Annual Report, 2006

THE COLLEGE OF SCIENCE
TEXAS A&M UNIVERSITY

College Station, Texas
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A. Foreword from Dean H. Joseph Newton

At Texas A&M University, “honor” and “duty” might be everyday words, but they certainly shouldn’t be mistaken for casual references.

More than a century after being founded as the land-grant institution for Texas, we still consider it an honor to carry out our duty to provide access to affordable education and unbridled opportunity for anyone willing to answer the Aggie call to excellence.

With a birthright bigger than Texas, our ingenuity continues to feed a global appetite for innovation, annually resulting in more than $550 million - $38.5 in the College of Science alone - in sponsored research projects that create new knowledge and help drive economies around the world. At Texas A&M, graduates walk off our stage and into influential positions of leadership in a range of world-changing areas, including industry, health care, business, and government.

As I reflect back on another successful year, I see many tangible examples of College-wide excellence in achieving our three-part University mission: teaching, research, and service. To name but a representative few, Chemistry’s Dave Bergbreiter earned a Presidential Professor for Teaching Excellence Award, Texas A&M’s highest recognition for excellence in the classroom. Physics’ Chris Pope was promoted to distinguished professor of physics, Texas A&M’s highest faculty rank reserved for those deemed by their peers as among the top five percent of scientists worldwide in their field. The Cyclotron Institute’s Bob Tribble was selected for a three-year term as chair of the Department of Energy/National Science Foundation Nuclear Science Advisory Committee, an appointment that speaks volumes regarding our faculty’s collective international professional service reputation and value. In direct support of this mission, the College closed out the phenomenally successful six-year *One Spirit One Vision* capital campaign, raising just over $129 million and nearly tripling its original goal of $45 million. In 2006 alone, we broke ground on two Physics buildings and received commitments to fund the first chairs in both Biology and Statistics. Past chairs, fellowships, and scholarships funded in Chemistry, Mathematics, and Physics helped to attract top faculty candidates - including John Gladysz in the Dow Chair in Chemical Invention and Nicholas Suntzeff in the Mitchell/Heep/Munnerlyn Chair in Observational Astronomy - and graduate students as we strive to fulfill the promise of Texas A&M’s faculty reinvestment program.

I thank each of you, not only for another year of great achievement, but also for the continued distinction you bring to both Texas A&M University and the College of Science in your efforts to deliver the highest quality of science education, scholarly research, and technical expertise to benefit our world.
B. Statistical Snapshots

The following statistics are cited as follows:

Faculty

▷ Office of Institutional Studies and Planning (OISP). (Fall 2002, Fall 2003, Fall 2004) TAMU Faculty as Reported by Academic Departments, Summary by TAMU Rank/Ethnicity by Tenure/Gender.
▷ Complied from the College of Science Faculty Database. (Fall 2005, Fall 2006) Baselines_Title, Gender, Ethnicity.

Research

▷ Compiled from the College of Science Research Awards Database

Student

▷ Office of Institutional Studies and Planning (OISP). (Fall 2002, Fall 2003, Fall 2004, Fall 2005, Fall 2006) Enrollment Profile, Headcount by Major by Level, Fall of [Year].

Teaching

▷ SCH: Undergraduate and Graduate - Office of Institutional Studies and Planning (OISP). (Spring 2002 - Fall 2006) SCH Summaries by College of [Semester] [Year].
▷ WSCH - Office of Institutional Studies and Planning (OISP). (Fall 2002, Fall 2003, Fall 2004, Fall 2005, Fall 2006) WSCH Summaries by College of [Semester] [Year].

Calculations to obtain WSCH/FTE:

▷ WSCH/FTE (Dept) = WSCH for Dept / FTE for Dept
▷ WSCH/FTE (College) = Σ (WSCH for all CLSC Depts) / Σ (FTE for all CLSC Depts)
**Faculty Snapshot**

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*Minority= Black and/or Hispanic*
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#### Graduate Majors (Fall)

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### SCH: Graduate

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### WSCH (Weighted Semester Credit Hours) in thousands

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Annual Report, 2006

THE DEPARTMENT OF BIOLOGY
TEXAS A&M UNIVERSITY

College Station, Texas
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1. Foreword from the Department Head

As the home of most basic biological research and education at Texas A&M University, the Department of Biology is poised to continue its leadership role in understanding life at its most basic levels and conveying that knowledge and the enthusiasm it engenders to the next generation of scientists, physicians and citizens. Research in the Department of Biology is well funded, considering the small size of the faculty, the inadequate facilities, and the large teaching load. Over the past 5 years, Biology faculty have successfully obtained more than $6 million in peer-reviewed, indirect cost accruing, extramurally funded research grants. This corresponds to more than $150,000 annual total costs/faculty member, more than twice than 9-month salary paid by the university. Further, Biology faculty are well regarded nationally and internationally, as exemplified by their inclusion in national and international panels, boards and editorial offices.

In year 2006, we have had several great successes. We recognized Dr. Comer “Pat” Patterson as an excellent educator through his promotion to Professor. We also welcomed new faculty member Dr. Hongmin Qin, who comes to us from Yale University. There were 91 peer-reviewed research papers and reviews published by departmental faculty and students. Many of these were published in top-flight journals such as Science, Nature, PNAS USA, Cell, Plant Cell, Genes and Development, Journal of Bacteriology and Journal of Neuroscience. Biology faculty have been invited to deliver lectures around the world, giving some 80 presentations to conferences and departmental colloquia.

The Department of Biology plays an essential educational role at Texas A&M. It teaches all of the Introductory Biology for all life sciences majors and one of the major laboratory science courses in the Core Curriculum. This load comprises some 5,000 students/year. Further, the department has implemented an excellent new curriculum for its 1,500 majors, the most in the College of Science, which prepares its students uniquely for advanced biological study and which endeavors to include them in undergraduate research and other scholarly activity. Finally, the department trains 102 graduate students, half of whom are women, and half of whom go on to academic careers. In addition to its own graduate students, because of the department’s significant teaching load, the department employs and trains the graduate students of other departments that either do not have a significant teaching responsibility and/or do not attract enough extramural resources to support their students.

Thus, great things have been accomplished by the faculty and students of the Department of Biology, plans are in place to improve the educational experience and research output of the department, and we look forward to a vibrant future.
## 2. Statistical Abstract

### I. Personnel

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<td>c. Federal</td>
<td>5,795,638</td>
<td>5,985,231</td>
</tr>
<tr>
<td>d. State</td>
<td>992,427</td>
<td>98,311</td>
</tr>
<tr>
<td>e. University</td>
<td>137,352</td>
<td>6,263</td>
</tr>
<tr>
<td>f. Private/Non-Profit</td>
<td>243,710</td>
<td>285,205</td>
</tr>
<tr>
<td>g. Industrial/Corporate</td>
<td>88,227</td>
<td>191,696</td>
</tr>
<tr>
<td>h. International</td>
<td>8,115</td>
<td>659</td>
</tr>
<tr>
<td>i. Other Govt</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7,310,174</strong></td>
<td><strong>6,567,365</strong></td>
</tr>
</tbody>
</table>
3. Honors & Awards, 2006

By Faculty

▷ This section contains all honors and awards, as reported by individual faculty members, during the calendar year 2006.

By Students

▷ This section contains all honors and awards, as reported by the department, during the calendar year 2006.
### 3.1 Honors & Awards Received by Faculty, 2006

<table>
<thead>
<tr>
<th>Name</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Bell-Pedersen</td>
<td>Distinguished Achievement Award - Teaching, The Association of Former Students</td>
</tr>
</tbody>
</table>
3.2 Honors & Awards Received by Students, 2006

Undergraduate

- **George Reichel ’70 Endowed Scholarship in Science**
  Ananth K Arjunan

- **H.R. Lewis Scholarship**
  Elizabeth R Drone
  Peter N Fata
  Hannah T Fox
  John C McElroy
  Jacob S Towns

- **Howard Gravett Endowed Scholarship**
  Jenna L Aldinger
  Amanda Howe

- **J. W. Birdwell ’28 Endowed Scholarship in Science**
  Chelsi Thigpen

- **Jessica Jon Chancellor Memorial Lifelines Scholarship**
  Chelsea Hook

- **John Todd Willis ’44 Endowed Memorial Scholarship in Biology**
  Veronica Alanis

- **Julia Ball Lee Scholarship**
  Maria Lee
  Han S Song

- **Katherine Anne Keller Endowed Memorial Scholarship**
  Maura Holcomb

- **Lifelines Endowed Scholarship Program**
  Robert W Best
  Matthew Blazek
  Lori Rollo
  Ruihong Zhao

- **Lucille Dougherty Endowed Scholarship in Science**
  Van N Hoang

- **Patricia & William Gordon ’67 Scholarship in Science**
  Jennifer Caero

- **Richard B. Grant, Jr. ’29 Endowed Scholarship**
  Michelle Lee
4. Students, 2006

This section contains all degrees awarded, as reported by the department, during the calendar year 2006.
4.1 Graduate Degrees Awarded, 2006

Fall

▷ M.S.

Gregory Lee Munoz
Advisor(s): D. Siegele

Kristin Ann Storie
Advisor(s): J. Golden

Beth Elene Armstrong Thomas
Regulation Of Phosphate Starvation Response In Arabidopsis
Advisor(s): T. McKnight

Tyler T Wright
Suppression Of Manganese-Dependent Production Of Nitric Oxide In Astrocytes: Implications For Therapeutic Modulation Of Glial-Derived Inflammatory Mediators
Advisor(s): M. Zoran

▷ Ph.D.

Brian Jay Cantwell
Localization Of The Phosphatase Chez To The Chemoreceptor Patch Of Escherichia Coli
Advisor(s): M. Manson

Ketan Suryakant Patel
Purple Acid Phosphatase 12: A Tool To Study The Phosphate Starvation Response In Arabidopsis Thaliana
Advisor(s): T. McKnight

Mi-Seon Seong
The Identification And Characterization Of Seedlings Hyper-Responsive To Light 2 (Shl2), A Gene Implicated In Developmental Responses To Light
Advisor(s): A. Pepper

Spring

▷ M.S.

Julie Rae Hayes
Advisor(s): I. Greenbaum

Jennifer Sue Stone
The Influence Of Physicochemical Factors And Wind-Induced Resuspension On Microalgal And Zooplankton Community Assemblages In A Shallow Coastal Embayment, South Bay, Tx...
Advisor(s): D. Harper

▷ Ph.D.

Su Jin Kwak
Functional Analysis Of Pax2/5/8 Genes And Their Genetic Interactions In Zebrafish Ear Development
Jingchuan Sun  
Structural Studies Of The Sars Virus Nsp15 Endonuclease And The Human Innate Immunity Receptor Tlr3  
Advisor(s): A. Holzenburg

Summer

Oranit Gilad  
Behavioral Ecology And Conservation Of Large Mammals: Historical Distribution, Reintroduction And The Effects Of Fragmented Habitat  
Advisor(s): R. Honeycutt, Ben X. Wu

Shannon Rose Mackey  
Circadian Rhythms In Synechococcus Elongatus Pcc 7942: Insights Into The Regulatory Mechanisms Of The Cyanobacterial Clock System  
Advisor(s): S. Golden

Xiaofan Zhang  
Function Of Cika In The Cyanobacterial Circadian System: The Pseudo-Receiver Domain Of Cika Regulates The Circadian Input Pathway  
Advisor(s): S. Golden
4.2 Undergraduate Degrees Awarded, 2006

Fall

▷ B.A.

Nirma Dora Bustamante
John Benjamin Luck
Hillary Marie Owen
Justin Thomas Riddle
Jorge Javier Solis
Amanda Vega
Misty Michelle Walden
Amber Michelle Wilson

▷ B.S.

Sara Emilia Almendarez
Nicole Bridget Bautista
Robert Walker Best
Michelle Renee Blanton
Hanna Kay Brown
Anna Greer Cobb
Letitia Michelle Cochrane
Anna Beth Collins
Brent Lakeith Cooper
Meredith Elise Daniel
Margarita De La Garza
Casey Lynn Dedow
Angela Renee Delz
James Brandon Denham
Shilpi Pankaj Desai
Sabin Cecil Dolino
Amr Hatem El-Khashab
Stephen Benjamin Falcon
Deanna Dawn Ferreira
Jessica Kamma Glenn
Daniel Wayne Green
Melissa Anne Hammond
Stacey Larae Hanlon
Gail Nicole Henry
Ashley A Howard
Sunil Malatesha Joshi
Daniel Wayne Kiniry
Elena Petrovna Koshman
Brett Harald Langsjoen
Lori Michelle Law
Patrick James Layton
Jonathan Alexander Lazarini
Nicole Dawn Leroux
Benjamin Joseph May
Chase Glenn Mcdonald
Travis James Morgan
Pamela Claire Musslewhite
Teri Renee Neff
Morgan Amanda Nelson
Richard Otto Nussle
Stephanie Marie Ogden
Jessica Lee Pack
Emily Dawn Pennington
William Davis Prater
Jose Miguel Ramirez
Daniel Paul Renfro
Gracie Therese Rogers
Matthew Shawn Roper
Anna Louise Saunders
Brad Dariush Seddighzadeh
Andrew Loran Seely
Joshua Mclain Shamburger
Mohiuddin Bilal Shamsi
Jennifer Gail Sinclair
Regina Herrera Smith
Ashley Nicole Spencer
Megan Michelle Surratt
Christina Babette Taylor
Stephanie Renee Thomas
Karrie Marie Thomas
Courtney D’Ann Thompson
Kristi Lee Thompson
Jessica Ann Tracy
Ryan Allen Tsamouris
Andrew Robert Tullman
Dustin Brice Tyler
Allyson Kendall Wakefield
Nathaniel Colbey Walker
James Stephen Wheeless
Logan Thomas Yeats
Beverly Zean-Ling Yee

Spring

▷ B.A.

Judenia Chinene Aririguzo
Erika Robin Bhateley
Erica Alyce Carrasco
Hsi Hou Shannon Chen
Ah Ra Cho
Rick Singh Gandhi
Faegen Dillon Lee
Lance Anthony Lopez
Eileen Martinez

SEC. 4.2 UNDERGRADUATE DEGREES 25
Natasha Ann Stringfellow
Laura Elizabeth Tribuzi

B.S.

Andrea Jean Alaniz
Vicente Karlos Arcos
Lauren Michelle Ardoin
Trina Baca
Matthew Joseph Barrickman
Anna Kaitlyn Beasley
Mark Francis Bellard
Philip Joel Berry
Heather Suzanne Berry
Helen M Boostrom
Margaret Elizabeth Brown
Jeremy David Brown
Amanda Dawn Brownfield
Sarah Permelia Bryant
Lauren Joe Butler
David Alan Caldwell
Thu Cam Cao
Courtney Ann Carmicheal
Jessica Lynn Carter
Elspeth Elena Castro
Beth Anne Chavez
Jessica J Comperlik
Christen Lyniece Coker
Krista Jeanne Cole
Alison Nicole Cook
Marika Cole Crockett
Sadra Cheyenne Daniels
Daylen Andrew Davis
Hayden Lea Dutton
Beth Ann Eisenhut
Kevin James Elrod
Courtney James El-Zokm
William Gaston Eubanks
Andrew Jeb Frost
Lauren Nicole Ganderson
Erica Celina Garza
Benjamin Garrick Gillispie
Bradley Jennings Green
Ryan Daniel Griffin
Jonathon Keith Gutierrez
Elizabeth Ashley Hardin
Ashley Shannon Harris
Casey Ho
Heather Leigh Holmes
Megan Alicia Horn
Jayme Leigh Hunt
Janna Elizabeth Janish
Natalie Malek Johnson
Kelsie Lynn Keen
Amanda Blake Keith
Nicholas Alexander Knapp
Kristi Lynn Krenek
Laura Marie Laminack
Leilani Lizbeth Lawson
Austin E-Ted Lee
Jason Wayne Leger
Amanda Michele Lehmann
Julia Ann Lemmon
Christopher Bradley Lewis
Brandon Daniel Liebelt
Ashley Jean Lohrman
Jessica Lynn Mahaffey
Ashton Shields Mansour
Travis Hudson Markham
Isabel Martinez
Jane Susan Mathews
Lindsey Keeler Mathews
Nicole Lorraine Mendell
Abigail Joni Nance
Vanessa Renee Neiman
Chad Robert Niemeyer
Vincent Michael Nieto
Jamie Ryan Nobles
Leslie Nicole Norwood
Sara Nicole Olson
Sylvia Marie Ontiveros
Annaliesa Marie O’Quinn
Amy Lynn Pannell
Minal R. Parikh
Rachel Leanne Parmer
Savan Arvind Patel
Krishna Arvind Patel
Cooper Michael Patterson
Xitlali Karilu Perez
Lauren Janece Ray
Ryan Padira Reddy
Alana Christine Redfern
Stephen Guess Richardson
Lindsay Renee Riddle
Jennifer Faye Robinson
Staci Michelle Rothchild
Lindsay M Ruder
Corey Edward Scherrer

SEC. 4.2 UNDERGRADUATE DEGREES 27
Chelsea Lynn Schock
Emily Renee Scurlock
Courtney Elisabeth Searcey
Martha Palmer Seitz
Shama Shrenik Shah
William Dean Shattuck
Daniel Bryant Shepherd
Karla Dawn Shilling
Weidi Shu
Thomas Edward Siegrist
Ashley Nicole Simpson
Sarah Simpson Sokol
Stephen Lynn Steele
Jenifer Nicole Stephenson
Joel David Stibbe
Sara Leann Swineford
Tavisty Kay Tarkenton
Heather Ann Taylor
Megan Nicole Tharp
Michael David Van Hal
Catherine Nhu Vu
Dennis Eric Waguespack
Anna Margaret Waren
Lucas Nathaniel Watkins
Nicole Alyn Wayson
Britney Lynn Whitehead
Sonny Allen Wiggins
Jennifer Ann Winn
Jessica Ruth Woods

Summer

▷ B.A.

Mary Ruth Cacho
Melissa Ann Nadira Persram
David Posada
Christopher Michael Schaefer

▷ B.S.

Najma Shabbir Ahmed
Jarrett Desmond Aldinger
Jason Douglas Ballard
Brett Aaron Barrett
Kristin Alana Bonnerup
Joshua Landon Brown
Lisa Michelle Bye
Niti Yogesh Chokshi
Elizabeth Lorraine Coldewey
Katy Louise Daniel
Kyle Ryan De Freitas

2006 Biology Annual Report
Thao Ly Lenh Do
Sergio Issac Fuentez
Elizabeth A Ihms
Miranda Dawn Love
Carlton John Mayo
Laura Allen Mccarthy
Joshua John Mink
Leah Elizabeth Murphy
Paras Bharatkumar Patel
Deirdre Ann Smith
Patrick Michael Waltz
Dustin Keith Young
## 5. Colloquium and Seminar Speakers, 2006

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Affiliation</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/24/2006</td>
<td>Cresko Bill</td>
<td>University of Oregon</td>
<td>Evolution of Bone Development in Alaskan Threespine Stickleback</td>
</tr>
<tr>
<td>2/7/2006</td>
<td>Jim Fadool</td>
<td>Florida State University</td>
<td>From Flies to Fishes: Mosaic Patterns and Photoreceptor Cells</td>
</tr>
<tr>
<td>2/14/2006</td>
<td>Michael Menaker</td>
<td>University of Virginia</td>
<td>Vertebrate Circadian Organization: No Simple Hierarchies</td>
</tr>
<tr>
<td>2/21/2006</td>
<td>Andy Clark</td>
<td>Cornell University</td>
<td>Genetic Variation in Innate Immunity</td>
</tr>
<tr>
<td>2/28/2006</td>
<td>Yi Wei Jiang</td>
<td>Texas A&amp;M University</td>
<td>Two Tales of “Innate Immunity”: Ty1 Pseudo-cosuppression in Yeast &amp; the BT Cationic Peptides in Animals</td>
</tr>
<tr>
<td>3/7/2006</td>
<td>Katema Paul</td>
<td>Northwestern University</td>
<td>Sleep-Wake Architecture Exhibits a Genetic Relationship to Daily Fluctuations of Locomotor Activity</td>
</tr>
<tr>
<td>3/21/2006</td>
<td>Antonietta Quigg</td>
<td>Texas A&amp;M University, Galveston</td>
<td>Elemental Signatures: Linking Evolutionary Forces and Ecological Success</td>
</tr>
<tr>
<td>4/11/2006</td>
<td>William Margolin</td>
<td>University of Texas Health Science Center</td>
<td>Splitsville: What Does It Take To Divide a Bacterial Cell?</td>
</tr>
<tr>
<td>9/5/2006</td>
<td>Bruce Riley</td>
<td>Texas A&amp;M University</td>
<td>The Inner Ear is not a big Truck. It’s a Series of Tubes</td>
</tr>
<tr>
<td>9/12/2006</td>
<td>Deborah Bell-Pedersen</td>
<td>Texas A&amp;M University</td>
<td>Genetic and Molecular Dissection of a Simple Circadian System</td>
</tr>
<tr>
<td>9/19/2006</td>
<td>Mark Guiltinan</td>
<td>Pennsylvania State University</td>
<td></td>
</tr>
</tbody>
</table>
Exploring the Genome of the Tropical Tree Theobroma Cacao: The Food of the Gods

9/26/2006  **Arne Lekven**  
*Texas A&M University*  
Wnt Signaling and Vertebrate Axis Patterning: How the Zebrafish Gets Ahead (and a Tail)

10/3/2006  **James Simmons**  
*Brown University*  
Connecting Field and lab Behavior with Neural Mechanisms of Echolocation in FM Bats

10/10/2006  **William Talbot**  
*Stanford University School of Medicine*  
Genetic Dissection of Glial Development and Myelination in Zebrafish

10/17/2006  **Yukako Asai**  
*Howard Hughes Medical Institute*  
Genetic Approach on Hearing Research Using Zebrafish

10/24/2006  **Reynaldo Patino**  
*Texas Tech University*  
Thyroid Endocrine Disruption in Fish and its Effects on Development and Reproduction

10/31/2006  **Justin Kumar**  
*Indiana University*  
Building an Eye on the Fly
Frontiers Lecture Series

3/28/2006  Sean Carroll  
*University of Wisconsin, Madison*  
Endless Forms Most Beautiful: The Role New Science of Evo Devo

3/29/2006  Sean Carroll  
*University of Wisconsin, Madison*  
Endless Flies Most Beautiful: The Role of Cis-Regulatory Evolution in the Origin of Novelty and Diversity
6. Faculty, 2006

Rodolfo D. Aramayo .................................. Associate Professor
Karl J. Auferheide ..................................... Associate Professor
Deborah Bell-Pedersen ................................. Associate Professor
Michael J. Benedik .................................... Professor
Lisa Campbell ........................................ Associate Professor (J)
Elizabeth Cantwell ..................................... Lecturer
Ginger E. Carney ........................................ Assistant Professor
Vincent M. Cassone .................................... Professor
William Cohn ........................................... Professor
Sumana Datta .......................................... Associate Professor (J)
David Earnest ......................................... Associate Professor (J)
James W. Erickson ..................................... Associate Professor
Rene Garcia ............................................ Assistant Professor
James W. Golden ...................................... Professor
Susan S. Golden ....................................... Distinguished Professor
Ira F. Greenbaum ...................................... Professor
Andrew Greene ........................................ Lecturer
Lawrence R. Griffing .................................. Associate Professor
Linda Guarino .......................................... Professor (J)
Timothy C. Hall ....................................... Distinguished Professor
Paul E. Hardin .......................................... Professor
Andreas K. Holzenburg ................................. Professor
Rodney Honeycutt .................................... Professor (J)
John M. Ivy ............................................. Lecturer
Carol B. Johnson ..................................... Senior Lecturer
Adam G. Jones ........................................ Assistant Professor
Walter M. Kemp ....................................... Professor
Arne C. Lekven ....................................... Assistant Professor
Thierry Lints .......................................... Assistant Professor
Robyn Lints ........................................... Assistant Professor
Duncan S. MacKenzie .................................. Associate Professor
Keith A. Maggert ...................................... Assistant Professor
James R. Manhart ..................................... Associate Professor
Michael D. Manson .................................. Professor
Thomas D. McKnight .................................. Professor
Louis Morgan ......................................... Lecturer
Rita B. Moyes ......................................... Senior Lecturer
Comer O. Patterson ................................... Professor
Alan E. Pepper ....................................... Associate Professor
Brian D. Perkins ...................................... Assistant Professor
Hongmin Qin .......................................... Assistant Professor
Bruce B. Riley ........................................ Associate Professor
Peter J. Rizzo ......................................... Associate Professor
Gil G. Rosenthal ...................................... Assistant Professor
Kathryn J. Ryan ........................................ Assistant Professor
Helmut W. Sauer ...................................... Professor
Timothy P. Scott ..................................... Senior Lecturer
Deborah A. Siegele .......................... Associate Professor
Michael Smotherman ........................ Assistant Professor
Thomas A. Stidham ........................... Assistant Professor
Max Summers ................................. Professor (J)
Andrew Tag .................................... Lecturer
Lathrop Taylor ............................... Lecturer
Terry L. Thomas .............................. Professor
R. Kathryn Vaughan ......................... Lecturer
Wayne Versaw ................................ Assistant Professor
Mindy L. Walker .............................. Lecturer
Mary K. Wicksten ............................ Professor
Hugh D. Wilson .............................. Professor
Leslie K. Winemiller ......................... Senior Lecturer
Thomas K. Wood ............................ Professor (J)
Jin Xiong ..................................... Assistant Professor
Philip A. Youderian ......................... Professor
Mark J. Zoran ............................... Associate Professor

*For the Annual Report, Faculty are defined as tenure and non-tenure track employees who were employed at any time during 2006 (01/01/2006-12/31/2006).
6.1 Professional Activities, 2006

This section contains information, as reported by individual faculty members, encompassing each faculty member’s professional activities for the calendar year 2006.

Subsections of professional activities are defined as follows:

Honors and Awards
▷ All professional honors and awards, both internal and external.

Service Activities
▷ All professional service and leadership roles, including: departmental, college, university, state, national and international.

Teaching
▷ Classes taught during the Spring, Summer and Fall sessions of 2006.
▷ Any missing enrollment numbers were gathered from the Student Information Management System (SIMS) at Texas A&M University.

Research Projects
▷ All research projects, funded and unfunded.
▷ Whenever possible, all research-related employees of that faculty member are listed along with the citation. Key for employees: (P)=Postdoc, (G)=Graduate Student, (U)=Undergraduate Student.
▷ Renewals are marked by “(REN)” at the beginning of their title.
▷ Unfunded grants are marked by “(UNFUNDED)” at the end of the citation.
▷ Additional information (including PIs, CoPIs, and funding) on all funded grants are listed in Section 7.

Presentations
▷ All posters, invited and contributed lectures (plenary, conferences, colloquia, seminars, etc.).
▷ Whenever reported, posters, invited and contributed lectures are noted in parentheses following the citation.
▷ Citations are in chronological order.

Publications
▷ All printed materials published during 2006.
▷ Pre-press, in-press and submitted publications were not included.
▷ Citations were formatted in APA Style and are in alphabetical order by lead author.
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Biotechnology, [2006]
  ▶ Member, Interdisciplinary Faculty, Genetics, [2006]

• SERVICE DURING 2006

  International
  ▶ Event: 8th International Mycological Congress, Cairns Convention Centre, Importance of Small Noncoding RNAs in Fungi (Chair)
  ▶ Editorial/Board: Israel Science Foundation (Ad hoc Reviewer), Public Library of Science (Editor), CONACYT-DAIC. Mexico, D.F., Mexico (Review: Proposals), Consejo Nacional de Ciencia y Tecnología (Review: Proposals), The International Journal of Biological Sciences (Member)
  ▶ Committee/Panel: Rede Nordeste de Biotecnologia (Member)

  National
  ▶ Editorial/Board: National Science Foundation (Review: Proposals), Fungal Genetics Newsletter (Member), Nucleic Acids Research, Fungal Genetics Newsletter, Current Biology, PLoS ONE, Genetics (Referee: Journals)

  University
  ▶ Service Position: Beta Beta Beta (Advisor)

  Department
  ▶ Committee/Panel: Annual Review & Awards Committee (Elected Member), Computer Committee (Member), Graduate Faculty of the Health Science Center (Member), Graduate Recruiting and Admissions Committee (Elected Member), Graduate Recruitment Committee (Chair)

  Interdisciplinary/Intercollegiate
  ▶ Research Group: Intercollegiate Program in Genetics (Member), Program for Microbial Genetics and Genomics (Member), Program for the Biology of Filamentous Fungi (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ BIOL 491. — Research (total enrollment: 2)
  ▶ BIOL 681. — Seminar (total enrollment: 7)
  ▶ MICR 691. — Research (total enrollment: 1)

  Summer
  ▶ BIOL 491. — Research (total enrollment: 1)
- BIOL 685. — Directed Studies (total enrollment: 1)
- MICR 691. — Research (total enrollment: 1)

**Fall**

- BIOL 491. — Research (total enrollment: 1)
- BIOL 685. — Directed Studies (total enrollment: 1)
- BIOL 691. — Research (total enrollment: 1)
- BIOL 691. — Research (total enrollment: 1)
- MICR 691. — Research (total enrollment: 1)
• SERVICE DURING 2006

University
▷ Service Position: ATMentors (Member)
▷ Advisory Board: University Student Fiscal Appeals Panel (Member)
▷ Committee/Panel: Blinn College/Texas A&M University Liaison Committee (Member), Core Curriculum Council (Faculty Senate) (Member), Faculty Senate (Faculty Senator - 06), Faculty Senate (Faculty Senator - 12), Faculty Senate Committee on Committees (Member), Faculty Senate Planning Committee (Member), Interim University Student Fiscal Appeals Panel (Member), Security Awareness Committee (Member)

College
▷ Service Position: College of Science, Office of the Vice-President for Research (Research Standards Officer)

Department
▷ Committee/Panel: Annual Review & Awards Committee (Elected Member), Biological Instrumentation Laboratory Oversight Committee (Member), Graduate Recruiting and Admissions Committee (Elected Member), Lower Division Advisory Committee (Member), Microscopy Committee (Member), Search Committee for Director of Introductory Programs (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ BIOL 413. — Cell Biology (total enrollment: 47)
▷ BIOL 423 — Cell Biology Laboratory (total enrollment: 11)
▷ BIOL 491. — Research (total enrollment: 1)
▷ BIOL 689 — Special Topics in (total enrollment: 6)

Summer
▷ BIOL 112. — Introductory Biology II (total enrollment: 72)
▷ BIOL 491. — Research (total enrollment: 1)

Fall
▷ BIOL 213. — Molecular Cell Biology (total enrollment: 73)
▷ BIOL 414 — Developmental Biology (total enrollment: 45)
▷ BIOL 491. — Research (total enrollment: 2)

• PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Genetics, [2006]

• AWARDS DURING 2006
  College
  ▶ Distinguished Achievement Award - Teaching, The Association of Former Students

• SERVICE DURING 2006
  International
  ▶ Event: 2006 International Neurospora Conference, Asilomar CA (Co-Organizer)
  ▶ Committee/Panel: Fungal Genetics Meeting (Organizer), Neurospora Policy Committee (Elected Member)

National
  ▶ Event: Society for Research on Biological Rhythms (Session Chair)
  ▶ Editorial/Board: National Science Foundation, National Institutes of Health (Review: Proposals), *Fungal Genetics and Biology* (Associate Editor)

University
  ▶ Research Group: Center for Environmental and Rural Health (Member)
  ▶ Committee/Panel: Council of Principal Investigators (Member), Genetics Faculty Graduate Admissions and Recruiting Committee (Member)

Department
  ▶ Committee/Panel: Executive Committee (Appointed), Faculty Search Committee (Member), Graduate Programs Committee (Chair), Promotion and Tenure Committee (Member)

Interdisciplinary/Intercollegiate
  ▶ Research Group: Center for Research on Biological Clocks (Member), Program for Microbial Genetics and Genomics (Member)
  ▶ Committee/Panel: Program for Biology of Filamentous Fungi (Member), UBM Integrated Undergraduate Research Experiences in Biological and Mathematical Sciences (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ BIOL 291. — Research (total enrollment: 1)
  ▶ BIOL 485. — Directed Studies (total enrollment: 1)
  ▶ BIOL 601. — Biological Clocks (total enrollment: 11)
  ▶ BIOL 691. — Research (total enrollment: 1)
MICR 691. — Research (total enrollment: 2)

Summer

MICR 691. — Research (total enrollment: 3)

Fall

MICR 445. — Biology of Viruses (total enrollment: 60)

MICR 691. — Research (total enrollment: 3)

• PRESENTATIONS DURING 2006

“Unwinding the Neurospora Clock,” Department of Biology, University of Virginia, Charlottesville, VA, February, 2006. (Invited)

“Unwinding the Neurospora Clock,” Department of Chemistry and Biochemistry, University of California, Los Angeles, CA, July, 2006. (Invited)

“Genetic and Molecular Dissection of a Simple Circadian Clock,” Department of Biology, Texas A&M University, College Station, TX, September, 2006. (Individual)

“Genetic and Molecular Dissection of a Simple Circadian Clock,” Department of Microbiology, University of California, Berkeley, CA, November, 2006. (Invited)

• PUBLICATIONS DURING 2006


• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Genetics, [2006]
  ▶ Graduate Advisor, Biology Graduate Advising Office, [2006]

• SERVICE DURING 2006
  International
  ▶ Editorial/Board: Federation of European Biochemical Societies (Referee: Journals)
  National
  ▶ Editorial/Board: Textbooks: Genetics, Introduction to Genetics, Microbiology A Genomics Perspective (Reviewer), Applied Microbiology and Technology (Referee: Journals)
  University
  ▶ Committee/Panel: Faculty of Genetics (Vice Chair), Faculty of Genetics - Membership Committee (Chair), Faculty Senate (Faculty Senator - 11), Faculty Senate Research Subcommittee (Member), Genetics Program - Executive Committee (Member), Honors Advisory Committee (Member), University Grievance Committee (Chair)
  College
  ▶ Committee/Panel: Graduate Instruction Committee (Member)
  Department
  ▶ Committee/Panel: Annual Review & Awards Committee (Elected Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ BIOL 285. — Directed Studies (total enrollment: 13)
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ MICR 360 — Microbial Biotechnology (total enrollment: 31)
  ▶ MICR 691. — Research (total enrollment: 1)
  Summer
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ MICR 691. — Research (total enrollment: 1)
  Fall
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 681. — Seminar (total enrollment: 21)
博士学位课程

- BIOL 685. — Directed Studies (total enrollment: 21)
- MICR 406. — Bacterial Genetics (total enrollment: 12)
- MICR 606. — Microbial Genetics (total enrollment: 7)
- MICR 691. — Research (total enrollment: 2)
• TEACHING ASSIGNMENTS DURING 2006
  
  Fall
  ▷ BIOL 491. — Research (total enrollment: 1)

• PUBLICATIONS DURING 2006
  

No report received from faculty member.
• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  ▷ ZOOL 319. — Integrated Human Anatomy and Physiology I (total enrollment: 143)

  Summer
  ▷ ZOOL 320. — Integrated Human Anatomy and Physiology II (total enrollment: 63)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006
  
  University
  ▶ Committee/Panel: Women’s Faculty Network (Vice President)
  
  Department
  ▶ Event: ACS Chemistry Open House (Participant), Texas Jr. Science & Humanities Symposium (Judge)
  ▶ Advisory Board: Graduate Cell Biology Curriculum Committee (Member)
  
• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  ▶ BIOL 489. — Special Topics in Bioinformatics (total enrollment: 16)
  ▶ BIOL 491. — Research (total enrollment: 2)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  
  Summer
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  
  Fall
  ▶ BIOL 489. — Special Topics in Bioinformatics (total enrollment: 42)
  ▶ BIOL 491. — Research (total enrollment: 3)
  ▶ BIOL 689. — Special Topics in (total enrollment: 13)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ➢ Member, Interdisciplinary Faculty, Biotechnology, [2006]
  ➢ Member, Interdisciplinary Faculty, Neuroscience, [2006]
  ➢ Department Head, Biology, [2003]

• SERVICE DURING 2006

National
  ➢ Service Position: Neuroscience Institute, Morehouse School of Medicine (Expert Witness), Society for Research on Biological Rhythms (Treasurer)
  ➢ Committee/Panel: Society for Research on Biological Rhythms (Member)

University
  ➢ Service Position: ATMentors (Member)
  ➢ Committee/Panel: Educational Environment Council (Member), Life Science Building Committee (Member), Life Science Building Search Committee for Architect/Engineer Firm (Member), Life Science Building Search Committee for Construction Manager at Risk (Member)

College
  ➢ Committee/Panel: College Quality Enhancement Plan Council (Member), Executive Committee (Member)

Department
  ➢ Committee/Panel: Annual Review & Awards Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ➢ BIOL 285. — Directed Studies (total enrollment: 7)
  ➢ BIOL 485. — Directed Studies (total enrollment: 2)
  ➢ BIOL 491. — Research (total enrollment: 5)
  ➢ BIOL 681. — Seminar (total enrollment: 7)
  ➢ BIOL 691. — Research (total enrollment: 3)
  ➢ BIOL 691. — Research (total enrollment: 3)

Summer
  ➢ BIOL 491. — Research (total enrollment: 1)
• PUBLICATIONS DURING 2006
No report received from faculty member.
SUMANA DATTA
ASSOCIATE PROFESSOR (J)
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• SERVICE DURING 2006

National
▷ Editorial/Board: American Heart Association (Review: Proposals), American Heart Association Western Review Consortium (Member), National Science Foundation Ad Hoc (Review: Proposals), Journal of Cell Biology, Developmental Biology (Referee: Journals)

University
▷ Service Position: Dr. Maribel Gonzalez-Garci, Texas A&M University- Kingsville, NIH MBRS grant (External Advisor)

Department
▷ Committee/Panel: Faculty Search Committee, Biochemistry and Biophysics (Member)

• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ BICH 690 — Theory of Biochemical Research (total enrollment: 4)
▷ BICH 691 — Research (total enrollment: 4)

• PRESENTATIONS DURING 2006

▷ “Perlecan-mediated Hedgehog Signaling: Roles in Brain Development and Prostate Cancer,” Department of Biochemistry & Molecular Biology, LSU Health Sciences Center, Shreveport, LA, 2006.( Invited)
▷ “Sugars, Signaling and Prostate Cancer,” Genetics Program, Texas A&M University, College Station, TX, 2006.( Invited)

• PUBLICATIONS DURING 2006

TEACHING ASSIGNMENTS DURING 2006

**Spring**
- BIOL 691. — Research (total enrollment: 3)
- BIOL 691. — Research (total enrollment: 3)

**Summer**
- BIOL 691. — Research (total enrollment: 2)
- BIOL 691. — Research (total enrollment: 2)

**Fall**
- BIOL 685. — Directed Studies (total enrollment: 1)
- BIOL 691. — Research (total enrollment: 2)
- BIOL 691. — Research (total enrollment: 2)

*No report received from faculty member.*
JAMES W. ERICKSON

ASSOCIATE PROFESSOR (979) 862-2204
BIOL-Biotechnology, Chronobiology jerickson@mail.bio.tamu.edu

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Genetics, [2006]

• SERVICE DURING 2006
  National
  ▶ Editorial/Board: Larry Sandler Award for Outstanding PhD Dissertation in Dorsophila (Reviewer), National Science Foundation (Review: Proposals), Developmental Cell, Development, Genetics (Referee: Journals)

  University
  ▶ Committee/Panel: University Lab Animal Care Committee (Member)

  Department
  ▶ Committee/Panel: Retreat Committee (Chair), Webpage Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ BIOL 213. — Molecular Cell Biology (total enrollment: 74)
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)

  Summer
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 2)
  ▶ BIOL 691. — Research (total enrollment: 2)

  Fall
  ▶ BIOL 611. — Molecular Biology of Differentiation and Development (total enrollment: 7)
  ▶ BIOL 685. — Directed Studies (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
RENE GARCIA

ASSISTANT PROFESSOR
BIOL-Developmental Biology, Neurobiology

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rgarcia@mail.bio.tamu.edu

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Genetics, [2003]
  ▶ Member, Interdisciplinary Faculty, Neuroscience, [2003]

• SERVICE DURING 2006
  National
  ▶ Committee/Panel: C. elegans Neuroscience Meeting Abstract Committee and Session (Chair)

  Department
  ▶ Event: Undergraduate Poster Competition (Organizer)
  ▶ Committee/Panel: Departmental Retreat Committee (Member), Graduate Programs Committee (Member), Graduate Recruiting and Admissions Committee (Elected Member)

• PRESENTATIONS DURING 2006

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

National
▷ Editorial/Board: Scientific Book Chapter (Reviewed), J. Bacteriology, Molecular Microbiology, Trends in Microbiology, Proceedings of the National Academy of Sciences, PNAS (Referee: Journals)

College
▷ Committee/Panel: Information Technology Committee (Member)

Department
▷ Committee/Panel: Computer Committee (Member), Executive Committee (Appointed), Graduate Recruiting and Admissions Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ BIOL 491. — Research (total enrollment: 1)
▷ BIOL 685 — Directed Studies (total enrollment: 1)
▷ MICR 351 — Fundamentals of Microbiology (total enrollment: 106)
▷ MICR 691. — Research (total enrollment: 3)

Summer
▷ BIOL 491. — Research (total enrollment: 1)
▷ MICR 691. — Research (total enrollment: 3)

Fall
▷ BIOL 111. — Introductory Biology I (total enrollment: 91)
▷ MICR 681. — Sem In Microbial Gene (total enrollment: 5)
▷ MICR 691. — Research (total enrollment: 3)

• PRESENTATIONS DURING 2006
▷ “Cell-to-cell Signaling Contributes to Heterocyst Pattern Formation,” Colloquium on Intermicrobial Communication, ASM 106th General Meeting, Orlando, FL, May, 2006.(Invited)
• SERVICE DURING 2006

International
  ▶ Committee/Panel: Biotechnology and Biological Sciences Research Council (Member)

National
  ▶ Professional Affiliation: American Academy of Microbiology (Fellow), Scientific Advisory Board, NIMH Silvio O. Conte Center for Neuroscience Research for a Project Entitled Chemical and Genetic Manipulation of Circadian Systems (Member)
  ▶ Editorial/Board: National Science Foundation (Review: Proposals), J. Bacteriology, Proceedings of the National Academy of Sciences, Journal of Biological Chemistry, Plant Cell, Photosynthesis Research (Referee: Journals), Journal of Bacteriology (Editor)
  ▶ Committee/Panel: American Society for Microbiology Publication Board Appointment Commettee (Chair)

University
  ▶ Event: 2006 Southeastern and Central Texas Society for Clocks Meeting at A&M Honorary Doctorate Committee (Organizer)
  ▶ Committee/Panel: Quality Enhancement Plan Committee (Member), Research Environment Council Life Science Advisory Committee (Member)

Interdisciplinary/Intercollegiate
  ▶ Research Group: Center for Research on Biological Clocks (Interim Director)
  ▶ Advisory Board: Texas A&M UniversityCenter for Statistical Bioinformatics (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ MICR 360. — Microbial Biotechnology (total enrollment: 31)
  ▶ MICR 691. — Research (total enrollment: 5)

Summer
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 2)
  ▶ MICR 691. — Research (total enrollment: 1)

Fall
  ▶ BIOL 111. — Introductory Biology I (total enrollment: 94)
  ▶ BIOL 491. — Research (total enrollment: 2)
  ▶ BIOL 681. — Seminar (total enrollment: 7)
  ▶ BIOL 691. — Research (total enrollment: 3)
• PRESENTATIONS DURING 2006
  ▶ “Winding up the Cyanobacterial Circadian Clock,” University of Georgia, Athens, GA, February, 2006. (Invited)
  ▶ “Winding up the Cyanobacterial Circadian Clock,” Ohio State, Columbus, OH, March, 2006. (Invited)
  ▶ “Integration of Environmental Sensing Pathways With the Oscillator of the Cyanobacterial Circadian Clock,” Gordon Research Conference on Photosensory Receptors and Signal Transduction, II, Ciocco, Italy, April, 2006. (Invited)
  ▶ “Winding up the Cyanobacterial Circadian Clock,” Oregon State University, Corvallis, OR, April, 2006. (Invited)
  ▶ “Winding up the Cyanobacterial Circadian Clock,” CSH Course on Advanced Bacterial Genetics, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, June, 2006. (Invited)
  ▶ “Winding up the Cyanobacterial Circadian Clock,” University of California, Berkeley, CA, October, 2006. (Invited)

• PUBLICATIONS DURING 2006
IRA F. GREENBAUM

PROFESSOR
BIOL-Evolution, Zoology, Genetics

IRA F. GREENBAUM
PROFESSOR (979) 845-7791

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Member, Interdisciplinary Faculty, Ecology and Evolutionary Biology, [2006]
  ▷ Member, Interdisciplinary Faculty, Genetics, [2006]

• SERVICE DURING 2006
  National
  ▷ Advisory Board: Cytogenetics and Genome Research (Editorial Board)
  ▷ Editorial/Board: National Science Foundation (Review: Proposals), Cytogenetics and Genome Research, Journal of Mammalogy (Referee: Journals)

  State
  ▷ Committee/Panel: Texas Society of Mammalogy, Board of Governors (Member)

  University
  ▷ Committee/Panel: University Faculty Advisory Committee to the Vice President for Student Affairs (Member)

  Department
  ▷ Committee/Panel: Faculty of Genetics Nominating Committee (Chair)

  Interdisciplinary/Intercollegiate
  ▷ Committee/Panel: Faculty of Genetics Membership Committee (Member), Seminar Committee (Elected Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ BIOL 466. — Principles of Evolution (total enrollment: 28)
  ▷ BIOL 685. — Directed Studies (total enrollment: 1)

  Summer
  ▷ BIOL 466. — Principles of Evolution (total enrollment: 24)

  Fall
  ▷ ZOOL 318. — Chordate Anatomy (total enrollment: 42)

• PUBLICATIONS DURING 2006
• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MICR 206. — Intro Microbiology (total enrollment: 37)

Summer
▷ MICR 351. — Fundamentals of Microbiology (total enrollment: 36)

No report received from faculty member.
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ⊳ Member, Interdisciplinary Faculty, Molecular and Environmental Plant Sciences, [2006]

• SERVICE DURING 2006
  International
  ⊳ Editorial/Board: International Cell Biology (Referee: Journals)

National
  ⊳ Editorial/Board: Book for Wiley: Plant Cell Biology (Reviewed), National Science Foundation, USDA (Review: Proposals), In Vitro (Member), Journal of Microscopy (Referee: Journals), Plant Physiology (Referee: Journals)
  ⊳ Committee/Panel: Education Committee, American Society of Plant Biologists (Chair), Executive Committee, American Society of Plant Biologists (Member), Steering Committee, Planting Science Program for K-16 Education Outreach, Botanical Society of America and American Society of Plant Biologists (Member)

University
  ⊳ Committee/Panel: Information Technology in Science, Center for Teaching and Learning (Co-Director)

College
  ⊳ Committee/Panel: Technology-Mediated Instruction Committee (Member)

Department
  ⊳ Committee/Panel: Seminar Committee (Elected Member), Undergraduate Programs Committee (Elected Member)

Interdisciplinary/Intercollegiate
  ⊳ Committee/Panel: Executive Committee: Molecular and Environmental Plant Sciences (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ⊳ BIOL 430. — Biological Imaging (total enrollment: 47)
  ⊳ BIOL 481. — Seminar in Biology (total enrollment: 19)
  ⊳ BIOL 491. — Research (total enrollment: 7)
  ⊳ BIOL 681. — Seminar (total enrollment: 6)
  ⊳ BIOL 691. — Research (total enrollment: 2)
  ⊳ BIOL 691. — Research (total enrollment: 2)

  Summer
  ⊳ BIOL 485. — Directed Studies (total enrollment: 1)
Fall

- BIOL 491. — Research (total enrollment: 2)

**PRESENTATIONS DURING 2006**


**PUBLICATIONS DURING 2006**

No report received from faculty member.
• **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  - Member, Interdisciplinary Faculty, Molecular and Environmental Plant Sciences, [2006]
  - Member, Interdisciplinary Faculty, Biotechnology, [2006]
  - Member, Interdisciplinary Faculty, Genetics, [2006]

• **SERVICE DURING 2006**

  **International**
  - Event: Research Roundtable on Crop Improvement through Biotechnologies, China-U.S. Relations: Trade, Diplomacy and Research (Co-Chair/Organizer)
  - Advisory Board: AoE, Chinese University, Hong Kong (Member)
  - Committee/Panel: International Programs Enhancement and Coordination Committee (Member)

  **National**

  **University**
  - Committee/Panel: Academic Program Council (Member), Distinguished Professors Executive Committee (Member), Faculty Senate (Faculty Senator - 05), Faculty Senate (Caucus Leader), Faculty Senate Legislative Affairs Committee (Member), Faculty Senate Research Committee (Co-Chair), IPECC Subcommittee on International Student Issues (Member)

  **Department**
  - Committee/Panel: Faculty of Genetics Seminar Committee (Member), Gene Technologies Committee (Chair), Plant Care Committee (Chair)

• **TEACHING ASSIGNMENTS DURING 2006**

  **Spring**
  - BIOL 691. — *Research* (total enrollment: 3)

  **Summer**
  - BIOL 691. — *Research* (total enrollment: 3)

  **Fall**
  - BIOL 491. — *Research* (total enrollment: 1)
  - BIOL 691. — *Research* (total enrollment: 3)
  - BOTN 101. — *Botany* (total enrollment: 216)
• PRESENTATIONS DURING 2006
  ▶ “Prolific transformation of rice and diversification of the mUbi1 promoter,” 31st Annual Rice Technical Working Group Meeting, The Woodlands, TX, March, 2006. (Poster Invited)
  ▶ “Gene Silencing,” Institute of Biophysics, Academy of Sciences of the Czech Republic, Brno, Czech Republic, August, 2006. (Individual)
  ▶ “Innovative Techniques and Application of Artificial Intelligence,” Twenty-sixth SGAI International Conference, Norwich, United Kingdom, December, 2006. (Invited)

• PUBLICATIONS DURING 2006
• CHAIRS/PROFESSORSHIPS
  ▶ John W. Lyons ’59 Endowed Chair in Biology [2005]

• SERVICE DURING 2006

  National
  ▶ Research Group: Center for Research on Biological Clocks (Director), Society for Research on Biological Rhythms (Secretary)
  ▶ Editorial/Board: *Journal of Biological Rhythms* (Associate Editor)
  ▶ Committee/Panel: NIH, Molecular Cellular and Developmental Neuroscience (Review: Proposals), NIH, Neurobiology of Motivated Behavior (Review: Proposals), NIH, Neurogenesis and Cell Fate (Review: Proposals), NIH, Neurogenesis and Cell Fate (Review: Proposals), *Current Biology*, *Genes & Development*, *Genome Biology*, *J. Neuroscience*, *Neuron* (Referee: Journals)

  University
  ▶ Committee/Panel: 1st Year Genetics Graduate Student Advising Committee (Member), Center for Research on Biological Clocks (Director), ILSB Scientific Leaders Committee (Member), Materials Characterization Facility Advisory Committee (Member)

  Department
  ▶ Committee/Panel: Annual Review Committee (Member), Graduate Program Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)

  Summer
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)

  Fall
  ▶ BIOL 213. — Molecular Cell Biology (total enrollment: 77)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006
  ▶ “Circadian Timekeeping Mechanisms and Outputs in Drosophila,” Department of Entomology, Texas A&M University, College Station, TX, 2006. (Invited)
“Regulation of Circadian Transcription and Output in Drosophila,” The 22nd International Symposium in Conjunction With Award of the International Prize for Biology, Tokyo, Japan, June, 2006.( Invited)

“Regulation of Circadian Transcription Within the Drosophila Clock,” International Union of Biochemistry and Molecular Biology Satellite Meeting, Tsukuba, Japan, June, 2006. (Invited)

• PUBLICATIONS DURING 2006


• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]
  ▷ Director, Microscopy and Imaging Center, [2000]

• SERVICE DURING 2006
  International
  ▷ Advisory Board: Subcellular Biochemistry International Advisory Board (Member)
  ▷ Editorial/Board: “Micron”, the International Research and Review Journal for Microscopy (Member)
  ▷ Committee/Panel: TX-UK Steering Committee (Member)

  National
  ▷ Editorial/Board: National Science Foundation-Major Research Instrumentation, National Institutes of Health (Review: Proposals), New Concepts of Antiviral Therapy (Editor), Journal of Molecular Biology, Microbiology Today, Journal of Microbiological Methods, JBC, Micron, Plant Physiology (Referee: Journals)
  ▷ Committee/Panel: Education Committee of the Microscopy Society of America (Member), USAF/AFRL Directorate (Associate Director)

  State
  ▷ Professional Affiliation: Texas Chapter of the Alexander von Humboldt Association of America (Vice President)

  University
  ▷ Committee/Panel: Life Sciences Building Committee and Subcommittees (Member), SAXS User Committee (Member), University Research Council (Member)

  Department
  ▷ Service Position: ORP, Biochemistry & Biophysics (Mentor & Examiner)
  ▷ Committee/Panel: Materials Science and Engineering Admission Committee (Member)

  Interdisciplinary/Intercollegiate
  ▷ Committee/Panel: MIC Electron Microscopy Advisory Committee (Member), MIC Light Microscopy Advisory Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ BIOL 689. — Special Topics in (total enrollment: 11)
  ▷ BIOL 691. — Research (total enrollment: 2)
  ▷ BIOL 691. — Research (total enrollment: 2)

  Summer
> BIOL 691. — Research (total enrollment: 1)
> BIOL 691. — Research (total enrollment: 1)

**Fall**
> BIOL 602. — Transmission Electron Microscopy (total enrollment: 14)
> BIOL 691. — Research (total enrollment: 2)
> BIOL 691. — Research (total enrollment: 2)

- **PUBLICATIONS DURING 2006**
• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ BIOL 691. — Research (total enrollment: 3)
▷ BIOL 691. — Research (total enrollment: 3)
▷ ZOOL 691. — Research (total enrollment: 1)

Summer
▷ ZOOL 691. — Research (total enrollment: 1)
▷ ZOOL 691. — Research (total enrollment: 1)

Fall
▷ ZOOL 691. — Research (total enrollment: 1)

• PUBLICATIONS DURING 2006


No report received from faculty member.
• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  
  ▷ BIOL 111. — Introductory Biology I (total enrollment: 452)

No report received from faculty member.
• SERVICE DURING 2006

Regional
▷ Event: Brazos Valley Regional Science & Engineering Fair (Judge)

Department
▷ Service Position: Faculty Teaching Academy (Participant), Laboratory Experience for Summer Honors Invitational Program (Presenter)
▷ Event: TA Workshop Sessions, Developing Good Exams and Writing Good Test Questions (Presenter), Texas Science Olympiad (Coordinator)
▷ Committee/Panel: Undergraduate Programs Committee (Elected Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ BIOL 113. — Introductory Biology (total enrollment: 230)

Fall
▷ BIOL 113. — Introductory Biology (total enrollment: 287)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Ecology and Evolutionary Biology, [2006]

• SERVICE DURING 2006

  International

  National

  Department
  ▶ Committee/Panel: Committee to Design New Graduate Level Evolution Course (Member), Faculty Search Committee (Member), Graduate Recruiting Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ BIOL 214. — Genes, Ecology and Evolution (total enrollment: 139)
  ▶ BIOL 491. — Research (total enrollment: 3)
  ▶ BIOL 691. — Research (total enrollment: 4)
  ▶ BIOL 691. — Research (total enrollment: 4)

  Summer
  ▶ BIOL 484. — Internship (total enrollment: 1)
  ▶ BIOL 491. — Research (total enrollment: 2)
  ▶ BIOL 691. — Research (total enrollment: 4)
  ▶ BIOL 691. — Research (total enrollment: 4)

  Fall
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 689. — Special Topics in (total enrollment: 6)
  ▶ BIOL 691. — Research (total enrollment: 4)
  ▶ BIOL 691. — Research (total enrollment: 4)
• PRESENTATIONS DURING 2006
  ▶ “Evolutionary Innovation in Pipefishes and Seahorses: Male Pregnancy and the Brood Pouch,” University of Nebraska, Lincoln, NE, March, 2006. (Invited)
  ▶ “Evolutionary Innovation in Pipefishes and Seahorses: Male Pregnancy and the Brood Pouch,” University of Texas Marine Sciences Institute, Port Aransas, TX, April, 2006. (Invited)
  ▶ “Conservation Genetic Data Analysis Course,” 26 Students were Ph. D. Candidates, Postdocs and Professors from 14 Countries, Porto, Portugal, September, 2006. (Invited)

• PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Dean and CEO, Texas A&M University - Qatar, [2004]

• TEACHING ASSIGNMENTS DURING 2006
  Fall
  ▶ BIOL 111. — Introductory Biology I (total enrollment: 21)
  ▶ BIOL 111. — Introductory Biology I (total enrollment: 280)

No report received from faculty member.
• SERVICE DURING 2006

International
▷ Research Group: National University of Singapore Office of Research (Reviewed)

National
▷ Editorial/Board: National Science Foundation (Review: Proposals), *Development, Developmental Biology, Developmental, Dynamics* (Referee: Journals)

College
▷ Committee/Panel: Faculty Advisory Council (Representative-at-large)

Department
▷ Committee/Panel: Faculty Search Committee (Member), Graduate Recruiting and Admissions Committee (Member), Light Microscopy Advisory Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ BIOL 681. — Seminar (total enrollment: 10)
▷ BIOL 681. — Seminar (total enrollment: 7)
▷ BIOL 691. — Research (total enrollment: 3)
▷ BIOL 691. — Research (total enrollment: 3)

Summer
▷ BIOL 691. — Research (total enrollment: 3)
▷ BIOL 691. — Research (total enrollment: 3)

Fall
▷ BIOL 111. — Introductory Biology I (total enrollment: 95)
▷ BIOL 285. — Directed Studies (total enrollment: 1)
▷ BIOL 681. — Seminar (total enrollment: 16)
▷ BIOL 691. — Research (total enrollment: 3)
▷ BIOL 691. — Research (total enrollment: 3)

• PRESENTATIONS DURING 2006
▷ “Wnt Regulation of Vertebrate Embryonic Patterning,” Department of Biology, Indiana University, Bloomington, IN, January, 2006. (Invited)
▷ “Wnt Signaling and Vertebrate Axis Patterning, or, how the Zebrafish Gets Ahead (and a Tail),” Department of Biology, Texas A&M University, College Station, TX, September,
2006. (Invited)
TEACHING ASSIGNMENTS DURING 2006

Summer
▷ BIOL 485. — Directed Studies (total enrollment: 1)
▷ BIOL 491. — Research (total enrollment: 1)

PUBLICATIONS DURING 2006
• TEACHING ASSIGNMENTS DURING 2006

Summer
▷ BIOL 691. — Research (total enrollment: 1)
▷ BIOL 691. — Research (total enrollment: 1)

Fall
▷ BIOL 691. — Research (total enrollment: 1)
▷ BIOL 691. — Research (total enrollment: 1)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Reproductive Biology, [2006]

• SERVICE DURING 2006

National
  ▶ Editorial/Board: National Science Foundation (Review: Proposals), General and Comparative Endocrinology, Fish and Wildlife Service Presubmission Review (Referee: Journals)

University
  ▶ Committee/Panel: CPR WALS Project (Participant), IACUC Executive Committee (Member), Radiological Safety Committee (Member)

Department
  ▶ Service Position: Biology BioAquatics Facility (Director)
  ▶ Committee/Panel: Animal Care Committee (Chair), Annual Review & Awards Committee (Elected Member), Executive Committee (Member), Undergraduate Programs Committee (Chair)

Interdisciplinary/Intercollegiate
  ▶ Committee/Panel: Executive Committee for Marine Biology Interdisciplinary Program (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▶ BIOL 491. — Research (total enrollment: 3)
  ▶ ZOOL 388. — Principles of Animal Physiology (total enrollment: 3)
  ▶ ZOOL 685. — Directed Studies (total enrollment: 7)
  ▶ ZOOL 691. — Research (total enrollment: 2)

Summer
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ ZOOL 319. — Integrated Human Anatomy and Physiology I (total enrollment: 135)
  ▶ ZOOL 691. — Research (total enrollment: 2)

Fall
  ▶ BIOL 481. — Seminar in Biology (total enrollment: 12)
  ▶ BIOL 491. — Research (total enrollment: 2)
  ▶ ZOOL 649 — Comparative Endocrinology (total enrollment: 5)
  ▶ ZOOL 685. — Directed Studies (total enrollment: 1)
• **PRESENTATIONS DURING 2006**
  - “Fish Thyroid Physiology: Red Drum and the Thyroid Conundrum,” Department of Marine Biology, Texas A&M University, Galveston, TX, October, 2006. (Invited)

• **PUBLICATIONS DURING 2006**
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Genetics, [2006]

• SERVICE DURING 2006

  National
  ▶ Editorial/Board: Genetics (Referee: Journals)

  University
  ▶ Service Position: ATMentors (Member)
  ▶ Event: Center for Teaching Excellence Peer Review Program (Participant), Greater Texas Foundation Board of Directors (Speaker), New Faculty Orientation, The Center for Teaching Excellence (Panelist), New Faculty Orientation, What I Wish I Knew My First Year (Panelist)
  ▶ Committee/Panel: Council of Principal Investigators (Member), The Association of Former Students University-Level Awards Committee (Member)

  College
  ▶ Event: Texas Junior Science and Humanities Symposium (Judge)

  Department
  ▶ Service Position: Academic Commencement (Representative), Regents Scholar-Paulo Leal (Advisor)
  ▶ Committee/Panel: Seminars Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ BIOL 213. — Molecular Cell Biology (total enrollment: 59)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)

  Summer
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)

  Fall
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 685. — Directed Studies (total enrollment: 4)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
PUBLICATIONS DURING 2006

• SERVICE DURING 2006

National
▶ Editorial/Board: American Journal of Botany, Systematic Botany (Referee: Journals)

College
▶ Committee/Panel: Grievance Committee (Elected Member)

Department
▶ Committee/Panel: IEEF, Undergraduate Program Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▶ BOTN 301. — Taxonomy Flowering Plant (total enrollment: 95)
▶ BOTN 691. — Research (total enrollment: 2)

Summer
▶ BIOL 691. — Research (total enrollment: 1)
▶ BIOL 691. — Research (total enrollment: 1)
▶ BOTN 691. — Research (total enrollment: 1)

Fall
▶ BIOL 214. — Genes, Ecology and Evolution (total enrollment: 92)
▶ BOTN 691. — Research (total enrollment: 2)

• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

National
▷ Event: Session at the Gordon Research Conference on Bacterial Cell Surfaces (Chair)
▷ Editorial/Board: Journal of Bacteriology (Advisory Board), PO1, NIH, ARD Process (Re-
view: Proposals), Journal of Bacteriology, Molecular Microbiology, Biophysical Journal,
Proceedings of the National Academy of Sciences (Referee: Journals)

College
▷ Committee/Panel: Diversity Committee (Member)

Department
▷ Committee/Panel: Annual Review & Awards Committee (Elected Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ BIOL 481. — Seminar in Biology (total enrollment: 24)
▷ BIOL 491. — Research (total enrollment: 4)
▷ BIOL 691. — Research (total enrollment: 4)
▷ BIOL 691. — Research (total enrollment: 4)
▷ MICR 406. — Bacterial Genetics (total enrollment: 19)

Summer
▷ BIOL 491. — Research (total enrollment: 1)
▷ BIOL 691. — Research (total enrollment: 4)
▷ BIOL 691. — Research (total enrollment: 4)
▷ MICR 351 — Fundamentals of Microbiology (total enrollment: 22)

Fall
▷ BIOL 111. — Introductory Biology I (total enrollment: 96)
▷ BIOL 112 — Introductory Biology II (total enrollment: 96)
▷ BIOL 491. — Research (total enrollment: 4)
▷ BIOL 691. — Research (total enrollment: 3)
▷ BIOL 691. — Research (total enrollment: 3)
▷ MICR 438. — Bacterial Physiol (total enrollment: 28)
▷ MICR 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006
▷ “The lid on the Flagellar Motor, Bacterial Cell-Surfaces,” Gordon Research Conference,
2006. (Individual)
Department of Biochemistry, Penn State University, University Park, PA, October, 2006. (Individual)
Department of Biology, University of Nagoya, Japan, October, 2006. (Individual)
Department of Microbiology, West Virginia University Medical School, Morgantown, WV, October, 2006. (Individual)

- PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Molecular and Environmental Plant Sciences, [2006]
  ▶ Member, Interdisciplinary Faculty, Genetics, [2006]
  ▶ Associate Department Head, Biology, [2003]

• SERVICE DURING 2006

  National
  ▶ Editorial/Board: National Science Foundation, USDA (Review: Proposals), Plant Cell, Plant Physiology (Referee: Journals)

  University
  ▶ Committee/Panel: Ad Hoc Committee for Teaching Space in New Life Sciences Building (Member), Gene Technologies Laboratory User’s Committee (Member)

  College
  ▶ Committee/Panel: College Quality Enhancement Plan Council (Member), Research Advisory Committee (Member)

  Department
  ▶ Committee/Panel: Annual Retreat Committee (Chair), Annual Review Committee (Chair), Executive Committee (Appointed), Undergraduate Curriculum Committee (Chair)

  Interdisciplinary/Intercollegiate
  ▶ Committee/Panel: MEPS Annual Symposium Organizing Committee (Member), MEPS Internal Review Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ BIOL 484. — Internship (total enrollment: 1)
  ▶ BIOL 485. — Directed Studies (total enrollment: 1)
  ▶ BIOL 485. — Directed Studies (total enrollment: 2)
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 491. — Research (total enrollment: 18)
  ▶ BIOL 682. — Research Seminar (total enrollment: 13)
  ▶ BIOL 691. — Research (total enrollment: 2)
  ▶ BIOL 691. — Research (total enrollment: 2)

  Summer
  ▶ BIOL 484. — Internship (total enrollment: 9)
BIOL 485. — Directed Studies (total enrollment: 1)
BIOL 491. — Research (total enrollment: 7)
BIOL 691. — Research (total enrollment: 2)
BIOL 691. — Research (total enrollment: 2)

Fall
BIOL 111. — Introductory Biology I (total enrollment: 75)
BIOL 285. — Directed Studies (total enrollment: 1)
BIOL 484. — Internship (total enrollment: 1)
BIOL 485.200(H) — Directed Studies (total enrollment: 1)
BIOL 491. — Research (total enrollment: 1)
BIOL 491. — Research (total enrollment: 1)
BIOL 491. — Research (total enrollment: 12)
BIOL 691. — Research (total enrollment: 2)
BIOL 691. — Research (total enrollment: 2)
BIOL 697. — Methods in Teaching Biology Laboratory (total enrollment: 26)
• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ BIOL 111. — Introductory Biology I (total enrollment: 21)
▷ BIOL 111. — Introductory Biology I (total enrollment: 283)
▷ BIOL 285. — Directed Studies (total enrollment: 2)

No report received from faculty member.
• SERVICE DURING 2006

  Department
  ▷ Committee/Panel: Biology Seminar Committee (Member), Undergraduate Programs Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▷ BIOL 491. — Research (total enrollment: 6)
  ▷ MICR 454. — Immunology (total enrollment: 83)

  Summer
  ▷ BIOL 491. — Research (total enrollment: 1)
  ▷ BIOL 491. — Research (total enrollment: 1)
  ▷ MICR 352. — Diagnostic Bacteriology (total enrollment: 27)
  ▷ MICR 685. — Directed Studies (total enrollment: 1)

  Fall
  ▷ BIOL 491. — Research (total enrollment: 3)
  ▷ MICR 206. — Intro Microbiology (total enrollment: 62)
  ▷ MICR 456. — Medical Microbiology (total enrollment: 54)

• PRESENTATIONS DURING 2006
  ▷ “Bacteria in Whirlpool Tubs,” KLIF Radio Interview, Dallas, TX, March, 2006. (Individual)
  ▷ “Bacteria in Whirlpool Tubs,” STAR 96.3 Radio Interview, Madison, WI, March, 2006. (Individual)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Molecular and Environmental Plant Sciences, [2006]
  ▶ Member, Interdisciplinary Faculty, Biotechnology, [2006]

• SERVICE DURING 2006

  National
  ▶ Service Position: National Advanced Placement Biology Examination (Grader)
  ▶ Event: Siemens-Westinghouse Science Talent Search Competition (Judge)
  ▶ Advisory Board: National Advisory Board for the College-Level Examination Program (Chair)
  ▶ Committee/Panel: Phi Beta Kappa Society (Delegator)

  State
  ▶ Committee/Panel: Vertical Team Committee for Success in College Initiative, Science Committee (Chair)

  Regional
  ▶ Event: Workshop on PreAP Science (Presenter)

  University
  ▶ Professional Affiliation: Kappa of Texas Chapter, Phi Beta Kappa (Secretary)
  ▶ Event: Official Report of the Lewis and Clark Expedition Gift to Cushing Library (Speaker)
  ▶ Advisory Board: Office of Professional School Advising (Member)
  ▶ Committee/Panel: Academic Scholarships and Awards Committee (Member), Scholarship and Assessment Think Tank (Member), University Council on Teacher Education (Member)

  College
  ▶ Event: AP Biology Teachers’ Workshop (Presenter)
  ▶ Committee/Panel: College Quality Enhancement Plan Council (Member)

  Department
  ▶ Committee/Panel: Advisor Committee for Freshman Biology (Member)

  Interdisciplinary/Intercollegiate
• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ BIOL 214. — Genes, Ecology and Evolution (total enrollment: 156)

Fall
▷ BIOL 685. — Directed Studies (total enrollment: 1)
▷ MICR 351. — Fundamentals of Microbiology (total enrollment: 233)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Molecular and Environmental Plant Sciences, [2006]
  ▶ Member, Interdisciplinary Faculty, Biotechnology, [2006]
  ▶ Member, Interdisciplinary Faculty, Genetics, [2006]

• SERVICE DURING 2006

  National
  ▶ Editorial/Board: USDA-ARS, NSF (Review: Proposals), Plant Systematics and Evolution, Plant Cell (Referee: Journals)
  ▶ Committee/Panel: National Cotton Microsatellite Database Advisory Committee (Member), Navasota Ladies’ Tresses (Spiranthes Parksii) Endangered Species Recovery Team, U.S. Fish and Wildlife Service (Member)

  State
  ▶ Committee/Panel: Working Group, Texas State Parks and Wildlife Department (Member)

  University
  ▶ Committee/Panel: Executive Committee (Member), Graduate Advising Committee (Member), Laboratory for Crop Transformation Advisory Committee (Member), Laboratory for Plant Genome Technologies Advisory Committee (Member)

  College
  ▶ Committee/Panel: College of Agriculture and Life Sciences Graduate Program Committee (Member)

  Department
  ▶ Committee/Panel: Ad Hoc Committee on Calculus for the Biological Sciences (Chair), Biology Faculty Search Committee (Member), Gene Technologies Laboratory Advisory Committee (Member)

  Interdisciplinary/Intercollegiate
  ▶ Research Group: Information Technology in Science Center (Project Team Leader)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BOTN 635. — Plant Molecular Biology (total enrollment: 19)

  Summer
  ▶ BIOL 491. — Research (total enrollment: 1)
• PRESENTATIONS DURING 2006
  > “Development of Molecular and Genetic Tools to Study the Evolution of Serpentine Adaptation, Endemism and Speciation in the Streptanthoid Complex,” Fifth International Conference on Serpentine Ecology, Sienna, Italy, May, 2006. (Individual)

• PUBLICATIONS DURING 2006
BRIAN D. PERKINS
ASSISTANT PROFESSOR  (979) 845-6505
BIOL-Cell Biol., Cellular & Molecular Biol.  bperkins@mail.bio.tamu.edu

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Genetics, [2004]
  ▶ Member, Interdisciplinary Faculty, Neuroscience, [2004]

• SERVICE DURING 2006

National
  ▶ Editorial/Board: *Development, Journal of Experimental Biology, Experimental Eye Research* (Referee: Journals)

State
  ▶ Committee/Panel: Visiting Committee, Department of Chemistry, Abilene Christian University (Member)

University
  ▶ Service Position: ATMentors (Member)

Interdisciplinary/Intercollegiate
  ▶ Committee/Panel: Faculty of Neuroscience Curriculum Committee (Member), Program in Genetics Seminar Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)

Summer
  ▶ BIOL 691. — Research (total enrollment: 2)
  ▶ BIOL 691. — Research (total enrollment: 2)

Fall
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 689. — Special Topics in (total enrollment: 11)
  ▶ BIOL 691. — Research (total enrollment: 2)
  ▶ BIOL 691. — Research (total enrollment: 2)
• SERVICE DURING 2006
  
  National

• TEACHING ASSIGNMENTS DURING 2006
  
  Fall
  ▷ BIOL 491. — Research (total enrollment: 2)
  ▷ BIOL 685. — Directed Studies (total enrollment: 1)
  ▷ BIOL 691. — Research (total enrollment: 1)
  ▷ BIOL 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006
  
  ▷ “Intraflagellar Transport Protein is Required for Vectorial Movement of TRPV Channels in the Ciliary Membrane,” 2006. (Poster Individual)
  ▷ “Intraflagellar Transport Protein-27 is a Small G Protein Involved in the Control of Cell Cycle,” Gordon Research Conference Plant and Fungal Cytoskeleton, Proctor Academy, Andover, NH, August, 2006. (Individual)
  ▷ “Intraflagellar Transport in Ciliary Signaling,” Texas A&M University Genetics Program Seminar, College Station, TX, September, 2006. (Invited)

• PUBLICATIONS DURING 2006
  
• **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  - Member, Interdisciplinary Faculty, Genetics, [2006]

• **SERVICE DURING 2006**
  - **National**
  - **University**
    - Committee/Panel: Genetics Graduate Awards Committee (Chair)
  - **College**
    - Committee/Panel: Faculty Advisory Council (Chair)
  - **Department**
    - Service Position: Faculty Mentor for Brian Perkins (Mentor)
    - Committee/Panel: Biology Lab Animal Care Committee (Member), Faculty Search Committee (Chair), Graduate Programs Committee (Elected Member), IEEF Committee (Chair), Seminar Committee (Elected Member)
  - **Interdisciplinary/Intercollegiate**
    - Committee/Panel: Genetics Executive Committee (Member), Genetics Training Grant Committee (Member)

• **TEACHING ASSIGNMENTS DURING 2006**
  - **Spring**
    - BIOL 491. — Research (total enrollment: 1)
    - BIOL 491.(H) — Research (total enrollment: 1)
    - BIOL 691. — Research (total enrollment: 3)
    - ZOOL 344. — Embryology (total enrollment: 25)
  - **Summer**
    - BIOL 691. — Research (total enrollment: 1)
  - **Fall**
    - BIOL 491. — Research (total enrollment: 2)
    - BIOL 681. — Seminar (total enrollment: 10)
    - BIOL 691. — Research (total enrollment: 2)

• **PRESENTATIONS DURING 2006**
PUBLICATIONS DURING 2006

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Molecular and Environmental Plant Sciences, [2006]

• SERVICE DURING 2006
  International

  National
  ▶ Editorial/Board: Journal of Eukaryotic Microbiology (Referee: Journals)

  University
  ▶ Committee/Panel: Class Councils Discussion Group (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ BIOL 111. — Introductory Biology I (total enrollment: 263)
  ▶ BIOL 285. — Directed Studies (total enrollment: 1)
  ▶ BIOL 481. — Seminar in Biology (total enrollment: 22)
  ▶ BIOL 491. — Research (total enrollment: 3)

  Summer
  ▶ BIOL 111. — Introductory Biology I (total enrollment: 73)

  Fall
  ▶ BIOL 111. — Introductory Biology I (total enrollment: 304)
  ▶ BIOL 111. — Introductory Biology I (total enrollment: 304)
  ▶ BIOL 285. — Directed Studies (total enrollment: 1)
  ▶ BIOL 485. — Directed Studies (total enrollment: 1)
  ▶ BIOL 491. — Research (total enrollment: 2)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Ecology and Evolutionary Biology, [2006]/

• SERVICE DURING 2006
  National

• TEACHING ASSIGNMENTS DURING 2006
  Summer
  ▶ BIOL 491. — Research (total enrollment: 2)

  Fall
  ▶ BIOL 491. — Research (total enrollment: 2)
  ▶ BIOL 689 — Special Topics in (total enrollment: 11)

• PRESENTATIONS DURING 2006
  ▶ “Mate Choice and Evolutionary Genetics of Hybrid Zones,” Genes and Behavior Gordon Conference, Ventura, CA, February, 2006.(Poster Individual)
  ▶ “Conducta y Genética Evolutiva en una Zona Híbrida Natural de Xiphophorus en la Huasteca Hidalguense,” Centro de Investigaciones Biológicas de Noroeste, La Paz, Baja California Sur, Mexico, May, 2006.( Invited)
  ▶ “Evolution of Communication in Neotropical Fishes,” Texas A&M University, Galveston, TX, September, 2006.( Invited)
  ▶ “Mate Choice and Evolutionary Genetics in Hybrid Zones,” Rice University, Houston, TX, September, 2006.( Invited)
  ▶ “Mate Choice and Evolutionary Genetics in Hybrid Zones,” University of Oklahoma, Norman, OK, September, 2006.( Invited)
> “Pérdida Rápida de un Ornamento Sexual en una Zona Híbrida Natural de Xiphophorus,” Sociedad Ictiológica Mexicana, A.C., Queretaro, Mexico, October, 2006.(Poster Individual)
> “Mate Choice and Evolutionary Genetics in Hybrid Zones in Xiphophorus,” 3rd International Symposium on Livebearing Fishes, Morelia, Michoacan, Mexico, November, 2006.(Invited)
> “Mate Choice and Evolutionary Genetics in Hybrid Zones,” Texas State University, San Marcos, TX, November, 2006.(Invited)

- PUBLICATIONS DURING 2006
• SERVICE DURING 2006
  National
  ▶ Editorial/Board: NIH, National Science Foundation (Review: Proposals)

• TEACHING ASSIGNMENTS DURING 2006
  Fall
  ▶ BIOL 413. — Cell Biology (total enrollment: 51)
  ▶ BIOL 685. — Directed Studies (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006

• PUBLICATIONS DURING 2006
• **TEACHING ASSIGNMENTS DURING 2006**

  **Spring**
  ▶ BIOL 330. — *Molecules and Life* (total enrollment: 28)

  **Fall**
  ▶ BIOL 414. — *Developmental Biology* (total enrollment: 45)

• **PRESENTATIONS DURING 2006**

  ▶ “Evolutionary Developmental Biology, evo/devo,” Department of Biology, Wuerzburg University, Germany, July, 2006. (Invited)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
 ▷ Senior Lecturer, Biology, [1996]

• SERVICE DURING 2006

National
 ▷ Professional Affiliation: World Conservation Union (Member)
 ▷ Committee/Panel: Species Survival Panel (Member)

State
 ▷ Professional Affiliation: Texas Alliance for Science, Math, Technology and Education Board (Member)

University
 ▷ Service Position: Aggie Science (Faculty Sponsor), ATMentors (Member), One Army (Faculty Sponsor)
 ▷ Committee/Panel: Academic Scholarship Committee (Member), Advisors and Counselors (Member), Council of Teacher Education (Member), Faculty Senate Subcommittee on the Status of Lecturers (Member)

College
 ▷ Committee/Panel: Diversity Committee (Member), Executive Committee (Member), Undergraduate Curriculum Committee (Chair)

Department
 ▷ Research Group: Crocodile Specialist Group (Member)
 ▷ Editorial/Board: Master Mathematics Teacher 8-12 Texas Examinations (Referee: Journals)
 ▷ Committee/Panel: Health Professions Advisory Committee (Member), Life Science Advisory Panel for the Career Center (Member)

No report received from faculty member.
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Biotechnology, [2006]
  ▶ Member, Interdisciplinary Faculty, Genetics, [2006]
  ▶ Graduate Advisor, Biology Graduate Advising Office, [2003]

• SERVICE DURING 2006
  National
  ▶ Editorial/Board: Journal of Bacteriology, PNAS, FEMS Microbiology Letters (Referee: Journals)
  College
  Department
  ▶ Committee/Panel: Graduate Programs Committee (Ex Officio Member), Graduate Programs Committee (Graduate Advisor), Graduate Recruiting and Admissions Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ BIOL 685. — Directed Studies (total enrollment: 7)
  ▶ MICR 351. — Fundamentals of Microbiology (total enrollment: 106)
  ▶ MICR 681. — Sem In Microbial Gene (total enrollment: 6)
  Summer
  ▶ BIOL 685. — Directed Studies (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)
  Fall
  ▶ BIOL 685. — Directed Studies (total enrollment: 2)

• PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Neuroscience, [2006]

• SERVICE DURING 2006
  National
  ▶ Editorial/Board: National Science Foundation (Review: Proposals), it Journal of Neurophysiology, Journal of Experimental Biology, Behavioral Brain Research (Referee: Journals)
  Department
  ▶ Committee/Panel: Ad Hoc Graduate Recruiting Committee (Member), Animal Care Committee (Member), Faculty Search Committee (Member), Undergraduate Program Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 689. — Special Topics in (total enrollment: 10)
  ▶ ZOOL 691. — Research (total enrollment: 3)
  Summer
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ ZOOL 691. — Research (total enrollment: 3)
  Fall
  ▶ ZOOL 434. — Regulatory and Behavioral Neuroscience (total enrollment: 40)
  ▶ ZOOL 691. — Research (total enrollment: 3)

• PRESENTATIONS DURING 2006
  ▶ Texas A&M University Neuroscience Spring Retreat, College Station, TX, May, 2006.(Poster Invited)
  ▶ “Seasonal Changes in the Vocal Behavior of the Mexican Free-tailed bat, Tadarida Brasiliensis,” Society of Neuroscience Meeting, Atlanta, GA, October, 2006.(Poster Individual)
  ▶ Jamaican Forestry Department, University of the West Indies, December, 2006.(Poster Invited)
• PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Ecology and Evolutionary Biology, [2006]

• SERVICE DURING 2006

  International
  ▶ Editorial/Board: Neues Jahrbuch fur Geologie und Palaeontologie (Referee: Journals)

  National
  ▶ Editorial/Board: Journal of Vertebrate Paleontology (Referee: Journals)

• PRESENTATIONS DURING 2006
  ▶ “New Vertebrates From the Paleogene of Eastern Texas and Their Importance for Stratigraphy and Correlation,” Ottawa, Canada, 2006.(Poster Individual)
  ▶ “Parrots (Aves: Psittaciformes) From the Miocene Varswater Formation,” West Coast Fossil Park, Cape Town, South Africa, 2006.(Individual)
  ▶ “What do Birds Indicate About the Taphonomy and Paleoenvironment of Plio-Pleistocene Hominin Localities in South Africa?,” Paleoanthropology Society Meeting, San Juan, Puerto Rico, 2006.(Poster Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

  National
  ▶ Professional Affiliation: National Academy of Sciences (Member)

  University
  ▶ Committee/Panel: Life Sciences Task Force (Member)

  Department
  ▶ Committee/Panel: Gene Technologies Committee (Appointed)

• TEACHING ASSIGNMENTS DURING 2006

  Fall
  ▶ BIOL 213.(H) — Molecular Cell Biology (total enrollment: 15)
  ▶ BIOL 213.200(H) — Molecular Cell Biology (total enrollment: 15)
  ▶ BIOL 491. — Research (total enrollment: 1)

• PUBLICATIONS DURING 2006

  ▶ Saksena, S; Summers, MD; Burks, JK; Johnson, AE; Braunagel, SC. (2006) Importin-alpha-16 is a translocon-associated protein involved in sorting membrane proteins to the nuclear envelope Nature Structural and Molecular Biology, vol. 13, 500-508.

  No report received from faculty member.
• SERVICE DURING 2006
  National
  ▶ Professional Affiliation: Beta Beta Beta, Biological Honor Society (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Fall
  ▶ BIOL 111. — Introductory Biology I (total enrollment: 47)
  ▶ BIOL 285. — Directed Studies (total enrollment: 1)

• PRESENTATIONS DURING 2006
• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ ZOOL 320. — Integrated Human Anatomy and Physiology II (total enrollment: 305)

Fall
▷ ZOOL 320. — Integrated Human Anatomy and Physiology II (total enrollment: 138)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ◦ Member, Interdisciplinary Faculty, Molecular and Environmental Plant Sciences, [2006]
  ◦ Member, Interdisciplinary Faculty, Biotechnology, [2006]

• SERVICE DURING 2006

National

University
  ◦ Committee/Panel: Life Sciences Building Committee (Member), Research Foundation PI Advisory Committee (Member)

College
  ◦ Committee/Panel: Tenure and Promotion Advisory Committee (Member)

Department
  ◦ Committee/Panel: Computer Committee (Chair), Space Committee (Chair), Web Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ◦ BIOL 481. — Seminar in Biology (total enrollment: 19)

Fall
  ◦ BIOL 213. — Molecular Cell Biology (total enrollment: 73)
  ◦ BIOL 491. — Research (total enrollment: 2)
  ◦ BIOL 685. — Directed Studies (total enrollment: 1)
  ◦ BIOL 691. — Research (total enrollment: 1)
  ◦ BIOL 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006

  ◦ “Functional Analysis of AB15 bZIP Transcription Factors in Arabidopsis Seed Development,” Wageningen University, Wageningen, Netherlands, October, 2006. (Individual)

• PUBLICATIONS DURING 2006

SEC. 6.1 PROFESSIONAL ACTIVITIES 113
• SERVICE DURING 2006

National
  ▶ Editorial/Board: *Journal of Herpetology* (Referee: Journals)

University
  ▶ Professional Affiliation: Texas A&M Century Scholars Program (Mentor), Texas A&M Graduate Teaching Academy (Mentor)

College
  ▶ Event: Texas Science Olympiad, Blinn College Regional Tournament (Regional Coordinator)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▶ BIOL 112. — *Introductory Biology II* (total enrollment: 44)
  ▶ BIOL 112. — *Introductory Biology II* (total enrollment: 461)
  ▶ BIOL 112. — *Introductory Biology II* (total enrollment: 66)

Fall
  ▶ BIOL 112. — *Introductory Biology II* (total enrollment: 351)
  ▶ BIOL 285. — *Directed Studies* (total enrollment: 1)
• **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  ▶ Member, Interdisciplinary Faculty, Molecular and Environmental Plant Sciences, [2006]

• **SERVICE DURING 2006**
  
  **International**
  ▶ Editorial/Board: *International Journal of Biological Sciences* (Referee: Journals)

  **National**

  **Department**
  ▶ Research Group: Molecular and Cell Biology Training Program (Member)
  ▶ Committee/Panel: Faculty Search Committee (Member), Graduate Programs Committee (Member)

  **Interdisciplinary/Intercollegiate**
  ▶ Research Group: Molecular and Environmental Plant Sciences Program (Member), Program for Microbial Genetics and Genomics (Member), Program for the Biology of Filamentous Fungi (Member)

• **TEACHING ASSIGNMENTS DURING 2006**
  
  **Spring**
  ▶ BIOL 491. — Research (total enrollment: 2)
  ▶ BIOL 635 — Plant Molecular Biology (total enrollment: 19)
  ▶ BIOL 691. — Research (total enrollment: 2)

  **Summer**
  ▶ BIOL 213. — Molecular Cell Biology (total enrollment: 30)
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 2)

  **Fall**
  ▶ BIOL 213. — Molecular Cell Biology (total enrollment: 54)
  ▶ BIOL 491. — Research (total enrollment: 3)
  ▶ BIOL 681. — Seminar (total enrollment: 6)
  ▶ BIOL 691. — Research (total enrollment: 2)

• **PUBLICATIONS DURING 2006**

116  2006 Biology Annual Report
• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ BIOL 112. — Introductory Biology II (total enrollment: 24)
▷ BIOL 112. — Introductory Biology II (total enrollment: 449)
▷ BIOL 112. — Introductory Biology II (total enrollment: 48)
▷ BIOL 285. — Directed Studies (total enrollment: 1)

No report received from faculty member.
• SERVICE DURING 2006

International
▷ Editorial/Board: Helgoland Marine Research, Zoosystema (Referee: Journals)

National
▷ Professional Affiliation: Sigma XI (Member)

University
▷ Committee/Panel: International Research Travel Assistance Grant Review Committee (Member), Search Committee, TAMU-Galveston Invertebrate Zoology faculty position (Member), TAMU- Galveston Committee to Prepare Interdisciplinary Degree in Marine Biological Sciences (Member)

Department
▷ Committee/Panel: Executive Committee (Appointed)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ BIOL 491. — Research (total enrollment: 4)
▷ ZOOL 335. — Invertebrate Zoology (total enrollment: 38)
▷ ZOOL 691. — Research (total enrollment: 1)

Summer
▷ BIOL 491. — Research (total enrollment: 1)
▷ BIOL 491. — Research (total enrollment: 2)
▷ BIOL 491. — Research (total enrollment: 3)

Fall
▷ BIOL 440. — Marine Biology (total enrollment: 30)
▷ BIOL 491. — Research (total enrollment: 5)
▷ ZOOL 691. — Research (total enrollment: 1)

• PUBLICATIONS DURING 2006
▷ Wicksten, M. (2006) Crustaceous From Wester Baja California, Mexico Collected by the R.V. Searcher. Contributions to the Study of East Pacific Crustaceous at the Instituto de Ciencias del Mar y Limnologia, Universidad National Autonoma de Mexico (pp. 1-12).
- **SERVICE DURING 2006**
  
  **National**
  - Editorial/Board: National Science Foundation (Review: Proposals), *Systematic Botany* (Referee: Journals)
  - Committee/Panel: Texas Oklahoma Regional Consortium of Herbaria Steering Committee (Member)

- **TEACHING ASSIGNMENTS DURING 2006**
  
  **Spring**
  - BIOL 491. — Research (total enrollment: 1)
  - BOTN 328. — *Plants and People* (total enrollment: 55)

  **Fall**
  - BOTN 301. — *Taxonomy Flowering Plant* (total enrollment: 78)
  - BOTN 328. — *Plants and People* (total enrollment: 59)

- **PRESENTATIONS DURING 2006**
LESLIE K. WINEMILLER

SENIOR LECTURER (979) 862-7484
BIOL lesliew@mail.bio.tamu.edu

• SERVICE DURING 2006

  International
  ▶ Editorial/Board: McGraw-Hill (Reviewer)

  National

  Department
  ▶ Service Position: TA Mentoring (Mentor)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ ZOOL 107. — Zoology (total enrollment: 194)

  Fall
  ▶ ZOOL 107. — Zoology (total enrollment: 197)
THOMAS K. WOOD

PROFESSOR (J) (979) 862-1588
BIOL thomas.wood@chemail.tamu.edu

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Professor, Chemical Engineering, [2006]

No report received from faculty member.
JIN XIONG
ASSISTANT PROFESSOR  (979) 458-3462
BIOL-Biotechnology, Chronobiology jxiong@mail.bio.tamu.edu

- SERVICE DURING 2006
  International

  National
  ▶ Editorial/Board: National Science Foundation (Review: Proposals)

- Department
  ▶ Committee/Panel: Faculty Search Committee (Member), Seminar Committee (Elected Member)

- TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ BIOL 489. — Special Topics in Bioinformatics (total enrollment: 7)
  ▶ BIOL 491. — Research (total enrollment: 2)
  ▶ BIOL 651. — Bioinformatics (total enrollment: 9)
  ▶ BIOL 691. — Research (total enrollment: 1)
  ▶ BIOL 691. — Research (total enrollment: 1)

  Summer
  ▶ MICR 691. — Research (total enrollment: 1)

  Fall
  ▶ BIOL 481. — Seminar in Biology (total enrollment: 12)
  ▶ BIOL 485. — Directed Studies (total enrollment: 1)
  ▶ BIOL 491. — Research (total enrollment: 1)
  ▶ BIOL 682. — Research Seminar (total enrollment: 13)
  ▶ MICR 691. — Research (total enrollment: 2)

- PUBLICATIONS DURING 2006
• SERVICE DURING 2006
  
  National
  ▶ Editorial/Board: Journal of Bacteriology (Referee: Journals)

  College
  ▶ Committee/Panel: International Programs Committee (Member)

  Department
  ▶ Committee/Panel: Graduate Programs Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  ▶ MICR 351. — Fundamentals of Microbiology (total enrollment: 102)

  Fall
  ▶ MICR 351. — Fundamentals of Microbiology (total enrollment: 35)

• PUBLICATIONS DURING 2006

No report received from faculty member.
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Chair, Interdisciplinary Faculty, Neuroscience, [2006]
  ▶ Associate Dean for Graduate Studies, Office of Graduate Studies, [2003]

• SERVICE DURING 2006
  University
  ▶ Committee/Panel: English Language Proficiency Certification Review Committee (Member), Faculty of Neuroscience Executive Committee (Chair), Graduate Council/Graduate Operations Committee (Member), Special International Programs Committee on Bologna Process (Member), University Fiscal Appeals Panel (Member), Texas A&M University-Chapter, Society for Neuroscience, Executive Committee (Member)

  College
  ▶ Service Position: Graduate Student Council (Advisor)
  ▶ Committee/Panel: Executive Committee (Member), Graduate Instruction Committee (Chair)

  Department
  ▶ Research Group: Cell Physiology and Molecular Imaging Core (Po1) (Director)
  ▶ Committee/Panel: BioAquatics Laboratory Use Committee (Member), Biology Executive Committee (Member), Faculty Search Committee (Member), Shared Facilities Advisory Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ BIOL 491. — Research (total enrollment: 4)
  ▶ BIOL 691. — Research (total enrollment: 5)
  ▶ ZOOL 681. — Seminar (total enrollment: 5)

  Summer
  ▶ BIOL 691. — Research (total enrollment: 4)
  ▶ ZOOL 691. — Research (total enrollment: 1)

  Fall
  ▶ BIOL 491. — Research (total enrollment: 4)
  ▶ BIOL 644. — Neural Development (total enrollment: 13)
  ▶ BIOL 681. — Seminar (total enrollment: 12)
  ▶ BIOL 691. — Research (total enrollment: 2)
  ▶ ZOOL 691. — Research (total enrollment: 2)
• PRESENTATIONS DURING 2006
  ▶ “Functional Switches in Neural Cell Communication,” Division of Neurobiology, University of Texas, Austin, TX, April, 2006. (Individual)
  ▶ “Melatonin Modulation of Astrocyte Intravascular Communication,” The Symposium on Melatonin Receptors, University of Illinois, Chicago, IL, September, 2006. (Individual)

• PUBLICATIONS DURING 2006
7. Research Activity, 2006

This section contains information on all funded research activity for the calendar year 2006. Information was initially reported by faculty and verified whenever possible through the granting agency. Because of calculations and rounding there is a small margin of error.

Information reported by faculty:
- Title
- Granting Agency
- PIs, Co-PIs, and co-workers (internal/external)
- Total Funding
- Indirect Costs
- Start & End Dates

Calendar year calculations:
- Total - Indirect = Direct
- # Days Total Grant = End Date - Start Date
- Daily Grant Award = Total Funding Reported / # Days Total Grant
- Grant Award for 2006 = # Days 2006 × Daily Grant Award
7.1 Summary of Research Support, 2006

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<td>Bell-Pedersen, D.</td>
<td>Coordination of Circadian Physiology of Diverse Species, (with: D. Bell-Pedersen, V. Cassone, S. Golden, T. Thomas, M. Zoran)</td>
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<td>Bell-Pedersen, D.</td>
<td>Functional Analysis of a Model of Filamentous Fungus</td>
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<td>3/31/2009</td>
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<td>Bell-Pedersen, D.</td>
<td>(REN) Molecular Genetic Analysis of Fungal Circadian Rhythms</td>
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<td>Datta, S.</td>
<td>Control of Neuroblast Proliferation in Drosophila</td>
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<td>Hardin, P.E.</td>
<td>Circadian Regulatory Circuits in Drosophila</td>
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<td>166,409</td>
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<td>Maggert, K.A.</td>
<td>DNA Methylation in Drosophila</td>
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<td>Perkins, B.D.</td>
<td>Cilia Assembly and Transport in the Vertebrate Retina</td>
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<td>Smotherman, M.</td>
<td>A Neural Interface for Coordinating Speech and Breathing</td>
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<td>20,249</td>
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<td>Thomas, T.L.</td>
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<td>Zoran, M.J.</td>
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* **Subtotal: National Institutes of Health**  
  3,217,894  290,624  3,508,517

* **National Science Foundation**

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<td>Bell-Pedersen, D.</td>
<td>Integrated Undergraduate Research Experiences in Biological and Mathematical Sciences, (with: D. Bell-Pedersen, V. Cassone, R. Honeycutt, T. McKnight, J. Walton, T. Wehrly)</td>
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2006 Biology annual report
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<td>Cassone, V.M.</td>
<td>TRACK1, GK-12: Fellows Integrate Science/Math In Rural Middle Schools, (with: G. Allen, V. Cassone, P. Yasskin)</td>
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<td>Holzenburg, A.K.</td>
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<td>Lekven, A.C.</td>
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SEC. 7. RESEARCH ACTIVITY 133
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<td>Pepper, A.E.</td>
<td>Population Genetics of Endangered Plant Species in the Lower Rio</td>
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**Industrial/Corporate Agencies**

- **Bayer CropScience**

| Thomas, T.L. | Definition and Analysis of a Minimal Gene Set in the Rice Blast Fungus Magnaporthe Grisea | 11/1/1999 | 12/31/2006 | 87,985 | 0 | 87,985 |

- **Cotton Incorporated**

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2006 Biology annual report
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**INTERNATIONAL AGENCIES**

- **Texas-UK Collaborative Initiative**

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**PRIVATE/NON-PROFIT AGENCIES**

- **American Cancer Society**

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<th>Lekven, A.C.</th>
<th>WNT Regulation Vertebrate Mesoderm Differentiation</th>
<th>7/1/2006</th>
<th>6/30/2010</th>
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- **Centocor**

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- **Knight's Templar Eye Foundation, Inc.**

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- **Searle Scholars Program**

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- **The Robert A. Welch Foundation**

| Benedik, M.J. | Substrate Recognition Amongst Oligomeric Nitrilases                                                             | 6/1/2005    | 5/31/2008  | 50,000 | 0        | 50,000|

**SEC. 7. RESEARCH ACTIVITY** 135
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### 7.2 Summary of Individual Support, 2006

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<td>(REN) Coordination of Circadian Physiology of Diverse Species, (with: D. Bell-Pedersen, V. Cassone, D. Earnest, S. Golden, T. Thomas, M. Zoran)</td>
<td>7/1/2006</td>
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<td>8/31/2006</td>
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**Totals:**
- Aramayo, E.D.: $277,988$
- Bell-Pedersen, D.: $978,954$
- Benedik, M.J.: $50,000$

2006 Biology annual report
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<tr>
<td>Vice President for Research</td>
<td>Structural Analysis of Cyanide Degrading Enzymes in Collaboration with University of Cape Town (South Africa)</td>
<td>1/1/2006</td>
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<td>Coordination of Circadian Physiology of Diverse Species, (with: D. Bell-Pedersen, V. Cassone, D. Earnest, S. Golden, T. Thomas, M. Zoran)</td>
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<td>8/31/2009</td>
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<td>National Cancer Institute</td>
<td>Perlecan-Mediated Control of Prostate Cancer Progression</td>
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SEC. 7. RESEARCH ACTIVITY 139
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<td><strong>Earnest, D.</strong></td>
<td>(REN) Coordination of Circadian Physiology of Diverse Species, (with: D. Bell-Pedersen, V. Cassone, D. Earnest, S. Golden, T. Thomas, M. Zoran)</td>
<td>7/1/2006</td>
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| **Erickson, J.W.**      | Chromosome Counting Mechanisms in Sex Determination                   | 1/1/2003  | 6/30/2007 | 142,352 | 64,770   | 207,122 |
| **Subtotal Erickson, J.W.**|                                                                    |           |           | 142,352 | 64,770   | 207,122 |

| **Garcia, E.**          | Genetic Regulation of Mating Behavior in *C. Elegans* Males           | 9/15/2003 | 8/31/2009 | 196,674 | 11,481   | 208,155 |
|                         |                                                                      |           |           | 233,204 | 14,403   | 247,607 |

| **Golden, J.V.**        | (REN) Regulation of Development and Nitrogen Fixation in Anabaena    | 8/15/2004 | 8/14/2007 | 120,110 | 0        | 120,110 |
|                         |                                                                      |           |           | 314,752 | 78,381   | 393,133 |

|                         | Coordination of Circadian Physiology of Diverse Species, (with: D. Bell-Pedersen, V. Cassone, S. Golden, T. Thomas, M. Zoran) | 7/1/2000  | 6/30/2006 | 49,795  | 0        | 49,795  |

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- Subtotal Golden, S.S. 238,227 48,542 286,769

- Hall, T.C.
  National Science Foundation | Chromatin Potentiation and ABA Activation of Phaseolin Transcripts | 3/1/2004    | 2/28/2008   | 112,577 | 40,027   | 152,605 |

- Subtotal Hall, T.C. 112,577 40,027 152,605

- Hardin, P.E.
  National Institutes of Health | Circadian Regulatory Circuits in Drosophila | 1/1/2004    | 12/31/2008  | 166,409 | 80,709   | 247,117 |
  National Institutes of Health | Regulation of Circadian Transcription | 4/1/2006    | 3/31/2010   | 221,180 | 0        | 221,180 |

- Subtotal Hardin, P.E. 422,701 97,387 520,088

- Holzenburg, A.K.
  National Institutes of Health | Graduate Training in Molecular Biophysics, (with: P. Cremer, V. DeRose, P. Fitzpatrick, M. Hall, A. Holzenburg, A. Johnson, F. Raushel, D. Russell) | 7/1/2003    | 6/30/2008   | 9,068  | 0        | 9,068  |
  National Science Foundation | Acquisition of a Combined Raman and Infrared Microscope With nanoscale Spatial Resolution | 8/15/2004   | 7/31/2007   | 40,730 | 0        | 40,730 |
  National Science Foundation | Phages of Agronomic Bacteria: A Student Based Genomics Approach | 10/1/2005   | 9/30/2008   | 17,101 | 7,693    | 24,793 |
  National Science Foundation | REU Site: Nanotechnology and Materials Systems, (with: M. Hall, A. Holzenburg) | 3/1/2005    | 2/28/2008   | 9,268  | 0        | 9,268  |
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<td>Molecular Mechanisms of Vocal Learning</td>
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144 2006 Biology annual report
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SEC. 7. RESEARCH ACTIVITY 145
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Annual Report, 2006

THE DEPARTMENT OF CHEMISTRY
TEXAS A&M UNIVERSITY

College Station, Texas
## 1. Statistical Abstract

### I. Personnel

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SEC. 1. **Statistical Abstract** 149
2. Honors & Awards, 2006

By Faculty

▷ This section contains all honors and awards, as reported by individual faculty members, during the calendar year 2006.

By Students

▷ This section contains all honors and awards, as reported by the department, during the calendar year 2006.
## 2.1 Honors & Awards Received by Faculty, 2006

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<td>Honorary Professorship, Renmin University (Beijing)</td>
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<td>Y. Gao</td>
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2.2 Honors & Awards Received by Students, 2006

Undergraduate

- Dow Aggie Endowed Scholarship in Science
  - Trevor D Ewers
  - William Foley
  - Ashlee Jahnke
  - Meghan Stroh

- Emily & Robert Walker ’45 Endowed Scholarship
  - Brittney D Amos

- Patsy Ruth & Delma P. Posey ’59 Endowed Scholarship
  - Courtney Faubion
3. Students, 2006

This section contains all degrees awarded, as reported by the department, during the calendar year 2006.
3.1 Graduate Degrees Awarded, 2006

Fall

M.S.

Jiney Jose
Water-Soluble Benzophenoxazine Dyes: Syntheses, Derivatization And Photophysical Studies
Advisor(s): K. Burgess

Michael Gordon Nowlin
Advisor(s): R. Macfarlane

Nancy Rebecca Ruiz
Non-Eyring Temperature Dependence Of Dynamic Isotope Effects
Advisor(s): D. Singleton

Ph.D.

Abdulaziz A H Al-Saadi
Spectroscopic And Ab Initio Studies On The Conformations And Vibrational Spectra Of Selected Cyclic And Bicyclic Molecules
Advisor(s): J. Laane

Charlotte Nicole Burress
Heavy Atom Induced Phosphorescence Of Organic Materials Using Mono- And Trifunctional Organomercury Derivatives
Advisor(s): F. Gabbai

Yuyan Guo
Mixed Ionic And Electronic Conducting Electrode Studies For An Alkali Metal Thermal To Electric Converter
Advisor(s): T. Hughbanks, Michael J. Schuller

Peniel Jason Yap Lim
Novel Devices For Analytical-Scale Isoelectric Trapping Separations
Advisor(s): G. Vigh

Qingsong Liu
Large Scale Total Synthesis Of Apoptolidinone And Progress Towards The Total Synthesis Of Ammocidin
Advisor(s): G. Sulikowski

Ricardo Marti Arbona
Mechanistic Characterization Of Members Of The Amidohydrolase Superfamily
Advisor(s): F. Raushel

Chihiyo Park
Combinatorial Design And Synthesis Of Peptidomimics And Small Molecules For Protein-Protein Interactions
Advisor(s): K. Burgess

Yong Peng
Systematics Of Cross Sections For Target K-Vacancy Production In Heavy Ion Collisions
Advisor(s): R. Watson
Bryson Richard Ussing  Systematic Examination Of Dynamically Driven Organic Reactions Via Kinetic Isotope Effects  
Advisor(s): D. Singleton

Tao Wei  Surface Spectroscopic Characterization Of Oxide Thin Films And Bimetallic Model Catalysts  
Advisor(s): D. Goodman

Heechang Ye  Dendrimer-Encapsulated Metal Nanoparticle Thin Films On Solid Surfaces: Preparation, Characterization, And Applications To Electrocatalysis  
Advisor(s): R. Crooks

Spring

▷ M.S.

Praveen Kumar Boopalachandran  Catalytic Studies Of Supported Pd-Au Catalysts  
Advisor(s): D. Goodman

Vanessa Alyss Chapa  Mimicking Anhydrobiosis On Solid Supported Lipid Bilayers  
Advisor(s): P. Cremer

Suparna Chatterjee  Advisor(s): M. Peck

Tracy Michelle Harrison  Advisor(s): M. Peck

Ernest Obinna Nnanabu  C10 Semi-Peptoid Beta-Turn Peptidomimetics: Syntheses, Characterization And Biological Studies  
Advisor(s): K. Burgess

Guangqing Shan  Detection Of Aldehydes In Lung Cancer Cell Culture By Gas Chromatography/Mass Spectrometry And Solid-Phase Microextraction With On-Fiber Derivatization  
Advisor(s): J. Bevan

▷ Ph.D.

Advisor(s): J. Fackler

Fernando Albertorio  Supported Phospholipid Membranes As Biometric Labs-On-A-Chip: Analytical Devices That Mimic Cell Membrane Architectures And Provide Insight Into The Mechanism Of Biopreservation  
Advisor(s): P. Cremer
Poulomi Ganguly  Metal Salen Catalyzed Production Of Polytrimethylene Carbonate  
Advisor(s): D. Darensbourg

Sergey Ibragimov  A Molecular Loop With Interstitial Channels In A Chiral Environment And Study Of Formation Of Metal-Metal Bonds In Dinickel, Dipalladium And Dititanium Complexes  
Advisor(s): F. Cotton

Stephen Paul Jeffery  Metalloiodithiolate Ligands As Building Blocks For Molecular Constructions  
Advisor(s): D. Darensbourg

Hahkjoon Kim  Imaging Studies Of Photochemistry Of The Stratospheric Bromine And Chlorine Compounds  
Advisor(s): S. North

Soon Mi Lim  Vibrational Sum Frequency Study On Biological Interfaces  
Advisor(s): P. Cremer

Kai Luo  Spectroscopic Characterization Of Monometallic And Bimetallic Model Catalysts  
Advisor(s): D. Goodman

Kingsley Chinwe Nzeadibe  Synthesis Of New, Single-Isomer Quaternary Ammonium Derivatives Of Beta Cyclodextrin For Electrophoretic Enantiomer Separations  
Advisor(s): G. Vigh

Seongho Oh  Optimization And Extensions Of The Nucleophile Catalyzed Aldol-Lactonization (Ncal) Process For Bicyclic B-Lactone Synthesis: Applications To Piperidine, Pyrrolidine, And Gamma-Lactam-Fused Beta-Lactones  
Advisor(s): D. Romo

Jesse Wayne Tye  Explorations Of Iron-Iron Hydrogenase Active Site Models By Experiment And Theory  
Advisor(s): M. Darensbourg

Juan Yang  Spectroscopic Investigations Of The Vibrational Potential Energy Surfaces In Electronic Ground And Excited States  
Advisor(s): J. Laane

Summer

Laura Elizabeth Ruebush  Advisor(s): S. North

Sara Jan Stefanutti Tate  Advisor(s): R. Macfarlane

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Ph.D.

Jack Hess L. Baricuatro  Electrodeposition Of Ultrathin Pd, Co And Bi Films On Well-Defined Noble-Metal Electrodes: Studies By Ultrahigh Vacuum-Electrochemistry (Uhv-Ec)  
**Advisor(s): M. Soriaga**

Richa Chandra  The Analysis Of Triglyceride-Rich Lipoproteins In Human Serum For Clinical Studies  
**Advisor(s): R. Macfarlane**

Irma Leticia Espinosa Garcia  Differential Density Lipoprotein Profiling For The Characterization Of Lipoprotein(A)  
**Advisor(s): R. Macfarlane**

Eman Mohamed Ghanem  Directed Evolution Of Phosphotriesterase For Detoxification Of The Nerve Agent Vx  
**Advisor(s): F. Raushel**

Joseph Michael Grill  The Design Of New Ligands And Transition Metal Compounds For The Oxidation Of Organic Compounds  
**Advisor(s): S. Miller**

Brandon Neal Hudder  Spectroscopic And Analytical Characterization Of The Distribution Of Iron In Intact Mitochondria From Saccharomyces Cerevisiae  
**Advisor(s): P. Lindahl**

Dheeraj Kumar  Synthesis Of Vinyl Acetate On Palladium-Based Catalysts  
**Advisor(s): D. Goodman**

Jay Edward Locklear  Secondary Ion Emission Under Kev Carbon Cluster Bombardment  
**Advisor(s): E. Schweikert**

Samuel Onofre Jara Reyes  Expanding Beta-Turn Analogs For Mimicking Protein-Protein Hot Spots  
**Advisor(s): K. Burgess**

Lindsay Elizabeth Roy  Rules For Understanding Rare-Earth Magnetic Compounds  
**Advisor(s): T. Hughbanks**

Jean Sanabria Chinchilla  Electrochemical Hydrogenation Of Aromatic Compounds Chemisorbed At Polycrystalline And Single-Crystal Pd Surfaces  
**Advisor(s): M. Soriaga**

Shayna D Sung  Phase Selectively Soluble Polymers For Homogeneously Supported Catalysts  
**Advisor(s): D. Bergbreiter**
3.2 Undergraduate Degrees Awarded, 2006

Fall

▷ B.A.

Anita Marie Bayer
Judy Edelmira Dominguez
Rachael Lynn Fraser
Jim Lim Gattoc
Matthew David Russell
Lauren Elizabeth Sprouse

▷ B.S.

Megan Taylor Arnold
James Fumiya Bondi
Jorja Lyne Duffin
Trevor David Ewers
Mark Lewis Gallagher
Dominique Lauren Galvan
Michael Alan Linder
Faber Francis McMullen

Spring

▷ B.A.

Claire Elise Borne
Brian James Cole
Sheena Shaliss Ellis
Nicholas Anthony Grizzle
Ann Holland Henderson
Christine Ann Kochart
Marcie Elizabeth Madore
Neeley Gray Morgan
Jenna Marie Nelson
Jesse Wayne Poucher
Lucki Teresa Quirindongo
Brentley J Smith
Carissa Janice Smith
Meghann Elise Smith
Rachel Simone Wooley
Blake Allan Yarbrough
Debby Lou York

▷ B.S.

Adam Hien-Minh Dao
Jose Luis Delgado
Garry Smith Grubbs
Angela Leigh Hoover
Darijana Horvat
Nicholas Gray Huggins
Stephen Matthew Kerlegon
<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Hannah Renee Malcolm</td>
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<tr>
<td>Casseday Paul Richers</td>
</tr>
<tr>
<td>Patrick Paul Vinas</td>
</tr>
<tr>
<td>Summer</td>
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<tr>
<td>☞ B.A.</td>
</tr>
<tr>
<td>Joshua Atkins Garey</td>
</tr>
<tr>
<td>Miral Hani Kawasmi</td>
</tr>
<tr>
<td>Lindsay Renee Riddle</td>
</tr>
<tr>
<td>☞ B.S.</td>
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<tr>
<td>Angelica Vanessa Cantillo</td>
</tr>
<tr>
<td>Kelly Lynn Decock</td>
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<tr>
<td>Laura Marie Launer</td>
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<tr>
<td>Katherine Ellen Walton</td>
</tr>
</tbody>
</table>

SEC. 3.2 UNDERGRADUATE DEGREES 161
4. Colloquium and Seminar Speakers, 2006

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker and Title</th>
</tr>
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<tbody>
<tr>
<td>1/23/2006</td>
<td><strong>XiaoLiang Sunney Xie</strong>&lt;br&gt;Harvard University&lt;br&gt;Single Molecule Dynamics</td>
</tr>
<tr>
<td>1/24/2006</td>
<td><strong>XiaoLiang Sunney Xie</strong>&lt;br&gt;Harvard University&lt;br&gt;Preparation and Characterization of Cyanide-Bridged Molecular Magnets Using a Building-Block Approach</td>
</tr>
<tr>
<td>1/25/2006</td>
<td><strong>XiaoLiang Sunney Xie</strong>&lt;br&gt;Harvard University&lt;br&gt;Single Molecule Dynamics</td>
</tr>
<tr>
<td>3/29/2006</td>
<td><strong>Richard N. Zare</strong>&lt;br&gt;Stanford University&lt;br&gt;Reaction Dynamics</td>
</tr>
<tr>
<td>3/30/2006</td>
<td><strong>Richard N. Zare</strong>&lt;br&gt;Stanford University&lt;br&gt;Reaction Dynamics</td>
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<td>3/31/2006</td>
<td><strong>Richard N. Zare</strong>&lt;br&gt;Stanford University&lt;br&gt;Reaction Dynamics</td>
</tr>
<tr>
<td>4/3/2006</td>
<td><strong>Richard V. Wolfenden</strong>&lt;br&gt;University of North Carolina</td>
</tr>
<tr>
<td>4/4/2006</td>
<td><strong>Richard V. Wolfenden</strong>&lt;br&gt;University of North Carolina&lt;br&gt;Enzyme Action and the Depth of Chemical Time</td>
</tr>
<tr>
<td>4/24/2006</td>
<td><strong>Erick M. Carreira</strong>&lt;br&gt;Eidgenssische Technische Hochschule&lt;br&gt;Synthesis Studies</td>
</tr>
<tr>
<td>4/25/2006</td>
<td><strong>Erick M. Carreira</strong>&lt;br&gt;Eidgenssische Technische Hochschule&lt;br&gt;Synthesis Studies</td>
</tr>
<tr>
<td>4/26/2006</td>
<td><strong>Erick M. Carreira</strong>&lt;br&gt;Eidgenssische Technische Hochschule&lt;br&gt;Synthesis Studies</td>
</tr>
<tr>
<td>4/27/2006</td>
<td><strong>Ana De Bettencourt-Dias</strong>&lt;br&gt;Syracuse University</td>
</tr>
</tbody>
</table>
9/20/2006  Harry A. Atwater  
California Institute of Technology  
Nanophotonic Materials and Devices

9/21/2006  Harry A. Atwater  
California Institute of Technology  
Nanophotonic Materials and Devices

9/22/2006  Harry A. Atwater  
California Institute of Technology  
Nanophotonic Materials and Devices

9/25/2006  Philipp Gutlich  
Johannes Gutenberg  
Mssbauer Spectroscopy - A Powerful Tool in Chemistry and Materials Science

9/26/2006  Philipp Gutlich  
Johannes Gutenberg  
Mssbauer Spectroscopy - A Powerful Tool in Chemistry and Materials Science

9/27/2006  Philipp Gutlich  
Johannes Gutenberg  
Mssbauer Spectroscopy - A Powerful Tool in Chemistry and Materials Science

10/9/2006  A. Paul Alivisatos  
University of California, Berkeley  
Physical Chemistry of Colloidal Nanocrystals

10/10/2006  A. Paul Alivisatos  
University of California, Berkeley  
Physical Chemistry of Colloidal Nanocrystals

10/11/2006  A. Paul Alivisatos  
University of California, Berkeley  
Physical Chemistry of Colloidal Nanocrystals

10/16/2006  Rolf Thauer  
Max-Planck-Institut  
Metalloenzymes Involved in Methanogenisis and Anaerobic Oxidation of Methane

10/17/2006  Rolf Thauer  
Max-Planck-Institut  
Metalloenzymes Involved in Methanogenisis and Anaerobic Oxidation of Methane

10/18/2006  Rolf Thauer  
Max-Planck-Institut  
Metalloenzymes Involved in Methanogenisis and Anaerobic Oxidation of Methane

11/6/2006  Thomas Elsaesser  
Max Born Institute  
Ultrafast Structural Dynamics of Condensed Matter

11/7/2006  Thomas Elsaesser  
Max Born Institute

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Ultrafast Structural Dynamics of Condensed Matter

11/8/2006  **Thomas Elsaesser**  
*Max Born Institute*  
Ultrafast Structural Dynamics of Condensed Matter

11/13/2006  **Scott E. Denmark**  
*University of Illinois*  
Invention of New Synthetic Reactions

11/14/2006  **Scott E. Denmark**  
*University of Illinois*  
Invention of New Synthetic Reactions

11/15/2006  **Scott E. Denmark**  
*University of Illinois*  
Invention of New Synthetic Reactions
Seminar Speakers

1/9/2006  Zhaoxiang Wu  
         Texas A& M University  
         Pre-Unfolding Resonant Oscillations of Dingle Green Fluorescent Protein Molecules

1/23/2006  Bekir Eser  
          Texas A& M University  
          Iron Transport and Storage in Biological Systems

1/23/2006  Travis Gilbreath  
          Writing is a Tool in Teaching Undergraduate Chemistry

1/23/2006  Hyunsook Jung  
          Texas A& M University  
          Terahertz Biosensing Technology: Frontiers and Progress

1/30/2006  Nam Hawn Chou  
          Core Shell and Hollow Nanomaterials: Synthesis and Application

1/30/2006  Henry Nguyen  
          Texas A& M University  
          Resolution of Alcohols via Metal-Catalyzed Oxidation

2/1/2006  Clare Grey  
          State University of New York, Stony Brook

2/6/2006  Jennifer Foulke  
          Texas A& M University  
          Roles of O-Linked N-Acetylglucosamine Protein Modification

2/6/2006  Qiang Shao  
          Texas A& M University  
          Force Generation by Myosin V in Skeletal Muscle

2/13/2006  Panida Surawatarawong  
          Texas A& M University  
          Quantum Mechanical Continum Solvation Models

2/13/2006  Ping-Chuan Tsai  
          Texas A& M University  
          Allosteric Mechanism of Biological Signal Transduction

2/15/2006  William Buhro  
          Washington University, St. Louis

2/20/2006  Brandon Chance  
          Texas A& M University  
          Condensation Polymers via Organocatalysis

2/20/2006  Jaebum Park
Imaging Studies of Biomolecular Interactions

2/22/2006  Seth Cohen
University of California, San Diego

2/27/2006  Kristen Chambers
Texas A&M University
Characteristics and Chemistry of Fluoride-Bridged Metal Clusters

2/27/2006  Jeffery Johnson
Texas A&M University
Ion Mobility Spectrometry for Rapid Screening of Narcotics and Explosives

2/27/2006  James Watkins
Nanosized Molecular Motors

3/6/2006  Matthew Hilfiger
The Use of Density Functional Theory in the Study and Prediction of Magnetic Behavior of Discrete and Extended Molecular Systems

3/6/2006  Lingling Li
Some Electro cyclic Reactions in Total Synthesis

3/6/2006  Zhaoxiang Wu
Pre-Unfolding Resonant Oscillations of Dingle Green Fluorescent Protein Molecules

3/9/2006  Clearfield Endowed
State University of New York, Buffalo
Combining Time-resolved Diffraction and Spectroscopy in the Study of Excited States in Solids and the Potential for Mapping Molecular Processes

3/20/2006  Edmundo Lozano
Hydrophobic Catalysis in Aqueous Media

3/20/2006  Lei Tao
Metallic Barcodes for Multiplexed Analysis

3/22/2006  Timothy Warren
Georgetown University

3/27/2006  Richard Hall
Developments in Protein Purification: Self Cleavable Elastin-Like Polypeptide Tags for Column Free Purification

3/27/2006  Yatsandra Oyola
Texas A&M University
Scalable Synthesis of Discodermolide as a Paradigm for Drug Candidate Development
4/3/2006  Younhee Cho

Novel Applications of Micro and Nano Barcodes
4/3/2006  Laura Ruebush

Visualizations in Chemical Education
4/6/2006  Mercouri Kanatzidis  
*Michigan State University*

Satellite Detection of Trace Gases in the Atmosphere
4/10/2006  Nazario Lopez

Control Motion in Supermolecular Ensembles
4/17/2006  Wei-Ssu Liao

A Different Scene of Analysis: The Single Cell Approach
4/17/2006  Marcus Sidhartha

Mass Spectrometry Based Metabolomics
4/24/2006  Andrea Hsu

Advancements in Solid Propellant Technology
4/24/2006  Han-Chun Tsai

Bclz and BAX in Apoptosis
5/3/2006  Mark Thompson  
*University of Southern California*

5/4/2006  Elky Almaraz

5/12/2006  Jessica Dafhne Aguirre

Synthesis and Investigation of the Interaction of Dirhodium Compounds with Biomolecules
5/22/2006  Ferdi Karadas

Preparation and Characterization of Cyanide-Bridged Molecular Magnets Using a Building-Block Approach
6/30/2006  Todd W. Hudnall
Synthesis and Structures of Polyfunctional Hybrid Lewis Acid/Hydrogen-Bond Donor Derivatives

8/8/2006  Amanda Henkes
Alternative Routes to Oxides, Phosphides, and Nitrides: Using Nanoparticles as Reactive Precursors to Synthesize Complex Materials

8/30/2006  Michael Heinekey
_{University of Washington}_
Transition Metal Dihydrogen Complexes: Synthesis, Structure, Dynamics and Reactivity

8/31/2006  Karl Scheidt
_{Northwestern University}_

9/4/2006  Andrea Matla
Multicomponent Dithiane Linchpin Coupling and Recent Applications in Organic Synthesis

9/4/2006  Robert North
Recent Advances in Micrarray Technology

9/11/2006  Osit Karroonrirun
Strategies and Tactics for the Total Synthesis of Guanacastepene Natural Products

9/11/2006  Luis Rivera
Quantum Mechanical Effects in Enzyme Kinetics

9/15/2006  J.P. Pellois
_{Texas A&M University}_

9/18/2006  Scott Brothers
Guilty as Sin: The Dithiolene Ligand in Action

9/18/2006  Martin Codrington
Tracing the Discovery of the Perfect Liquid

9/25/2006  Maria Duran-Galvan
Recent Applications of Transannular Diels-Alder Reactions in the Total Synthesis of Natural Products

9/25/2006  Ammon Pickett
Organic Photovoltaic Cells
9/28/2006  Michael Burkart  
*University of California, San Diego*

9/29/2006  Chris Dorsey  
Cationic Main Group Lewis Acids - Bonding and Reactivity with Anions

10/2/2006  Stephanie Cologna  
Novel Applications of Biological Nanotechnology

10/2/2006  Nathan Henderson  
Magnetostrictic Materials: Ferromagnetism and Shape Memory Alloys

10/4/2006  Paul Maggard  
*North Carolina State University*

10/5/2006  David Van Vranken  
*University of California, Irvine*

10/9/2006  Benjamin Duffus  
Understanding the Photophysical Properties of Luminescent Group X Cyclometalated Complexes

10/9/2006  Tianbiao Liu  
Recent Advances in Applications of Ferrocene in Biological Chemistry

10/12/2006  Kazunori Koide  
*University of Pittsburgh*

10/19/2006  Debbie Crans  
*Colorado State*

10/20/2006  Jeremy Andreatta  
Mechanistic and Catalyst Recyclability Studies for the Copolymerization of CO2 and Epoxides

10/23/2006  Adriana Moncada  
N-Heterocyclic Carbene Ligands and Some of Their Applications in Homogenous Catalyssis

10/23/2006  Vince Venditto  
From Borromean Rings to Palindromic Rotaxanes: The Chemistry of Molecular Muscles
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<tr>
<th>Date</th>
<th>Speaker</th>
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<tr>
<td>10/30/2006</td>
<td>Farah Dawood</td>
<td>Properties and Applications of Multiferroic Materials</td>
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<td>10/30/2006</td>
<td>Richard Sanchez Jr.</td>
<td>Comparative Analysis of Lactacystin Syntheses</td>
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<td>11/1/2006</td>
<td>Joseph Sadighi</td>
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<td>11/3/2006</td>
<td>Shawn Fitch</td>
<td>Tetradentate Nitrogen Donor Metal Complexes for the Copolymerization of CO2 and Epoxide</td>
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<td>11/6/2006</td>
<td>Dorianna Castillo</td>
<td>Recent Strategies for Selective Chemical Protein Modification</td>
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<td>11/8/2006</td>
<td>Nam Hawn Chou</td>
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<tr>
<td>11/9/2006</td>
<td>Dennis Winge</td>
<td>University of Utah</td>
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<td>11/10/2006</td>
<td>Chris Bauer</td>
<td>Converting Nanocrystalline Metals into Intermetallics for Applications in Catalysis</td>
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<td>Gyula Vigh</td>
<td>Texas A&amp;M University</td>
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<td>11/13/2006</td>
<td>Buddhadeb Ghosh</td>
<td>Atmospheric Chemistry of Titan</td>
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<td>11/13/2006</td>
<td>Meredith Mintzer</td>
<td>Polutionation Reactions Using Ionic Liquids as Solvent</td>
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<td>11/17/2006</td>
<td>Roxanne Jenkins</td>
<td>Synthetic Analogs for the Nickel-Containing Superoxide Dismutase Active Site using N2S2 Ligands</td>
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<td>11/20/2006</td>
<td>Ryan Blas</td>
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Hadamard Transforms - How are They Used in Chemical Analyses?

11/20/2006  Qingsheng Wang

Model Chemistry of Carboxylate-bridged Diiron Metalloproteins

11/27/2006  Jixin Chen

Photoswitches on the Molecular Level: Advances and Applications

11/27/2006  Cliferson Thivierge

Metal Catalyzed Borylation via C-H Bond Activation

12/1/2006  Nazario Lopez

Molecule-Based Magnets Composed of Lanthanide and Transition Metal Ions Bridged by Organocyanide or Cyanometallate Ligands: Tuning Magnetic Interactions by Varying Dimensionality of the Structure and Metal Ion Identity

12/8/2006  Paul Cremer

*Texas A&M University*
5. Faculty*, 2006

Paul S. Bagus..........................................................Senior Lecturer
David P. Barondeau.............................................Assistant Professor
James D. Batteas.................................................Associate Professor
David E. Bergbreiter .............................................Professor
John W. Bevan....................................................Professor
Lawrence S. Brown..............................................Senior Lecturer
Kevin Burgess....................................................Professor
Abdellatif Chouai.................................................Lecturer
Abraham Clearfield..............................................Professor
Brian T. Connell..................................................Assistant Professor
Dwight C. Conway................................................Professor
F. Albert Cotton..................................................Distinguished Professor
Paul S. Cremer....................................................Professor
Richard M. Crooks..............................................Professor
Marcetta Y. Daresbourg........................................Professor
Donald J. Daresbourg..........................................Professor
Victoria J. DeRose..............................................Associate Professor
Kim R. Dunbar....................................................Professor
John P. Fackler....................................................Distinguished Professor
Paul Fitzpatrick..................................................Professor (J)
Francois P. Gabbai..............................................Professor
Holly C. Gaede....................................................Senior Lecturer
Yi Qin Gao..........................................................Assistant Professor
D. Wayne Goodman.............................................Distinguished Professor
Ganesa Gopalakrishnan.......................................Senior Lecturer
Michael B. Hall..................................................Professor
Kenn E. Harding..................................................Professor
Dudley Herschbach..............................................Professor (J)
Robert A. Hildreth..............................................Lecturer
Christian B. Hilty................................ .................Assistant Professor
John L. Hogg.....................................................Professor
Emily C. Hollink-Beddie......................................Lecturer
Timothy R. Hughbanks.......................................Professor
Marian Hyman...................................................Senior Lecturer
Arthur E. Johnson..............................................Distinguished Professor (J)
Wendy Keeney-Kennicutt.................................Senior Lecturer
Jaan Laane.......................................................Professor
Paul A. Lindahl..................................................Professor
Robert R. Lucchese.............................................Professor
Jack H. Lunsford.................................................Distinguished Professor Emeritus (A)
Ronald D. Macfarlane.........................................Professor
Elmo J. Mawk....................................................Senior Lecturer
Stephen A. Miller..............................................Assistant Professor
Ahmed A. Mohamed...........................................Lecturer
Mysore S. Mohan..............................................Senior Lecturer
Christine A. Mullen.............................................Senior Lecturer
Carlos A. Murillo..............................................Lecturer
Joseph B. Natowitz ................................. Distinguished Professor
Simon W. North ................................. Associate Professor
M. Larry Peck .................................... Professor
Joanna G. Pellois ................................ Senior Lecturer
James D. Pennington ............................ Senior Lecturer
Krishan Ponnamperuma .......................... Lecturer
Frank M. Raushel ................................ Professor
Daniel Romo ...................................... Professor
Michael P. Rosynek ............................... Professor
Marvin W. Rowe .................................. Professor
David H. Russell .................................. Professor
James C. Sacchettini ............................... Professor (J)
Patricio Santander ................................. Lecturer
Raymond E. Schaak .............................. Assistant Professor
Emile A. Schweikert .............................. Professor
A. Ian Scott ...................................... Distinguished Professor
Eva Sevick-Muraca ................................ Professor
Mykhailo Shatruk ................................ Lecturer
Eric E. Simanek ................................. Associate Professor
Daniel A. Singleton ................................ Professor
Dong Hee Son ..................................... Assistant Professor
Elizabeth Soriaga ................................. Senior Lecturer
Manuel P. Soriaga ............................... Professor
Earle G. Stone ................................... Lecturer
Megan Tichy ...................................... Lecturer
Tammy H. Tiner ................................. Senior Lecturer
Gyula Vigh ........................................ Professor
Coran M. Watanabe .............................. Assistant Professor
Rand L. Watson .................................. Professor
Robert D. Wells .................................. Professor (J)
Vickie M. Williamson ............................. Senior Lecturer
Danny L. Yeager .................................. Professor
Sherry J. Yennello .................................. Professor
Ralph A. Zingaro ................................. Professor Emeritus (A)

*For the Annual Report, Faculty are defined as tenure and non-tenure track employees who were employed at any time during 2006 (01/01/2006-12/31/2006).
5.1 Professional Activities, 2006

This section contains information, as reported by individual faculty members, encompassing each faculty member’s professional activities for the calendar year 2006.

*Subsections of professional activities are defined as follows:*

**Honors and Awards**
▷ All professional honors and awards, both internal and external.

**Service Activities**
▷ All professional service and leadership roles, including: departmental, college, university, state, national and international.

**Teaching**
▷ Classes taught during the Spring, Summer and Fall sessions of 2006.
▷ Any missing enrollment numbers were gathered from the Student Information Management System (SIMS) at Texas A&M University.

**Research Projects**
▷ All research projects, funded and unfunded.
▷ Whenever possible, all research-related employees of that faculty member are listed along with the citation. *Key for employees: (P)=Postdoc, (G)=Graduate Student, (U)=Undergraduate Student.*
▷ Renewals are marked by “(REN)” at the beginning of their title.
▷ Unfunded grants are marked by “(UNFUNDED)” at the end of the citation.
▷ Additional information (including PIs, CoPIs, and funding) on all funded grants are listed in Section 6.

**Presentations**
▷ All posters, invited and contributed lectures (plenary, conferences, colloquia, seminars, etc.).
▷ Whenever reported, posters, invited and contributed lectures are noted in parentheses following the citation.
▷ Citations are in chronological order.

**Publications**
▷ All printed materials published during 2006.
▷ Pre-press, in-press and submitted publications were not included.
▷ Citations were formatted in APA Style and are in alphabetical order by lead author.
• SERVICE DURING 2006

National
  ▶ Professional Affiliation: NCSA (Member)
  ▶ Editorial/Board: Editorial Board, Journal of Electron Spectroscopy and Related Phenomena (Member)

Department
  ▶ Committee/Panel: SDSC (Member)

No report received from faculty member.
• SERVICE DURING 2006

National
▷ Editorial/Board: 2006 Cooperative Grants Program Competition (Reviewed), Biochemistry and Cellular and Molecular Life Sciences (Reviewed)

University
▷ Service Position: Chemistry-Biology Interface Training Program (Mentor), Molecular Biophysics Training Program (Mentor)

• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 627. — Principles of Biological Chemistry (total enrollment: 19)
▷ CHEM 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006

▷ “Post-Translational Chemistry for Cofactor-Protein Partnerships,” The Chemistry: Biology Interface (CBI) Conference, College Station, TX, August, 2006. (Invited)
▷ “Design and Elucidation of Post-Translational Chemistry in Green Fluorescent Protein,” Biochemistry and Biophysics Department, Texas A&M University, College Station, TX, September, 2006. (Invited)
▷ “Structure-Function Studies of Nickel Superoxide Dismutase,” The Biophysical Night Out, College Station, TX, September, 2006. (Invited)

• PUBLICATIONS DURING 2006

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• SERVICE DURING 2006

  National
  ▶ Advisory Board: Polymer Analysis Division, Society of Plastic Engineers (Board of Directors)
  ▶ Committee/Panel: Symposium on Polymer Surfaces and Interfaces, Annual Technical Conference (Chair), Symposium on Polymer Surfaces and Interfaces, Annual Technical Conference (Organizer), Symposium on Scanning Probe Microscopy, Southwest Regional ACS Meeting (Chair), Symposium on Scanning Probe Microscopy, Southwest Regional ACS Meeting (Organizer)

  University
  ▶ Advisory Board: Center for Integrated Microchemical Systems - Materials Characterization Facility (Member)
  ▶ Committee/Panel: CIMS-Materials Characterization Facility (Chair), Materials Science and Engineering Faculty (Member)

  Department
  ▶ Committee/Panel: Faculty Search Committee - Analytical (Member), Graduate Admissions and Review Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 602. — Analytical Chemistry II (total enrollment: 11)
  ▶ CHEM 691. — Research (total enrollment: 5)

  Summer
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 691. — Research (total enrollment: 2)
  ▶ CHEM 691. — Research (total enrollment: 2)

  Fall
  ▶ CHEM 315. — Quantitative Analysis (total enrollment: 27)
  ▶ CHEM 318. — Quantitative Analysis Laboratory (total enrollment: 21)
  ▶ CHEM 691. — Research (total enrollment: 5)
• PRESENTATIONS DURING 2006
  ▶ “Applications of Scanned Probe Lithography for Chemical Assembly,” 231st National American Chemical Society Meeting, March, 2006. (Contributed)
  ▶ “Patterning of Molecular Devices on Surfaces,” Texas A&M University Research Week, College Station, TX, March, 2006. (Poster Graduate, K. Walton)
  ▶ “Patterning and Chemical Assembly on GaAs Surfaces for Electronics and Photonics Applications,” Telluride Workshop on Functional Modification of Semiconductor Surfaces, July, 2006. (Invited)
  ▶ “Characterization of Thiol Derivatized Porphyrins on Au Substrates,” SW Regional ACS Meeting, October, 2006. (Poster Graduate, A. Schuckman)
  ▶ “Characterization of Thiol Tethered Porphyrin Derivatives on Au Substrates,” SW Regional ACS Meeting, October, 2006. (Contributed)
  ▶ “Patterning of GaAs(100) and Self-Assembled Monolayers on GaAs(100) by Scanning Probe Lithography,” SW Regional ACS Meeting, October, 2006. (Contributed)
  ▶ “Tribochemistry of Mica Studied by AFM,” SW Regional ACS Meeting, October, 2006. (Contributed)

• PUBLICATIONS DURING 2006
6521-6525.


- **CHAIRS/PROFESSORSHIPS**
  - Eppright Professorship in Undergraduate Teaching Excellence [2002]

- **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  - Member, Interdisciplinary Faculty, Materials Science and Engineering, [2004]

- **AWARDS DURING 2006**
  - **University**
    - Presidential Professor for Teaching Excellence, Texas A&M University
    - Wells Fargo Honors Faculty Mentor Award, Texas A&M University

- **SERVICE DURING 2006**
  - **University**
    - Committee/Panel: University Writing Course Committee (Representative)
  - **Department**
    - Service Position: Graduate Admissions/Recruiting (Coordinator), National Science Foundation and Research Experiences for Undergraduates Program (Coordinator)
    - Committee/Panel: Advisory Council (Member), Department Head Search Committee (Member), Executive Committee (Member), Graduate Admissions and Review Committee (Chair), Graduate Curriculum Committee (Member)

- **TEACHING ASSIGNMENTS DURING 2006**
  - **Spring**
    - CHEM 466. — **Polymer Chemistry** (total enrollment: 70)
    - CHEM 491. — **Research** (total enrollment: 1)
    - CHEM 491. — **Research** (total enrollment: 1)
    - CHEM 691. — **Research** (total enrollment: 9)
  - **Summer**
    - CHEM 491. — **Research** (total enrollment: 1)
    - CHEM 491. — **Research** (total enrollment: 1)
    - CHEM 491. — **Research** (total enrollment: 1)
    - CHEM 491. — **Research** (total enrollment: 1)
    - CHEM 691. — **Research** (total enrollment: 9)
  - **Fall**
    - CHEM 491. — **Research** (total enrollment: 1)
    - CHEM 491. — **Research** (total enrollment: 1)
CHEM 691. — Research (total enrollment: 8)
CHEM 695. — Frontiers in Chemical Research (total enrollment: 58)

PRESENTATIONS DURING 2006

“Polysiloxanes as Inorganic Soluble Polymer Supports in Synthesis,” 231st American Chemical Society National Meeting, Atlanta, GA, March, 2006. (Graduate, K. Regan)
“Probing the Microenvironment of Polymer-Supported Reagents,” 231st American Chemical Society National Meeting, Atlanta, GA, March, 2006. (Graduate, C. Hobbs)
“Covalent Layer-by-Layer Assembly for Surface Modification of Polyolefins,” Hong Kong University of Science and Technology, Hong Kong, China, May, 2006. (Individual)
“Polyolefin Surface Functionalization,” Polymer Technology Consortium, Texas A&M University, College Station, TX, May, 2006. (Individual)
“Soluble Polymers as Supports that Facilitate Synthesis and Catalysis,” Chinese University of Hong Kong, Hong Kong, China, May, 2006. (Individual)
“Soluble Polymers as Supports that Facilitate Synthesis and Catalysis,” Polytechnic University of Hong Kong, Hong Kong, China, May, 2006. (Individual)
“Studies of Thermomorphic and Solvent-Dependent Macromolecular Solubility Effects,” East Asia Polymer Conference, Nankai University, Tianjin, China, May, 2006. (Invited)
“Using Soluble Polymers to Facilitate Synthesis,” Hong Kong University, Hong Kong, China, May, 2006. (Individual)
“Cascade Catalysis and 'Smart' Catalyst Separation in ATRP Polymerizations,” 62nd American Chemical Society Southwest Regional Meeting, Houston, TX, October, 2006. (Graduate, P. Hamilton)
“Cascade Catalysis and 'Smart' Catalyst Separation in ATRP Polymerizations,” Industrial University Cooperative Chemistry Program Symposium, Texas A&M University, College Station, TX, October, 2006. (Graduate, P. Hamilton)
“Covalent Thin Film Nanocomposites,” 62nd American Chemical Society Southwest Regional Meeting, Houston, TX, October, 2006. (Individual)
“Green Chemistry With Smart Polymers,” Governor’s State University, Chicago, IL, October, 2006. (Individual)
“Layer-by-Layer Assembly on Polyethylene Films via 'Click' Chemistry,” 62nd American Chemical Society Southwest Regional Meeting, Houston, TX, October, 2006. (Graduate)
“Phase Selectively Soluble Polymer Supports for Homogeneous Reactions,” 62nd American Chemical Society Southwest Regional Meeting, Houston, TX, October, 2006. (Graduate)
“Phase Selectively Soluble Polymer Supports for Homogeneous Reactions,” Industrial University Cooperative Chemistry Program Symposium, Texas A&M University, College Station, TX, October, 2006. (Graduate)

“Polyisobutylene as a Polymer Support for Homogeneous Catalysis,” 62nd American Chemical Society Southwest Regional Meeting, Houston, TX, October, 2006. (Graduate)

“Polyisobutylene Terminally Functionalized Oligomers in Phase Transfer Catalysis,” Industrial University Cooperative Chemistry Program Symposium, Texas A&M University, College Station, TX, October, 2006. (Poster Graduate)

“Polymer-Facilitated Homogeneous Catalysis,” University of Illinois, Chicago, IL, October, 2006. (Individual)

“Polyvalent Layer-by-Layer Surface Modification of Polyethylene Film and Power,” 62nd American Chemical Society Southwest Regional Meeting, Houston, TX, October, 2006. (Graduate, K. Liao)

“Stimuli Responsive Polymer Solubility - a Probe of Biomacromolecule Solvation and a Tool for Synthesis,” University of Seattle, Seattle, WA, October, 2006. (Individual)

“Stimuli-Responsive Polymer Solubility,” Symposium on Stimuli-Responsive Polymers, University of Southern Mississippi, Hattiesburg, MS, October, 2006. (Individual)

“Synthesis and Applications of Soluble Polyisobutylene (PIB) Oligomer Supported Ligands and Catalysts,” Industrial University Cooperative Chemistry Program Symposium, Texas A&M University, College Station, TX, October, 2006. (Poster Graduate, J. Tian)

“Synthesis and Applications of Soluble Polyisobutylene (PIB) Oligomer Supported Ligands and Catalysts,” 62nd American Chemical Society Southwest Regional Meeting, Houston, TX, October, 2006. (Poster Graduate)


“New Ways to Use Catalysts in Organic Chemistry,” Moscow State University, Moscow, Russia, December, 2006. (Individual)

**PUBLICATIONS DURING 2006**


JOHN W. BEVAN

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CHEM-Physical/Nuclear Chemistry bevan@mail.chem.tamu.edu

• CHAIRS/PROFESSORSHIPS
  ▷ Davidson Chair in Science [2005]

• SERVICE DURING 2006

  University
  ▷ Service Position: Center for Atmospheric Chemistry and the Environment, Texas A&M University(Director), Laboratory for Submillimeter/THz Science and Technology (Director)

  Department
  ▷ Research Group: Physical and Nuclear Chemistry Division (Chair)
  ▷ Committee/Panel: Departmental Advisory Council (Alternate Member), Faculty Recruitment Committee - Analytical (Member), Faculty Recruitment Committee - Physical - Nuclear (Member), Tenure and Promotion Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▷ CHEM 322. — Physical Chemistry for Engineers (total enrollment: 13)
  ▷ CHEM 491. — Research (total enrollment: 1)
  ▷ CHEM 491. — Research (total enrollment: 1)
  ▷ CHEM 691. — Research (total enrollment: 3)

  Summer
  ▷ CHEM 326. — Physical Chemistry Laboratory II (total enrollment: 14)
  ▷ CHEM 491. — Research (total enrollment: 1)
  ▷ CHEM 491. — Research (total enrollment: 1)
  ▷ CHEM 691. — Research (total enrollment: 2)

  Fall
  ▷ CHEM 324. — Physical Chemistry (total enrollment: 33)
  ▷ CHEM 691. — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006
  ▷ “An Initial Morphed Potential of OC-HCl,” Symposium on Molecular Structure, University of Texas, Austin, TX, March, 2006. (Contributed)
  ▷ “Observation and Analysis of the $K = 0 \leftarrow 0$ Rot-vibrational Transitions in $(HI)_2$,” Symposium on Molecular Structure, University of Texas, Austin, TX, March, 2006. (Contributed)
“Ortho Para Isomers of HI Dimer,” Symposium on Molecular Structure, University of Texas, Austin, TX, March, 2006. (Contributed)

The Structure and Dynamics of HI Dimer Austin,” Symposium on Molecular Structure, University of Texas, Austin, TX, March, 2006. (Contributed)


“TAMU Fast Scan BWO Spectrometer With Co-Axially Configured Pulsed Jet, Ortho Para Spin Isomers of HI Dimer,” XVth Symposium High Resolution Molecular Spectroscopy, Russia, July, 2006. (Contributed)

“Quadrupole Coupling and Large Amplitude Motion Interaction in HI Dimer,” 19th International Conference on High Resolution Molecular Spectroscopy, Praque, Czech Republic, August, 2006. (Contributed)

“Phase and Frequency Stabilized Submillimeter Spectroscopy for Atmospheric Chemistry,” 62nd South West Regional Meeting, ACS, Houston, TX, November, 2006. (Contributed)


• PUBLICATIONS DURING 2006
  

• SERVICE DURING 2006

University
▷ Committee/Panel: Chemistry Coordinator TAMU-Qatar (Coordinator)

College
▷ Committee/Panel: Qatar Advisory Committee (Member)

Department
▷ Service Position: Chemistry 107 (Coordinator)
▷ Committee/Panel: Undergraduate Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 334. — Experimental Physical Chemistry II (total enrollment: 26)

Fall
▷ CHEM 107. — General Chemistry for Engineering Students (total enrollment: 310)
▷ CHEM 107. — General Chemistry for Engineering Students (total enrollment: 314)
▷ CHEM 697. — Methods in Teaching Chemistry Laboratory (total enrollment: 14)

• PUBLICATIONS DURING 2006
• CHAIRS/PROFESSORSHIPS
  ▶ Rachal Professorship in Chemistry [2004]

• SERVICE DURING 2006
  International
  ▶ Service Position: L’Oreal in France (Consultant)
  ▶ Editorial/Board: Hong Kong Universities (Review: Proposals)

  National
  ▶ Service Position: Combimax, San Francisco, CA (Consultant), Three Legal Cases (Expert Witness)
  ▶ Committee/Panel: NIH Chemical and Bioanalytical Sciences Review Panel (Member), NIH Roadmap Applications for Pilot-Scale Libraries for High-Throughput Screening (Member)

  State
  ▶ Service Position: Southwestern Medical School (Consultant)

  University
  ▶ Research Group: Chemistry Biology Interface Training Grant (Member)
  ▶ Service Position: Chemistry Biology Interface Program (Director)
  ▶ Committee/Panel: Library Committee (Liaison) (Chair), Sterling C. Evans Library Council (Member)

  Department
  ▶ Research Group: NMR and Mass Spectrometry User Group (Member)
  ▶ Committee/Panel: Library Committee (Representative), Organic Chemistry Division (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ CHEM 610. — Organic Reactions (total enrollment: 22)
  ▶ CHEM 691. — Research (total enrollment: 16)

  Summer
  ▶ CHEM 691. — Research (total enrollment: 13)

  Fall
• PRESENTATIONS DURING 2006
  ▶ “N-Heterocyclic Carbone Catalysts for Hydrogenation of Dienes and Alkenes,” University of Texas, Dallas, TX, April, 2006. (Individual)
  ▶ “Hydrogenation of Largely Unfunctionalized Dienes and Alkenes as a Route to Chirons in Natural Product Syntheses,” Chiang Mai University, Chiang Mai, Thailand, May, 2006. (Individual)
  ▶ “Hydrogenation of Largely Unfunctionalized Dienes and Alkenes as a Route to Chirons in Natural Product Syntheses,” Chulabhorn Research Institute, Bangkok, Thailand, May, 2006. (Individual)
  ▶ “Hydrogenation of Largely Unfunctionalized Dienes and Alkenes as a Route to Chirons in Natural Product Syntheses,” Chulalongkorn University, Bangkok, Thailand, May, 2006. (Individual)
  ▶ “Hydrogenation of Largely Unfunctionalized Dienes and Alkenes as a Route to Chirons in Natural Product Syntheses,” University of Bath, Bath, England, September, 2006. (Individual)
  ▶ “Mono- and Bivalent Peptidomimetics to Mimic or Disrupt Protein-protein Interactions,” University of Bristol, Bristol, England, September, 2006. (Individual)
  ▶ “Mono- and Bivalent Peptidomimetics to Mimic or Disrupt Protein-protein Interactions,” The Institute of Biotechnology, Houston, TX, October, 2006. (Individual)

• PUBLICATIONS DURING 2006
• TEACHING ASSIGNMENTS DURING 2006

Spring

▷ CHEM 101. — Fundamentals of Chemistry I (total enrollment: 284)

No report received from faculty member.
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  • Member, Interdisciplinary Faculty, Materials Science and Engineering, /2006/

• SERVICE DURING 2006
  International
  • Research Group: Collaborative program with Drs. Aurellio Cabeza and Miguel A.G. Aranda on metal phosphonate chemistry, Chemistry Department, University of Malaga, Spain. (Member), Continued collaboration with Prof. Jerzy Zon, Wroclaw University, Chemistry Department, Wroclaw, Poland (Member)

  University
  • Event: NSF REU Solid State Summer Program (Mentor)

  College
  • Committee/Panel: Faculty Advisory Council (Elected Member)

  Department
  • Event: Two Students from Texas A&M University, Prairie View and Dr. Remi Oki, Chemistry Department Head (Host)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  • CHEM 106. — Molecular Science for Citizens (total enrollment: 59)
  • CHEM 491. — Research (total enrollment: 5)
  • CHEM 491. — Research (total enrollment: 5)
  • CHEM 691. — Research (total enrollment: 2)

  Summer
  • CHEM 491. — Research (total enrollment: 1)
  • CHEM 491. — Research (total enrollment: 1)
  • CHEM 691. — Research (total enrollment: 2)

  Fall
  • CHEM 491. — Research (total enrollment: 2)
  • CHEM 491. — Research (total enrollment: 2)
  • CHEM 691. — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006
  • “In-situ Study of Ion Exchange in Tunnel Type Ion Exchangers,” SUNY Buffalo, Buffalo, NY, March, 2006.( Invited)
“In-situ Study of Ion Exchange in Tunnel Type Ion Exchangers,” Temple University, Temple, TX, March, 2006. (Invited)


“Strong Bronsted Acid Catalysis: Sulfonated Zirconium Posphonates,” American Chemical Society Meeting, Chicago, IL, March, 2006. (Contributed)


PUBLICATIONS DURING 2006


• SERVICE DURING 2006

National

Department
▷ Committee/Panel: Graduate Admissions and Review Committee (Member), Organic Division Faculty Search Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 691. — Research (total enrollment: 6)

Summer
▷ CHEM 691. — Research (total enrollment: 6)

Fall
▷ CHEM 681. — Seminar (total enrollment: 30)
▷ CHEM 689. — Special Topics in (total enrollment: 12)
▷ CHEM 691. — Research (total enrollment: 6)
• SERVICE DURING 2006

Department
  ▶ Service Position: Chemistry 325/326 Physical Chemistry Laboratory Program (Coordinator)
  ▶ Committee/Panel: Safety Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▶ CHEM 102. — Fundamentals of Chemistry II (total enrollment: 311)
  ▶ CHEM 326. — Physical Chemistry Laboratory II (total enrollment: 17)

Summer
  ▶ CHEM 325. — Physical Chemistry Laboratory I (total enrollment: 17)

No report received from faculty member.
F. ALBERT COTTON

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- **CHAIRS/PROFESSORSHIPS**
  - W.T. Doherty-Welch Foundation Chair in Chemistry [1972]

- **AWARDS DURING 2006**
  **International**
  - Honorary Doctorate, Lanzhou University
  - Honorary Professorship, Renmin University (Beijing)
  - Honorary Professorship, Sun-Yat Sen University (Quangzhou)
  **National**
  - George C. Pimentel Award in Chemical Education, Dow Chemical
  - Kuivila Lecturer, SUNY-Albany

- **SERVICE DURING 2006**
  **National**
  - Professional Affiliation: American Philosophical Society (Member), National Academy of Sciences (Member)
  **College**
  - Committee/Panel: Faculty Advisory Council SUNY-Albany (Elected Member)

- **TEACHING ASSIGNMENTS DURING 2006**
  **Spring**
  - CHEM 691. — **Research** (total enrollment: 7)
  **Summer**
  - CHEM 691. — **Research** (total enrollment: 5)
  **Fall**
  - CHEM 633. — **Principles of Inorganic Chemistry** (total enrollment: 7)
  - CHEM 691. — **Research** (total enrollment: 6)

- **PUBLICATIONS DURING 2006**


• CHAIRS/PROFESSORSHIPS
  ▶ Davidson Chair in Science [2005]

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• AWARDS DURING 2006
  National
  ▶ Faculty Early Career Development (CAREER), National Science Foundation
  ▶ Norman Hackerman Award in Chemical Research, The Welch Foundation
  ▶ Pittsburgh Conference Achievement Award, The Pittsburgh Conference & Exposition on Analytical Chemistry & Applied Spectroscopy
  ▶ Southwest Regional Young Investigator Award, Sigma Xi

• SERVICE DURING 2006
  Department
  ▶ Committee/Panel: Analytical Chemistry Division (Chair), Analytical/Physical Faculty Search Committee (Chair), Colloquium and Seminar Committee (Member), Graduate Student Association Committee (Advisor), Graduate Student Recruitment Committee and Admissions, Molecular Biophysics Training Grant (Member), Promotion and Tenure Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 685. — Directed Studies (total enrollment: 1)
  ▶ CHEM 691. — Research (total enrollment: 7)

  Summer
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 691. — Research (total enrollment: 6)

  Fall
  ▶ CHEM 323. — Physical Chemistry (total enrollment: 34)
  ▶ CHEM 681. — Seminar (total enrollment: 24)
  ▶ CHEM 691. — Research (total enrollment: 5)
• PRESENTATIONS DURING 2006
  ▶ “Biofouling: Why Some Proteins can be Displaced From the Surface,” AIR-UCI Conference, Laguna Beach, CA, January, 2006. (Individual)
  ▶ “Protein and Polymer Folding on a Chip,” University of California, Department of Chemistry, Irvine, CA, January, 2006. (Individual)
  ▶ “Protein and Polymer Folding on a Chip,” Penn State University, Department of Chemistry, State College, PA, February, 2006. (Individual)
  ▶ “Protein and Polymer Folding on a Chip,” University of California, Department of Chemistry, Riverside, CA, April, 2006. (Individual)
  ▶ “Protein and Polymer Folding on a Chip,” Great Lakes Regiona ACS Meeting, Milwaukee, WI, May, 2006. (Individual)
  ▶ “Protein and Polymer Folding on a Chip,” John Hopkins University, Department of Chemical and Biomolecular Engineering, Baltimore, MD, May, 2006. (Individual)
  ▶ “Protein and Polymer Folding on a Chip, Chains: The Limits of Neutrality,” European Science Foundation Workshop, Compiégne, France, September, 2006. (Individual)
  ▶ “Ion and Osmolyte Effects at the Biointerface,” Biointerface Science GRC, Les Diablerets, Switzerland, October, 2006. (Individual)
  ▶ “Protein and Polymer Folding on a Chip,” Texas A&M University Health Science Center, College Station, TX, October, 2006. (Individual)

• PUBLICATIONS DURING 2006


• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• SERVICE DURING 2006
  National
  ▶ Advisory Board: Analytical Chemistry (Member)
  ▶ Editorial/Board: Langmuir (Senior Editor)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ CHEM 691. — Research (total enrollment: 1)
  Summer
  ▶ CHEM 691. — Research (total enrollment: 1)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International
  ▷ Committee/Panel: Evaluation Panel for COST (Member), International Scientific Committee for the International Conference on Carbon Dioxide Utilization (Member)

National
  ▷ Editorial/Board: Advances in Inorganic Chemistry Editorial Advisory Board (Member), Organometallic (Advisory Editorial Board)
  ▷ Committee/Panel: American Chemical Society (Member)

Department
  ▷ Committee/Panel: Graduate Admission and Review Committee (Member), Space Committee (Member), Undergraduate Awards Committee (Member), X-Ray Users Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▷ CHEM 491. — Research (total enrollment: 4)
  ▷ CHEM 681. — Seminar (total enrollment: 31)
  ▷ CHEM 691. — Research (total enrollment: 5)

Summer
  ▷ CHEM 491. — Research (total enrollment: 4)
  ▷ CHEM 691. — Research (total enrollment: 5)

Fall
  ▷ CHEM 485. — Directed Studies (total enrollment: 1)
  ▷ CHEM 491. — Research (total enrollment: 5)
  ▷ CHEM 636. — Mechanistic Inorganic Chemistry (total enrollment: 5)
  ▷ CHEM 691. — Research (total enrollment: 5)

• PRESENTATIONS DURING 2006
  ▷ “Academic Life: It’s a Wonderful Life,” The Lloyd N. Ferguson Distinguished Lecture, California State University, Los Angeles, CA, February, 2006.( Invited)
  ▷ “Making Plastics from CO$_2$: Copolymerization of CO$_2$ and Epoxides or Oteranes to Polycarbonate,” California State University, Los Angeles, CA, February, 2006.( Invited)
  ▷ “Recent Advances in the Catalytic Copolymerization of CO$_2$ and Epoxides to Afford Polycarbonates,” College of Science Distinguished Multicultural Lecture Series, Purdue University, West Lafayette, IN, September, 2006.( Invited)
“Recent Advances in the Catalytic Copolymerization of CO₂ and Epoxides to Afford Polycarbonates,” Tulane University, New Orleans, LA, October, 2006. (Invited)

“Recent Advances in the Catalytic Copolymerization of CO₂ and Epoxides to Afford Polycarbonates,” Vanderbilt University, Nashville, TN, October, 2006. (Invited)

**PUBLICATIONS DURING 2006**


• AWARDS DURING 2006

National
▷ Outstanding Alumnus of Kentucky, University of Kentucky

College
▷ Distinguished Achievement Award - Teaching, The Association of Former Students

• SERVICE DURING 2006

International
▷ Event: Hydrogenase and Hydrogen Production 2007: The 8th International Hydrogenase Conference (Co-Chair)
▷ Editorial/Board: Journal of Inorganic Biochemistry Editorial Advisory Board (Member)

National
▷ Professional Affiliation: Inorganic Chemistry Editorial Advisory Board (Member), Inorganic Syntheses Corporation (Member)
▷ Editorial/Board: Chemical Communications Editorial Advisory Board (Member)
▷ Committee/Panel: National Science Foundation, Chemistry Division’s Chemical Bonding Center (Panel Member), University of Nevada-Reno, External Review Committee (Member)

College
▷ Committee/Panel: Diversity Committee (Member)

Department
▷ Research Group: ESR User Group (Member), NMR User Group (Member), X-ray Diffraction User Group (Member)
▷ Committee/Panel: Advisory Council (Member), Faculty Awards (Member), Library Committee (Member), P&T Committee (Member), Space Committee (Member), Undergraduate Curriculum Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 433. — Advanced Inorganic Chemistry Laboratory (total enrollment: 10)
▷ CHEM 491. — Research (total enrollment: 3)
▷ CHEM 491. — Research (total enrollment: 3)
▷ CHEM 685. — Directed Studies (total enrollment: 12)
▷ CHEM 691. — Research (total enrollment: 6)
CHEM 491. — Research (total enrollment: 4)
CHEM 691. — Research (total enrollment: 5)

Fall
CHEM 491. — Research (total enrollment: 2)
CHEM 642. — Organometallic Chemistry and Homogeneous Catalysis (total enrollment: 9)
CHEM 691. — Research (total enrollment: 6)

• PRESENTATIONS DURING 2006

“Controlling Chemotherapeutic Resistance in Platinum Anti-Cancer Drugs: The Role of Zinc,” Minority Serving Institutions Research Partnerships Conference, Edinburg, TX, February, 2006. (Graduate)
“Development of a Nickel Tripeptide as a Metallodithiolate Ligand Anchor for Resin-Bound Organometallics,” Annual Chemistry Biology Interface Program Conference, College Station, TX, August, 2006. (Graduate)
“Small Peptides With N-, S-Donors as Models of the Active Site of Nickel Superoxide Dismutase,” Chemistry Biology Interface Conference, August, 2006. (Graduate)
“Small Peptides With N-, S-Donors as Models of the Active Site of Nickel Superoxide Dismutase,” Southwest Regional American Chemical Society Meeting, Houston, TX, October, 2006. (Graduate)
“The Acetyl CoA Synthase Paradigm for Hybrid Bio-organometallics: Quantitative Measures for Resin-Bound Ni-Rh Complexes,” Industry-University Cooperative Chemistry Program (IUCCP) for Graduate Research in General and Pharmaceutical Chemistry Symposium, Texas A&M University, College Station, TX, October, 2006. (Graduate)
“The Acetyl CoA Synthase Paradigm for Hybrid Bio-organometallics: Quantitative Measures for Resin-Bound Ni-Rh Complexes,” Southwest Regional American Chemical Society Meeting, Houston, TX, October, 2006. (Graduate)
“The Interactions of Zinc-Bound Thiolates With Analogues of Pt-DNA Adducts,” Southwest Regional American Chemical Society Meeting, Houston, TX, October, 2006. (Graduate)

• PUBLICATIONS DURING 2006


- Jeffery, S.P.; Green, K.N.; Rampersad, M.V.; Reibenspies, J.H.; Darensbourg, M.Y. (2006) Ni\(\text{N}_2\text{S}_2\) Complexes as Metallodithiolate Ligands to Rh\(^I\), Rh\(^II\), and Rh\(^III\) *Dalton Transactions* 4244-4252.


VICTORIA J. DEROSE

ASSOCIATE PROFESSOR
CHEM-Biological Chemistry
derose@mail.chem.tamu.edu

- **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  - Member, Interdisciplinary Faculty, Biotechnology, [2006]

- **SERVICE DURING 2006**
  - **University**
    - Committee/Panel: Executive Committee, TAMU Molecular Biophysics Training Program and Chemistry/Biology Interface Program (Member), Life Sciences Building Committee (Member), Life Sciences Task Force (Chair)
  - **Department**
    - Research Group: EPR User Group (Member), NMR User Group (Member)
    - Committee/Panel: Biological Chemistry Faculty Search Committee (Member), Undergraduate Chemistry Curriculum Committee (Chair)

- **TEACHING ASSIGNMENTS DURING 2006**
  - **Spring**
    - CHEM 691. — Research (total enrollment: 3)
  - **Summer**
    - CHEM 691. — Research (total enrollment: 1)

- **PUBLICATIONS DURING 2006**

*On leave.*

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SEC. 5.1

**PROFESSIONAL ACTIVITIES**

209
• CHAIRS/PROFESSORSHIPS
  ▶ Davidson Chair in Science /2004/

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Computational Nanoscience and Materials - IGERT, /2006/
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, /2006/

• AWARDS DURING 2006
  University
  ▶ Distinguished Achievement Award - Graduate Mentoring, The Association of Former Students

• SERVICE DURING 2006
  International
  ▶ Advisory Board: American Advisor for Molmagnet, The European Funding Network for Research on Magnetism (Advisor)
  National
  ▶ Service Position: CHEMTRACTS (Expert Analyst)
  ▶ Professional Affiliation: American Association for the Advancement of Science (Fellow), American Chemical Society, Inorganic Division Secretary (Member), American Institute of Chemists (Member), Kappa Mu Epsilon National Mathematics Honor Society (Member), New York Academy of Science (Member), Phi Lambda Upsilon Chemical Honorary, Nu Chapter (Member), Pi Sigma Pi National Scholastic Honorary (Member), Sigma Xi Chemical Honorary (Member)
  ▶ Event: Gordon Research Conference Council (Member)
  ▶ Editorial/Board: Crystal Engineering (Advisory Board), Inorganic Chemistry (Associate Editor), Journal of the Chemical Society, Dalton Transactions (Advisory Board)

Department
  ▶ Committee/Panel: Department Head Search Committee (Chair), Graduate Curriculum Committee (Member), Promotion and Tenure Committee (Member), Self Study Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ CHEM 634. — Physical Methods in Inorganic Chemistry (total enrollment: 19)
  ▶ CHEM 691. — Research (total enrollment: 7)
Summer
▷ CHEM 691. — Research (total enrollment: 2)
▷ CHEM 691. — Research (total enrollment: 9)

Fall
▷ CHEM 691. — Research (total enrollment: 11)

• PRESENTATIONS DURING 2006
▷ Emory University, Atlanta, GA, January, 2006. (Invited)
▷ University of North Texas, Denton, Texas, March, 2006. (Invited)
▷ University of Washington, Seattle, WA, May, 2006. (Invited)
▷ “Molecule-Based Magnets,” 10th International Conference, Victoria, British Columbia, August, 2006. (Invited)
▷ “Molecular Magnetism,” MAGMANet-ECMM European Conference, Tomar, Portugal, October, 2006. (Invited)

• PUBLICATIONS DURING 2006


• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]
  ▶ Member, Interdisciplinary Faculty, Toxicology, [2006]

• AWARDS DURING 2006
  International
  ▶ Visiting Lecturer, Chemistry Research Promotion Center, R.O.C., Taiwan

• SERVICE DURING 2006
  National
  ▶ Professional Affiliation: American Chemical Society (Career Counselor), Inorganic Synthesis Corporation (Member)
  ▶ Advisory Board: Chemistry Department, Valparaiso University (Advisory Committee)
  ▶ Editorial/Board: Comments on Inorganic Chemistry (Editor), Journal of Cluster Science (Board Member), Profiles in Inorganic Chemistry (Editor)

University
  ▶ Advisory Board: University Club Advisory Board (Member)
  ▶ Committee/Panel: Distinguished Professors (Executive Committee), Faculty Senate (Faculty Senator - 08), National Advisory Board PEER, College of Veterinary Medicine (Member), Quality Enhancement Plan Council, (Executive Committee), Research Environment Council (Member), Scholarship of Assessment Think Tank (Chair), TAMU Chapter Sigma Xi, Planning and Executive Committees (Member)

College
  ▶ Committee/Panel: Campus Community Campaign Committee (Member), College Quality Enhancement Plan Council (Member)

Department
  ▶ Advisory Board: Industry University Cooperative Chemistry Program (Member)
  ▶ Committee/Panel: Faculty Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ CHEM 462. — Inorganic Chemistry (total enrollment: 15)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 691. — Research (total enrollment: 1)

  Summer
CHEM 491. — Research (total enrollment: 1)
CHEM 491. — Research (total enrollment: 1)

Fall
CHEM 103. — Structure and Bonding (total enrollment: 18)
CHEM 113. — Physical and Chemical Principles (total enrollment: 18)
CHEM 491. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006

“Ethics in Science,” TAMU College of Veterinary Medicine, College Station, TX, 2006. (Individual)
“Gold, A Special Metal From Antiquity,” First Year Freshman Chemistry Lecture, College Station, TX, 2006. (Individual)
“New Chemistry With an Old Element - Gold With Nitrogen Ligands for Catalysis,” Nanostructure Symposium, National Dong Hua University, Hualein, Taiwan, 2006. (Individual)
“New Chemistry With and Old Element - Gold With Nitrogen Ligands,” Tamkang University, Taiwan, 2006. (Individual)
“Science and Engineering Education,” TAMU Chapter Sigma Xi, College Station, TX, 2006. (Individual)
“Science and Engineering Education,” TAMU Council of Principle Investigators, College Station, TX, 2006. (Individual)

• PUBLICATIONS DURING 2006


Mohamed, AA; Galassi, R; Papa, F; Burini, A; Fackler, JP. (2006) Gold(I) and Silver(I) Mixed- metal Trimuclear Complexes: Dimeric Products From the Reaction of Gold(I) Carbeneiates or Benzylimidazolates With Silver(I) 3,5- Diphenylpyrazololate Inorganic Chemistry, vol. 45, 7770- 7776.
• SERVICE DURING 2006

National
▷ Service Position: Archives of Biochemistry and Biophysics (Executive Editor)
▷ Committee/Panel: NIH Physical Biochemistry Study Section (Ad hoc Member)

Department
▷ Research Group: Protein Chemistry Lab Users’ Group (Chair)
▷ Committee/Panel: Graduate Curriculum Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 691. — Research (total enrollment: 2)

Summer
▷ CHEM 691. — Research (total enrollment: 1)

Fall
▷ CHEM 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006

▷ “Protein Motion in the Tyrosine Hydroxylase Reaction,” Meeting on Trends in Enzymology, Como, Italy, June, 2006. (Invited)
▷ “Mechanism and Regulation of Tyrosine Hydroxylase,” Department of Biochemistry, University of Texas, San Antonio, TX, September, 2006. (Invited)

• PUBLICATIONS DURING 2006


• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006] /

• SERVICE DURING 2006
  
  Department
  ▶ Research Group: Laboratory For Molecular Simulation Users Committee (Member), NMR
  Users Committee (Member)
  ▶ Committee/Panel: Advisory Council (Member), Colloquium and Seminar Committee
  (Member), Department Committee Overseeing the Review Committee (Member), De-
  partment Head Search Committee (Member), Executive Committee (Member), Graduate
  Awards Committee (Member), Inorganic Chemistry Division (Chair), Undergraduate
  Curriculum Committee (Chair), X-Ray Powder Users Committee (Chair), X-Ray Single
  Crystal Users Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  ▶ CHEM 433. — Advanced Inorganic Chemistry Laboratory (total enrollment: 11)
  ▶ CHEM 691. — Research (total enrollment: 5)

  Summer
  ▶ CHEM 491. — Research (total enrollment: 2)
  ▶ CHEM 491. — Research (total enrollment: 2)
  ▶ CHEM 691. — Research (total enrollment: 5)

  Fall
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 691. — Research (total enrollment: 5)

• PRESENTATIONS DURING 2006
  ▶ “Fluoride Complexation by Polydentate Lewis Acids Containing Boron and Mercury,”
    Columbia University, New York, NY, January, 2006. (Invited)
  ▶ “Fluoride Complexation by Polydentate Lewis Acids Containing Boron and Mercury,”
    Michigan State University, East Lansing MI, February, 2006. (Invited)
  ▶ “Fluoride Complexation by Polydentate Lewis Acids Containing Boron and Mercury,”
    Simon Fraser University, British Columbia, Canada, February, 2006. (Invited)
  ▶ “Fluoride Complexation by Polydentate Lewis Acids Containing Boron and Mercury,”
    University of British Columbia, British Columbia, Canada, February, 2006. (Invited)
“Fluoride Complexation by Polydentate Lewis Acids Containing Boron and Mercury,” University of Victoria, British Columbia, Canada, February, 2006. (Invited)


“Cooperative Effects in the Chemistry of Polyfunctional Lewis Acids Containing Mercury,” International COE Symposium for Young Scientists on Frontiers of Molecular Science, Tokyo University, Tokyo, Japan, August, 2006. (Invited)


“Polyfunctional and Cationic Boranes - Reduction Chemistry and Anion Complexation,” Indiana University, Bloomington, IN, September, 2006. (Invited)


“Polyfunctional and Cationic Boranes - Reduction Chemistry and Anion Complexation,” University of Texas, Austin, TX, September, 2006. (Invited)

“Polyfunctional and Cationic Boranes - Reduction Chemistry and Anion Complexation,” Texas Lutheran University, Seguin, TX, October, 2006. (Invited)

“Polyfunctional and Cationic Boranes - Reduction Chemistry and Anion Complexation,” Texas Christian University, Fort Worth, TX, November, 2006. (Invited)

“Polyfunctional and Cationic Boranes - Reduction Chemistry and Anion Complexation,” University of Texas, Arlington, TX, November, 2006. (Invited)

• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

National
▷ Professional Affiliation: American Chemical Society, Chemical Education Division (Member), Association of Women in Science (Member), Biophysical Society (Member)
▷ Editorial/Board: ACS Books (Reviewer)

University
▷ Committee/Panel: Funding for Diversity Initiatives Workshop (Panelist), Parent’s Council, University Children’s Center (Member), Search Advisory Committee, Dean of Undergraduate Programs & Associate Provost for Academic Services (Member)

Center, Institute or Program
▷ Event: Science Fair A&M Consolidated Middle School (Judge)

Department
▷ Professional Affiliation: CHEM 101 & 102 Assessment of Laboratories (Coordinator)
▷ Committee/Panel: Physical Chemistry Search Committee (Member), Undergraduate Curriculum Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 481. — Seminar (total enrollment: 20)

Fall
▷ CHEM 481. — Seminar (total enrollment: 28)

• PRESENTATIONS DURING 2006

▷ “Research Writing,” Department of Chemistry, Texas A&M University, College Station, TX, August, 2006. (Invited)
▷ “Undergraduate Research,” CHEM 100 Seminar, College Station, TX, October, 2006. (Invited)
▷ “Undergraduate Research,” CAEN 289 Introduction to Research, College Station, TX, November, 2006. (Invited)
• AWARDS DURING 2006
  
  National
  ▶ Searle Scholar Award, The Chicago Community Trust

• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  ▶ CHEM 323. — Physical Chemistry (total enrollment: 27)
  ▶ CHEM 691. — Research (total enrollment: 2)

  Summer
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 691. — Research (total enrollment: 1)

  Fall
  ▶ CHEM 491. — Research (total enrollment: 2)
  ▶ CHEM 491. — Research (total enrollment: 2)
  ▶ CHEM 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006
  
  ▶ “On the Chemomechanical Coupling Mechanisms of two Motor Proteins, Kinesin and Dynein,” Department of Physics, University of Texas, San Antonio, TX, April, 2006. (Invited)
  ▶ “Multi-time Scale Simulations of Protein Motions,” Institute of Advanced Research, Kobe University, Kobe, Japan, May, 2006. (Invited)
  ▶ “On the Unconventional Ozone Isotopic Effects,” Department of Chemistry, Kobe University, Kobe, Japan, May, 2006. (Invited)
  ▶ “Protein Conformational Changes and Motor Proteins,” Department of Chemistry, Shandong University, Jinan, China, May, 2006. (Invited)
  ▶ “Simulations of Motor Proteins,” Department of Chemistry, Beijing University, Beijing, China, May, 2006. (Invited)
  ▶ “Simulations of Multi-scale Motions of Proteins,” 2006 ACS Regional Meeting, Houston, TX, October, 2006. (Invited)
  ▶ “Simulations of Multi-scale Motions of Proteins,” Department of Chemistry, University of Wisconsin, Madison, WI, November, 2006. (Invited)
  ▶ “Multi-scale Simulations of Protein Motions,” Department of Chemistry, Sun Yat-Sen University, Guangzhou, China, December, 2006. (Invited)
“Multi-scale Simulations of Protein Motions,” The International Meeting on Motor Proteins and Protein Folding, Kobe, Japan, December, 2006. (Invited)

- **PUBLICATIONS DURING 2006**
• CHAIRS/PROFESSORSHIPS
  ▶ Robert A. Welch Foundation Chair in Chemistry [1994]

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• SERVICE DURING 2006

  National
  ▶ Editorial/Board: *Topics in Catalysis, Catalysis Letters, Journal of Molecular Catalysis A: Chemical* (Referee: Journals)

  Department
  ▶ Research Group: XPS User Group (Member)
  ▶ Advisory Board: Industry University Cooperative Chemistry Program (Representative)
  ▶ Committee/Panel: Awards Committee (Member), Electronics and Machine Shop User Group (Machine Shop Liaison) (Member), Executive Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ CHEM 691. — Research (total enrollment: 9)

  Summer
  ▶ CHEM 691. — Research (total enrollment: 8)

  Fall
  ▶ CHEM 623. — Surface Chemistry (total enrollment: 12)
  ▶ CHEM 691. — Research (total enrollment: 6)

• PRESENTATIONS DURING 2006
  ▶ “Catalytically Active Gold: From Nano-particles to Ultra-thin Films,” The University of Tokyo, Tokyo, Japan, March, 2006. (Invited)
  ▶ “Catalysis by Au and Au Alloys: From Single Crystals to Nanoparticles,” Oklahoma State University, Stillwater, OK, April, 2006. (Invited)
  ▶ “Modeling the Complexities of Heterogeneous Catalysis,” Argonne National Lab, Chicago, IL, April, 2006. (Invited)
> “The Nature of the Active Site in Catalysis by Gold,” University of Aarhus, Aarhus, Denmark, June, 2006. (Invited)
> “Catalysis by Au and Au Alloys,” PIRE-ECCI/ICMR Summer Program, UCSB, Santa Barbara, CA, August, 2006. (Invited)
> “Model Oxide Supported Metal Catalysts,” ACS Meeting, San Diego, CA, September, 2006. (Invited)
> “Modeling Oxide Surfaces,” ACS Meeting, San Diego, CA, September, 2006. (Invited)
> “Surface Science Contributions to Green Chemistry,” ACS Meeting, San Diego, CA, September, 2006. (Invited)
> “Structure-function Relationships in Catalysis by Au and Au Alloys,” ACS Southwest Regional Meeting, Houston, TX, October, 2006. (Invited)
> “Catalysis by Au and Au-Pd Alloys,” Georgetown University, Washington, DC, November, 2006. (Invited)
> “Model Studies of Au as a Catalyst,” University of Florida, Gainsville, FL, November, 2006. (Invited)

**PUBLICATIONS DURING 2006**


• SERVICE DURING 2006

University
▷ Event: International Talent Show (Judge), Regional Engineering and Science Fair (Judge), Student Research Week (Judge), Texas Junior Academy Science Presentations (Judge)

Department
▷ Event: “Hands on Experience in Chemistry” in National Chemistry Week (Organizer)
▷ Committee/Panel: Advisory Council (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 228.502 — Organic Chemistry II (total enrollment: 104)
▷ CHEM 228.504 — Organic Chemistry II (total enrollment: 104)
▷ CHEM 228.506 — Organic Chemistry II (total enrollment: 104)

Summer
▷ CHEM 222.300 — Elements of Organic and Biological Chemistry (total enrollment: 89)
▷ CHEM 228.300 — Organic Chemistry II (total enrollment: 135)

Fall
▷ CHEM 227.502 — Organic Chemistry I (total enrollment: 94)
▷ CHEM 227.504 — Organic Chemistry I (total enrollment: 96)
▷ CHEM 227.505 — Organic Chemistry I (total enrollment: 96)
MICHAEL B. HALL

PROFESSOR
CHEM-Inorganic Chemistry
(979) 845-7361
hall@science.tamu.edu

• CHAIRS/PROFESSORSHIPS
  ▶ Davidson Chair in Science [2004]

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Computational Nanoscience and Materials - IGERT, [2006]
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]
  ▶ Executive Associate Dean, Main Office, [2002]
  ▶ Associate Director, Institute for Scientific Computation, [1997]
  ▶ Director, Laboratory for Molecular Simulation, [1997]

• SERVICE DURING 2006

  University
  ▶ Committee/Panel: Supercomputer Steering Committee (Member), University Research Council (Member)

  College
  ▶ Committee/Panel: College Quality Enhancement Plan Council (Member), Executive Committee (Member), Information Technology Committee (Chair), Qatar Advisory Committee (Chair), Research Advisory Committee (Chair)

  Department
  ▶ Committee/Panel: Computer User Group (Chair)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ CHEM 641. — Structural Inorganic Chemistry (total enrollment: 14)
  ▶ CHEM 691. — Research (total enrollment: 3)

  Summer
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 691. — Research (total enrollment: 2)

  Fall
  ▶ CHEM 691. — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006


“Theoretical Organometallic Reaction Mechanisms,” University of Belgrade, Serbia, November, 2006. (Invited)

**PUBLICATIONS DURING 2006**


Complexes as Structural Models of the Reduced Form of Iron-iron Hydrogenase Inorganic Chemistry, vol. 45, 1552-1559.


• SERVICE DURING 2006

National
▷ Professional Affiliation: Phi Kappa Phi Honor Society (President)

Department
▷ Service Position: Organic Teaching Laboratories (Coordinator)
▷ Committee/Panel: Chemistry Education Committee (Member), Cume preparation and grading (Participant), Graduate Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 228.200(H) — **Organic Chemistry II** (total enrollment: 27)
▷ CHEM 697. — **Methods in Teaching Chemistry Laboratory** (total enrollment: 18)

Summer
▷ CHEM 227. — **Organic Chemistry I** (total enrollment: 68)
▷ CHEM 237. — **Organic Chemistry Laboratory** (total enrollment: 38)

Fall
▷ CHEM 227.200(H) — **Organic Chemistry I** (total enrollment: 48)
▷ CHEM 697. — **Methods in Teaching Chemistry Laboratory** (total enrollment: 12)

*No report received from faculty member.*
• SERVICE DURING 2006

University
▷ Professional Affiliation: Christian Faculty Network (Member)
▷ Event: TAMU Veritas Forum (Host/Organizer)
▷ Advisory Board: Aggie Christian Graduate (Faculty Advisor)

Department
▷ Event: 18th Annual Chemistry Open House and Science Exploration Gallery (Contributor)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 222. — Elements of Organic and Biological Chemistry (total enrollment: 172)

Fall
▷ CHEM 227. — Organic Chemistry I (total enrollment: 93)
• AWARDS DURING 2006

National
▷ Camille Dreyfus New Faculty Award, Camille and Henry Dreyfus Foundation

• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ CHEM 601. — Analytical Chemistry I (total enrollment: 24)

• PRESENTATIONS DURING 2006

▷ “Optimized Protein Detection and Molecular Imaging With the Xenon Biosensor,” 47th Experimental Nuclear Magnetic Resonance Conference, Pacific Grove, CA, April, 2006.(Poster Contributed)
▷ “Sensitivity Enhanced Molecular Imaging of the Xenon Biosensor,” 47th Experimental Nuclear Magnetic Resonance Conference, Pacific Grove, CA, April, 2006.(Poster Contributed)
▷ “Optimized Protein Detection and Molecular Imaging With the Xenon Biosensor,” 5th Annual Meeting of the Society for Molecular Imaging, Hawaii, September, 2006.(Poster Contributed)

• PUBLICATIONS DURING 2006


JOHN L. HOGG

PROFESSOR (979) 845-0520
CHEM-Organic Chemistry hogg@mail.chem.tamu.edu

• CHAIRS/PROFESSORSHIPS
  ▶ Thaman University Professorship in Undergraduate Teaching Excellence [2002]/
  ▶ University Professorship in Undergraduate Teaching Excellence [1996]/

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Undergraduate Advisor, Chemistry Undergraduate Advising Office, [1985]/

• SERVICE DURING 2006

  University
    ▶ Service Position: ATMentors (Member)
    ▶ Committee/Panel: Faculty Senate Undergraduate Admissions Advisory Council (Member), Undergraduate Appeals Panel (Member)

  College
    ▶ Committee/Panel: Undergraduate Curriculum Committee (Member)

  Department
    ▶ Service Position: Chemistry Road Show (Director), Department of Chemistry SIMS Access (Coordinator), Undergraduate Advisor (Advisor)
    ▶ Editorial/Board: Orbitals: What’s Happening in Chemistry Circles (Editor)
    ▶ Committee/Panel: Academic Operations Council (Member), Chemistry Education Committee (Member), Faculty Awards Committee (Member), Internal Awards Committee (Chair), Undergraduate Awards Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
    ▶ CHEM 106. — Molecular Science for Citizens (total enrollment: 145)
    ▶ CHEM 228. — Organic Chemistry II (total enrollment: 36)
    ▶ CHEM 285. — Directed Studies (total enrollment: 1)
    ▶ CHEM 491. — Research (total enrollment: 1)

  Summer
    ▶ CHEM 491. — Research (total enrollment: 2)

  Fall
    ▶ CHEM 100. — Horizons in Chemistry (total enrollment: 85)
    ▶ CHEM 106. — Molecular Science for Citizens (total enrollment: 211)
    ▶ CHEM 227. — Organic Chemistry I (total enrollment: 65)
    ▶ CHEM 491. — Research (total enrollment: 1)
• PRESENTATIONS DURING 2006
  ▶ “Chemistry Road Show,” Caldwell Intermediate School, Caldwell, TX, January, 2006. (Individual)
  ▶ “Chemistry Road Show,” Texas Junior Science and Humanities Symposium, Texas A&M University, College Station, TX, January, 2006. (Individual)
  ▶ “Tips on Teaching,” Texas A&M University Faculty Teaching Academy, College Station, TX, January, 2006. (Individual)
  ▶ “Chemistry Road Show,” Allen Academy, Bryan, TX, February, 2006. (Individual)
  ▶ “Chemistry Road Show,” Texas A&M as Part of AggieLand Saturday, Texas A&M University, College Station, TX, February, 2006. (Individual)
  ▶ “Chemistry Road Show,” Navasota Intermediate School, Navasota, TX, March, 2006. (Individual)
  ▶ “Chemistry Road Show,” Harvey Mitchell Elementary School, Bryan, TX, April, 2006. (Individual)
  ▶ “Chemistry Road Show,” Gibbs Elementary School, Huntsville, TX, May, 2006. (Individual)
  ▶ “Chemistry Road Show,” Texas A&M University, College Station, TX, May, 2006. (Individual)
  ▶ “Chemistry Road Show,” All Saints Episcopal School, Tyler, TX, September, 2006. (Individual)
  ▶ “Chemistry Road Show,” Oakwood Intermediate School, College Station, TX, September, 2006. (Individual)
  ▶ “Chemistry Road Show,” South Knoll Elementary School, College Station, TX, September, 2006. (Individual)
  ▶ “Chemistry Road Show,” Texas A&M University, College Station, TX, September, 2006. (Individual)
  ▶ “Chemistry Road Show,” 17th Anniversary of National Chemistry Week, Texas A&M University, College Station, TX, October, 2006. (Individual)
  ▶ “Chemistry Road Show,” Navasota Intermediate School, Navasota, TX, October, 2006. (Individual)
  ▶ “Chemistry Road Show,” Pebble Creek Elementary School, College Station, TX, October, 2006. (Individual)
  ▶ “Chemistry Road Show,” Rock Prairie Elementary School, College Station, TX, November, 2006. (Individual)
No report received from faculty member.
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  - Member, Interdisciplinary Faculty, Materials Science and Engineering, /2006/

• SERVICE DURING 2006
  National
  - Event: North American Solid State Chemistry Conference (Organizer)
  Department
  - Research Group: X-Ray Diffraction User Group (Member)
  - Service Position: Graduate Admissions and Recruiting (Department Coordinator)
  - Committee/Panel: Computer User Group (Member), Graduate Curriculum Committee (Member)
  Interdisciplinary/Intercollegiate
  - Committee/Panel: Faculty of Materials Science and Engineering (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  - CHEM 102.201-202(H) — Fundamentals of Chemistry II (total enrollment: 21)
  - CHEM 691. — Research (total enrollment: 2)
  Summer
  - CHEM 691. — Research (total enrollment: 4)
  Fall
  - CHEM 673. — Symmetry and Group Theory in Chemistry (total enrollment: 8)
  - CHEM 681. — Seminar (total enrollment: 13)
  - CHEM 691. — Research (total enrollment: 4)

• PRESENTATIONS DURING 2006
  - “Molybdenum, Zirconium and Lanthanide Clusters; On the Road to Molecular Magnets?,” University of Delaware, Newmark, DE, March, 2006. (Individual)
• PUBLICATIONS DURING 2006
  ▶ Sweet, L.E.; Hughbanks, T. (2006) CsR$(R_6CoI_{12})_2$ (R=Gd, Er) and $(CeI)_{0.24}(Ce_6MnI_{9})_2$: Two New Structure Types Featuring $R_6Z$ Clusters *Inorganic Chemistry*, vol. 45, 9696-9702.
• SERVICE DURING 2006

University
▷ Committee/Panel: Faculty Senate (Faculty Senator - 07), Faculty Senate Academic Affairs Committee (Member), Faculty Senate Diversity Committee (Member), University W Course Advisory Committee (Member), Women in Science and Engineering Executive Board (Member)

College
▷ Service Position: Ethel Ashworth-Tsutsui Memorial Awards in Research and Mentoring (Organizing Board), Susan M. Arseven Memorial Award (Organizing Board)
▷ Event: Fourteenth Annual Women in Science and Engineering Career Development Conference, “Goals for Success” (Organizing Board)

Department
▷ Service Position: Chemistry 320 Instrumental Analysis Laboratory (Coordinator), Graduate Studies (Associate Advisor)
▷ Committee/Panel: Chemistry Education Committee (Chair), Graduate Admissions and Review Committee (Member), Graduate Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 320. — Instrumental Analysis Laboratory (total enrollment: 31)
▷ CHEM 686. — Ethics in Chemical Research and Scholarship (total enrollment: 68)

Fall
▷ CHEM 317. — Quantitative Analysis (total enrollment: 23)
▷ CHEM 320. — Instrumental Analysis Laboratory (total enrollment: 13)
• CHAIRS/PROFESSORSHIPS
  ▷ E.L. Wehner-Welch Chair in Chemistry [1994]

• AWARDS DURING 2006
  University
  ▷ JoAnn Treat Research Excellence Award, Texas A&M University

• SERVICE DURING 2006
  University
  ▷ Committee/Panel: M.D.-Ph.D. Advisory Committee, TAMUS HSC (Member), Senior Faculty Search Committee, Department of Molecular and Cellular Medicine, TAMUS HSC (Member)
  College
  ▷ Committee/Panel: College of Medicine Council of PIs (Chair)
  Department
  ▷ Committee/Panel: Search Committee for Chair, Department of Chemistry (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ CHEM 691. — Research (total enrollment: 2)
  Summer
  ▷ BICH 691 — Research (total enrollment: 1)
  ▷ CHEM 691. — Research (total enrollment: 1)
  Fall
  ▷ BICH 672 — Biological Membranes (total enrollment: 18)
  ▷ BICH 691 — Research (total enrollment: 1)
  ▷ CHEM 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006
  ▷ “Maintenance of Membrane Integrity by Ribosomes, Translocons, and BiP During Protein Trafficking at the ER,” Department of Biochemistry, University of Wisconsin, Madison, WI, January, 2006.( Invited)
  ▷ “FRET-detected Folding of Ribosome-bound Nascent Proteins Regulates Trafficking at the ER Membrane,” Adler Symposium on Protein Folding and Neurodegenerative Diseases, Salk Institute, LaJolla, CA, February, 2006. (Invited)
“Fluorescence-Detected Protein Trafficking at the ER Membrane,” Department of Cell & Developmental Biology, University of North Carolina, Chapel Hill, NC, March, 2006. (Invited)

“Fluorescence-Detected Protein Trafficking at the ER Membrane,” Department of Chemistry, Brandeis University, Waltham, MA, March, 2006. (Invited)

“Fluorescence-Detected Protein Trafficking at the ER Membrane,” Molecular and Cellular Biology Retreat, University of Massachusetts, Amherst, MA, March, 2006. (Invited)

“Cholesterol Alone is Sufficient to Specifically Trigger Perfringolysin O Oligomerization and Prepore Formation,” American Society of Biochemistry and Molecular Biology Annual Meeting, San Francisco, CA, April, 2006. (Poster Contributed)


“FRET Detection of Nascent Protein Folding,” Celebration of Biochemistry Scientific Symposium, University of Texas Southwestern Medical School, Dallas, TX, April, 2006. (Invited)

“Fluorescence-Detected Protein Trafficking at the ER Membrane,” Life Sciences Colloquium, Weizmann Institute of Science, Rehovot, Israel, May, 2006. (Invited)

“Mechanisms Involved in Maintaining the Permeability Barrier During Protein Trafficking at the ER Membrane, on Membrane Proteins in Health and Disease,” Canadian Society of Biochemistry, Molecular and Cellular Biology Meeting, Ontario, Canada, May, 2006. (Invited)

“Fluorescence-Detected Protein Trafficking Into and Out of the ER Membrane,” Institute for Physiological Chemistry, University of Münich, Munich, Germany, August, 2006. (Invited)

“Fluorescence-Detected Protein Trafficking Into and Out of the ER Membrane,” Department of Biophysics, Johns Hopkins University, Baltimore, MD, September, 2006. (Invited)

“Using Fluorescence and Photocrosslinking to Determine Nascent Chain Environment, Folding and Interactions,” Department of Cellular Biochemistry, Max Planck Institute of Biochemistry, Martinsreid, Germany, September, 2006. (Invited)

“Fluorescence-Detected Protein Trafficking Into and Out of the ER Membrane,” Department of Biochemistry and Biophysics, Stockholm University, Stockholm, Sweden, October, 2006. (Invited)

“Fluorescence-Detected Protein Trafficking Into and Out of the ER Membrane,” Department of Biological Sciences, Columbia University, New York, NY, October, 2006. (Invited)

“Fluorescence-Detected Protein Trafficking Into and Out of the ER Membrane,” Department of Molecular Biology, New York State Institute for Basic Research in Developmental Disabilities, New York, NY, October, 2006. (Invited)

“Fluorescence-Detected Protein Trafficking Into and Out of the ER Membrane,” Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX, November, 2006. (Invited)

“Fluorescence-Detected Protein Trafficking Into and Out of the ER Membrane,” Department of Biochemistry, Weill Medical College, Cornell University, New York, NY, November, 2006. (Invited)


“Ribosome-Translocon Interactions are Controlled by the Nascent Chain During Cotranlational Protein Integration into the ER Membrane,” American Society for Cell Biology Annual Meeting, San Diego, CA, December, 2006.(Poster Contributed)

• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

National
▷ Professional Affiliation: American Chemical Society-Chemical Education Division (Member)

Regional
▷ Event: American Chemical Society Chemists Celebrate Earth Day (Presenter)

University
▷ Service Position: ACS Chemistry Open House and Science Exploratorium (Coordinator), Age of Oak (Faculty Advisor), Aggie School Volunteers (Faculty Advisor), ATMentors (Member), Calibrated Peer Review for Texas A&M University (Master Administrator), Regent Scholars (Mentor), Texas Environmental Action Coalition (Faculty Advisor)
▷ Professional Affiliation: Organization of Professional Academic Lecturers (Co-Founder)
▷ Event: CPR at Texas A&M University (Presenter), CPR Workshop (Co-Organizer), MSC Conversations (Faculty in Attendance), Youth Adventure Program (Co-instructor)
▷ Committee/Panel: Faculty Senate Sub-committee on the Status of Non-Tenure Track Faculty (Co-Chair), GLBT Members of the University Community (ALLY), Texas A&M University Women’s & Gender Equity Resource Center Advisory Committee (Member)

College
▷ Service Position: American Chemical Society Local Chapter (Alternate Councilor)
▷ Event: All Chemistry Events and Pentathlon, Texas Science Olympiad (Coordinator), Brazos Valley Regional Science and Engineering Fair (Judge), Mitchell Institute for Fundamental Physics (Chemistry Coordinator), Texas A&M Regional Junior Science Bowl (Judge), Texas A&M Regional Science Bowl (Judge)

Department
▷ Service Position: TA Teaching Mentor and Ombudsman (Mentor)
▷ Event: American Chemical Society Chemists Celebrating Earth Day (Coordinator), AP Chemistry Summer Institute (Director), Chemistry Road Show (Member), Dr. K’s Invitational First Year Chemistry Dance Video Contest (Coordinator), First Year Chemistry Study Hall and Computer Lab (Participant), Physics Festival (Presenter)
▷ Committee/Panel: TA Training (Co-Organizer) (Speaker)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 101.501-512 — Fundamentals of Chemistry I (total enrollment: 292)

Summer
▷ CHEM 485(H) — Directed Studies (total enrollment: 1)
Fall
▷ CHEM 102.515-524 — **Fundamentals of Chemistry II** (total enrollment: 242)
▷ CHEM 485.501 — **Directed Studies** (total enrollment: 4)

- **PRESENTATIONS DURING 2006**
  ▷ “My Thoughts on How You and Your Students Can Have a Successful Experience With Calibrated Peer Review,” Teaching With Technology 2006 Conference, Texas A&M University, College Station, TX, February, 2006. (Individual)
  ▷ “March to College,” Jane Long Middle School, Bryan, TX, March, 2006. (Individual)
  ▷ “Calibrated Peer Review at Texas A&M University,” Biennial Conference on Chemical Education, Purdue University, West Lafayette, IN, August, 2006. (Individual)

- **PUBLICATIONS DURING 2006**
JAAN LAANE

PROFESSOR
CHEM-Physical/Nuclear Chemistry

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• SERVICE DURING 2006

International
  ▶ Editorial/Board: Journal of Molecular Structure (Editor)
  ▶ Committee/Panel: International Committee, European Congress on Molecular Spectroscopy (Elected Member)

National
  ▶ Service Position: Alexander von Humboldt Association of America (President)

University
  ▶ Committee/Panel: Council of Faculty Senate Speakers (Member)

College
  ▶ Committee/Panel: College of Science Grievance Committee (Member), International Programs Committee (Member)

Department
  ▶ Committee/Panel: Chemistry Education Committee (Member), Faculty Awards Committee (Chair), Graduate Student Awards Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▶ CHEM 324. — Physical Chemistry (total enrollment: 42)
  ▶ CHEM 691. — Research (total enrollment: 4)

Summer
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 691. — Research (total enrollment: 4)

Fall
  ▶ CHEM 322. — Physical Chemistry for Engineers (total enrollment: 22)
  ▶ CHEM 685. — Directed Studies (total enrollment: 2)
  ▶ CHEM 691. — Research (total enrollment: 5)

• PRESENTATIONS DURING 2006

  ▶ “A Chemist’s View of the Vibrational Spectra of DPA and it’s Calcium Salts,” DARPA Workshop, Texas A&M University, College Station, TX, January, 2006. (Invited)
“Analysis of the Vibrational Modes of 2-Cyclohexen-1-one by Infrared and Raman Spectra and by DFT Calculations,” Austin Symposium on Molecular Structure, Austin, TX, March, 2006.(Poster Contributed)

“Experimental and Calculated Raman and Infrared Spectra of Dipicolinic Acid and the Related Dinicotinic Acid and Their Anions,” Austin Symposium on Molecular Structure, Austin, TX, March, 2006.(Poster Contributed)

“Spectra and DFT Calculations for the Vibrations of Tetralin and 1,4-Benzodioxan,” Austin Symposium on Molecular Structure, Austin, TX, March, 2006.(Poster Contributed)

“Spectroscopic and Computational Studies of the Intramolecular Hydrogen Bonding of 2-Indanol and 3-Cyclopentenol,” Austin Symposium on Molecular Structure, Austin, TX, March, 2006.(Poster Contributed)

“Spectroscopic Determination of Molecular Structures and Potential Energy Surfaces of Cyclic and Bicyclic Molecules in Their Ground and Excited Electronic States,” Austin Symposium on Molecular Structure, Austin, TX, March, 2006.( Invited)


“Raman Spectra, Computations, and Structures of 2-Indanol, 2-Cyclohexenone, Dipicolinic Acid, 1,3-Dithiolane and Pyridan,” International Conference on Raman Spectroscopy, Yokohama, Japan, August, 2006.( Invited)


“Laser Induced Fluorescence Spectra and Vibrational Potential Energy Surfaces of Coumaran and 1,4-Benzodioxan in Their Ground and Excited Electronic States,” XXXVIII European Congress on Molecular Spectroscopy, Istanbul, Turkey, September, 2006.( Invited)

“Vibrational Spectra, Structure and the Ring-Puckering Potential Energy Functions in the $S_0$ and $S_1(\pi, \pi^*)$ Electronic State of Coumaran,” Industry-University Cooperative Chemistry Program (IUCCP) Symposium, College Station, TX, October, 2006.( Invited)

PUBLICATIONS DURING 2006


Yang, J.; Wagner, M.; Laane, J. (2006) Laser Induced Fluorescence Spectra, Structure, and the Ring-Twisting and Ring-Bending Vibrations of 1,4-Benzodioxan in it’s S_0 and S_1(\pi, \pi^\ast) State *Journal of Chemical Physics*, vol. 110, 9805-9815.

PAUL A. LINDAHL

• SERVICE DURING 2006

National
▷ Professional Affiliation: American Chemical Society (Treasurer)
▷ Committee/Panel: Committee for the Computational Neurosciences Graduate Training Program at the University of Minnesota (External Advisor), Hydrogen Program Panel, Department of Energy (Member)

University
▷ Research Group: Center for Advanced Biomolecular Research (Member), Chemistry Biology Interface Training Program (Member)

Department
▷ Research Group: Departmental EPR User Group (Chair)
▷ Service Position: Biological Division (Graduate Advisor)
▷ Event: Graduate Visitation Weekend (Chemistry and Biochemistry Departments) (Participant)
▷ Committee/Panel: Awards Committee (Member), Biological Chemistry Division (Chair), Chemistry Service-Course Evaluation Committee (Member), Colloquium and Seminar Committee (Member), Executive Committee (Member), Graduate Awards Committee (Member), Promotion and Tenure Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 691. — Research (total enrollment: 3)

Summer
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 691. — Research (total enrollment: 3)

Fall
▷ CHEM 681. — Seminar (total enrollment: 7)
▷ CHEM 689. — Special Topics in (total enrollment: 8)
▷ CHEM 691. — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006
▷ Duke University, Durham, NC, March, 2006. (Individual)
▷ University of North Carolina, Charlette, NC, March, 2006. (Individual)
▷ Max Planck Institute for Terrestrial Microbiology, Marburg, Germany, May, 2006. (Individual)
Phillips University, Marburg, Germany, May, 2006. (Individual)

“Molecular Biology,” Penn State Symposium, University Park, PA, June, 2006. (Individual)

Fudan University, Shanghai, China, October, 2006. (Individual)

First International Bioinorganic Symposium, Ewha Women’s University, Seoul, Korea, November, 2006. (Individual)

Sogang University, Department of Chemistry, Seoul, Korea, November, 2006. (Individual)

Third Asian Biological Inorganic Conference, Nanjing University, Nanjing, China, November, 2006. (Individual)

**PUBLICATIONS DURING 2006**


ROBERT R. LUCCHES

PROFESSOR
CHEM-Physical/Nuclear Chemistry

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- AWARDS DURING 2006
  
  International
    - Fellowship, Japan Society for the Promotion of Science

- SERVICE DURING 2006

  College
    - Committee/Panel: Information Technology Committee (Member)

  Department
    - Committee/Panel: Library Committee (Member), Phys/Nuc/Chemistry Division (Chair), Promotion and Tenure Committee (Member)

- TEACHING ASSIGNMENTS DURING 2006

  Spring
    - CHEM 691. — Research (total enrollment: 2)

  Summer
    - CHEM 324. — Physical Chemistry (total enrollment: 28)
    - CHEM 691. — Research (total enrollment: 2)

  Fall
    - CHEM 648. — Principles of Quantum Mechanics (total enrollment: 18)
    - CHEM 691. — Research (total enrollment: 3)

- PRESENTATIONS DURING 2006

  - “Role of Nuclear Motion in Molecular Photoionization,” TAGEN International Symposium on Photoelectric Effects, Tohoku University, Sendai, Japan, June, 2006. (Invited)
  - “The Effects of Nuclear Motion on Molecular Photoionization,” The 22nd Symposium on Chemical Kinetics and Dynamics, Okazaki, Japan, June, 2006. (Contributed)
  - “The Effects of Resonances on Molecular Frame Photoelectron Angular Distributions,” Southwest Theoretical Chemistry Conference, Austin, TX, October, 2006. (Contributed)
  - “Mode-Specific Polyatomic Photoionization,” National Chung Cheng University, Chia-Yi, Taiwan, November, 2006. (Invited)
“Morphed Intermolecular Interaction Potentials of Molecular Dimers,” National Chiao Tung University, Hsinchu, Taiwan, November, 2006. (Invited)

- **PUBLICATIONS DURING 2006**
  - Das, A.; Poliakoff, E.D.; Lucchese, R.R.; Bozek, J.D. (2006) Launching a Particle on a Ring: $b_{2u} \to k e_{2g}$ Ionization of $C_6F_6$ *Journal of Chemical Physics*, vol. 125, 1-5.
JACK H. LUNSFORD
DISTINGUISHED PROFESSOR EMERITUS (A)
CHEM-Physical/Nuclear Chemistry
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lunsford@mail.chem.tamu.edu

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

National
▷ Editorial/Board: NIH Review Panel (Member)

State
▷ Professional Affiliation: Texas Health and Biotechnology Institute (Member)
▷ Committee/Panel: Central Texas Science and Engineering Fair (Judge)

University
▷ Professional Affiliation: Cardiovascular Research Institute (Member)
▷ Committee/Panel: Texas A&M Institute of Food Science & Nutrition (Member)

Department
▷ Committee/Panel: Review Committee for Lichter Report on First Year Program (Chairman)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 315. — Quantitative Analysis (total enrollment: 38)
▷ CHEM 491. — Research (total enrollment: 4)
▷ CHEM 491. — Research (total enrollment: 4)
▷ CHEM 681. — Seminar (total enrollment: 9)
▷ CHEM 691. — Research (total enrollment: 5)

Summer
▷ CHEM 691. — Research (total enrollment: 5)

Fall
▷ CHEM 315. — Quantitative Analysis (total enrollment: 29)
▷ CHEM 318. — Quantitative Analysis Laboratory (total enrollment: 21)
▷ CHEM 318. — Quantitative Analysis Laboratory (total enrollment: 22)
▷ CHEM 491. — Research (total enrollment: 4)
▷ CHEM 491. — Research (total enrollment: 4)
▷ CHEM 691. — Research (total enrollment: 3)

• PUBLICATIONS DURING 2006

• SERVICE DURING 2006

National
▷ Event: Texas Junior Academy of Science (Presentation Judge), Texas Junior Science and Humanities Symposium (Poster Judge/Event Coordinator), Texas Junior Science and Humanities Symposium (Presentation Judge)

College
▷ Event: Junior Science Bowl (Question Reviewer), Regional Science Bowl (Question Reviewer), Texas Science Olympiad (Event Coordinator)

Department
▷ Event: American Chemical Society Open House (Assistant Coordinator), Chemistry Open House (Assisted), Chemistry Road Show (Assistant Coordinator), Math Bowl (Volunteer), Physics Festival (Assisted), Physics Festival (Demonstration Coordinator), Science Bowl (Volunteer), Several College of Science Outreach Activities (Volunteer)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 102. — Fundamentals of Chemistry II (total enrollment: 285)
▷ CHEM 107. — General Chemistry for Engineering Students (total enrollment: 798)

Fall
▷ CHEM 101. — Fundamentals of Chemistry I (total enrollment: 311)
▷ CHEM 101. — Fundamentals of Chemistry I (total enrollment: 589)

• PRESENTATIONS DURING 2006
▷ “Moving From Vista 3 to Vista 4: Trials and Tribulations,” WebCT Texas Conference, TX, October, 2006. (Individual)
• AWARDS DURING 2006
  National
  ▶ Faculty Early Career Development (CAREER), National Science Foundation

• SERVICE DURING 2006
  National
  ▶ Professional Affiliation: Texas A&M University, Local Section of the American Chemical Society (Secretary)
  University
  ▶ Committee/Panel: Texas A&M University, Polymer Technology Center (Member)
  Department
  ▶ Research Group: IUCCP Faculty Participant (Participant/Presenter)
  ▶ Service Position: Inorganic Division (Associate Member)
  ▶ Committee/Panel: Graduate Student Recruiting Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ CHEM 383. — Chemistry of Environmental Pollution (total enrollment: 20)
  ▶ CHEM 383. — Chemistry of Environmental Pollution (total enrollment: 20)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 691. — Research (total enrollment: 5)
  Summer
  ▶ CHEM 491. — Research (total enrollment: 3)
  ▶ CHEM 491. — Research (total enrollment: 3)
  ▶ CHEM 691. — Research (total enrollment: 8)
  Fall
  ▶ CHEM 485. — Directed Studies (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 646. — Organic Chemistry (total enrollment: 15)
  ▶ CHEM 691. — Research (total enrollment: 6)

• PRESENTATIONS DURING 2006

“Sterically Expanded Transition Metal Catalysts for Olefin Polymerization,” Indiana University, Bloomington, IN, January, 2006. (Individual)

“Sterically Expanded Transition Metal Catalysts for Olefin Polymerization,” Purdue University, West Lafayette, IN, January, 2006. (Individual)


“Sterically Expanded Transition Metal Catalysts for Olefin Polymerization,” University of North Carolina, Chapel Hill, NC, February, 2006. (Individual)


“Sterically Expanded Transition Metal Catalysts for Olefin Polymerization,” University of Southern Mississippi, Hattiesburg, MS, April, 2006. (Individual)

“Catalysis in the Miller Research Group,” Texas Molecular, LP/Sea Lion Technology, College Station, TX, May, 2006. (Individual)

“Sterically Expanded Transition Metal Catalysts for Olefin Polymerization,” NSF-REU Symposium Series, Texas A&M University, College Station, TX, July, 2006. (Individual)

“Sterically Expanded Transition Metal Catalysts for Olefin Polymerization,” University of Wyoming, Laramie, WY, September, 2006. (Individual)

“Metalloene/MAO Olefin Polymerization: Catalyst Recorganization vs. Catalyst Activity,” 62nd ACS Southwest Regional Meeting, Houston, TX, October, 2006. (Invited)

“Sterically Expanded Transition Metal Catalysts for Olefin Polymerization,” Texas A&M University, College Station, TX, October, 2006. (Individual)

“A Sodium-based Catalyst for the Highly Efficient and Controlled Ring-opening Polymerization of Lactide,” Polymer Technology Industrial Consortium, Texas A&M University, College Station, TX, November, 2006. (Invited)

“Sterically Expanded Transition Metal Catalysts for Olefin Polymerization,” Louisiana State University, Baton Rouge, LA, December, 2006. (Individual)

PUBLICATIONS DURING 2006

Miller, S.A. (2006) Application of the $S_{2\infty}$ and $C_{\infty}$ Point Groups for the Prediction of Polymer Chirality *Chemical Communications*, vol. 70, 862-864.


TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 102. — Fundamentals of Chemistry II (total enrollment: 295)

Fall
▷ CHEM 102. — Fundamentals of Chemistry II (total enrollment: 215)
▷ CHEM 116. — Molecular Science for Citizens Laboratory (total enrollment: 20)

No report received from faculty member.
• SERVICE DURING 2006

Regional
▷ Event: “Pallavi” a Program on Indian Classical Music on KAMU-FM (Host)

University
▷ Service Position: SPICMACAY (Society for the Promotion of Indian Classical Music and Culture Among Youth) (Faculty Advisor)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 316. — Quantitative Analysis (total enrollment: 38)
▷ CHEM 318. — Quantitative Analysis Laboratory (total enrollment: 22)
▷ CHEM 318. — Quantitative Analysis Laboratory (total enrollment: 52)

Fall
▷ CHEM 316. — Quantitative Analysis (total enrollment: 135)
▷ CHEM 318. — Quantitative Analysis Laboratory (total enrollment: 18)
▷ CHEM 318. — Quantitative Analysis Laboratory (total enrollment: 42)
▷ CHEM 318. — Quantitative Analysis Laboratory (total enrollment: 44)
• SERVICE DURING 2006
  National
  ▶ Committee/Panel: American Chemical Society - Chemical Education and Biological Chemistry Divisions (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Fall
  ▶ CHEM 222. — Elements of Organic and Biological Chemistry (total enrollment: 147)

• PRESENTATIONS DURING 2006
CARLOS A. MURILLO

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CHEM-Inorganic Chemistry murillo@tamu.edu

- AWARDS DURING 2006
  National
  ▶ Fellow, American Association for the Advancement of Science

- SERVICE DURING 2006
  Department
  ▶ Research Group: Laboratory for Molecular Structure and Bonding (Executive Director)

- TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ CHEM 104. — Chemistry of the Elements (total enrollment: 9)
  ▶ CHEM 114. — Quantitative Analysis (total enrollment: 9)
  Fall
  ▶ CHEM 362. — Descriptive Inorganic Chemistry (total enrollment: 30)

- PUBLICATIONS DURING 2006


JOSEPH B. NATOWITZ

DISTINGUISHED PROFESSOR (979) 845-1411
CHEM-Physical/Nuclear Chemistry natowitz@comp.tamu.edu

• CHAIRS/PROFESSORSHIPS
  ▷ Cyclotron Institute Bright Chair in Nuclear Science [2002]

• SERVICE DURING 2006

  International
  ▷ Committee/Panel: International Advisory Committee, Nucleus-Nucleus Collisions 2006, Rio Di Janerio, Brazil (Member), Oaxtepec, Mexico Nuclear Physics Symposium International Advisory Committee (Member), Programs Advisory Committee, French-Belgian DEMON Detector Array (Chair)

  National

  University
  ▷ Committee/Panel: Center for Teaching Excellence Advisory Committee (Member), Graduate Student PhD Committees (Member)

  College
  ▷ Event: Expanding Your Horizons Program (Presenter)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▷ CHEM 691. — Research (total enrollment: 1)

  Summer
  ▷ CHEM 691. — Research (total enrollment: 1)

  Fall
  ▷ CHEM 464. — Nuclear and Radiochemistry (total enrollment: 19)

• PRESENTATIONS DURING 2006


  ▷ “Nuclear Symmetry Energies at low Density,” Department of Physics, University of Padova, Padova, Italy, March, 2006. (Invited)


“Experimental Determination of the Symmetry Energy in a Low Density Nuclear Gas,”
In Heaven and on Earth 2006, Montreal, Canada, June, 2006. (Individual)

“Experimental Determination of the Symmetry Energy of low Density Nuclear Matter,”
NN2006 Conference, Rio de Janeiro, Brazil, August, 2006. (Invited)

• PUBLICATIONS DURING 2006
  ▶ De, J.N.; Samaddar, S.K.; Shlomo, S.; et al. (2006) Continuous Phase Transition and
    Negative Specific Heat in Finite Nuclei Physical Review C: Nuclear Physics, vol. 73,
    034602.
• SERVICE DURING 2006

National
▷ Research Group: Project Research Team, Advanced Light Source, Berkeley, CA (Member)

University
▷ Research Group: Center for Atmospheric Chemistry and the Environment (Member)

College
▷ Committee/Panel: Grievance Committee (Elected Member)

Department
▷ Committee/Panel: Department Head Search Committee (Member), Departmental Executive Committee (Member), Executive Committee (Member), Faculty Search Committee (Physical/Analytical) (Member), Graduate Admission and Review Committee (Member), Self-Study Committee (Member), Undergraduate Curriculum Committee (Member), Undergraduate Curriculum Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 621. — Chemical Kinetics (total enrollment: 19)
▷ CHEM 691. — Research (total enrollment: 5)

Summer
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 691. — Research (total enrollment: 5)

Fall
▷ CHEM 325. — Physical Chemistry Laboratory I (total enrollment: 24)
▷ CHEM 681. — Seminar (total enrollment: 13)
▷ CHEM 691. — Research (total enrollment: 5)

• PRESENTATIONS DURING 2006
▷ “Direct Imaging of Atmospheric Photochemistry: Photodissociation Dynamics of ClO and BrO Radicals,” Regional ACS Meeting Houston, Houston, TX, 2006. (Invited)

• PUBLICATIONS DURING 2006
  ▶ Kim, H; Dooley, KS; Groenenboom, GC; North, SW. (2006) Vibrational State-dependent Predissociation Dynamics of ClO (A (2)Pi(3/2)): Insight From Correlated Fine Structure Branching Ratios Physical Chemistry Chemical Physics, vol. 8, 2964-2971.
  ▶ Kim, H; Dooley, KS; North, SW; Hall, GE; Houston, PL. (2006) Anisotropy of photofragment recoil as a function of dissociation lifetime, excitation frequency, rotational level, and rotational constant Journal of Chemical Physics, vol. 125.
• SERVICE DURING 2006

National
▷ Professional Affiliation: American Chemical Society, Division of Chemical Education (Member), National Science Teachers Association (Member)
▷ Committee/Panel: Passer Portfolio Committee for ACS Division of Chemical Education (Member), Passer Portfolio Committee for ACS Division of Chemical Education (Member)

State
▷ Professional Affiliation: ACT 2 (Associated Chemistry Teachers of Texas) (Member), Science Teachers Association of Texas (Member), Texas Teachers Organization for Physical Science (Member)

University
▷ Service Position: Heldenfels Hall (Building Proctor)
▷ Committee/Panel: University Council on Teacher Education (Member)

College
▷ Committee/Panel: Science and Math Education Committee (Member)

Department
▷ Service Position: Chemistry Road Show (Co-Director), First-Year Chemistry Program (Director), Students Seeking Teacher Certification in Chemistry (Departmental Advisor)
▷ Committee/Panel: Advisory Council (Member), Outreach Committee (Member), Undergraduate Awards Committee (Member)

• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

National
▷ Professional Affiliation: American Chemical Society - Division of Inorganic Chemistry (Member)

University
▷ Professional Affiliation: Faculty Teaching Academy (Member)
▷ Event: Center for Teaching Excellence Workshop (Participant)

• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ CHEM 101. — Fundamentals of Chemistry I (total enrollment: 247)
▷ CHEM 101. — Fundamentals of Chemistry I (total enrollment: 297)
▷ CHEM 116. — Molecular Science for Citizens Laboratory (total enrollment: 24)
▷ CHEM 116. — Molecular Science for Citizens Laboratory (total enrollment: 24)
• AWARDS DURING 2006

University
▷ Fish Camp Namesake, Texas A&M University

• SERVICE DURING 2006

National
▷ Professional Affiliation: American Chemical Society (Member)

University
▷ Professional Affiliation: Christian Faculty Network (Member)
▷ Committee/Panel: Aggie Access Namesake (Member), Project Sunshine (Faculty Advisor), Status of Non-Tenure Track Faculty (Member)

College
▷ Event: Brazos Valley Regional Science and Engineering Fair (Judge), Brazos Valley Regional Science and Engineering Fair (Member), Hands-On Science Exhibition (Volunteer), Science Olympiad (Event Coordinator), Texas Junior Academy of Science (TJAS) (Judge)

Department
▷ Event: National Chemistry Week Open House (Volunteer)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 228.501 — Organic Chemistry II (total enrollment: 87)
▷ CHEM 228.505 — Organic Chemistry II (total enrollment: 91)
▷ CHEM 228.509 — Organic Chemistry II (total enrollment: 98)

Fall
▷ CHEM 227.501 — Organic Chemistry I (total enrollment: 85)
▷ CHEM 227.506 — Organic Chemistry I (total enrollment: 88)
▷ CHEM 227.512 — Organic Chemistry I (total enrollment: 90)

• PRESENTATIONS DURING 2006
▷ “Large Classes: Class Management,” Wakonse South Teaching Conference, April, 2006. (Individual)

• PUBLICATIONS DURING 2006
• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  ▶ CHEM 227. — Organic Chemistry I (total enrollment: 302)
  
  Fall
  ▶ CHEM 228. — Organic Chemistry II (total enrollment: 293)
  ▶ CHEM 238. — Organic Chemistry Laboratory (total enrollment: 23)
  
• PUBLICATIONS DURING 2006
FRANK M. RAUSHEL

PROFESSOR
CHEM-Biological Chemistry
raushel@mail.chem.tamu.edu

• CHAIRS/PROFESSORSHIPS
  ▶ Davidson Chair in Science [2004]

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Toxicology, [2006]

• SERVICE DURING 2006
  International
  ▶ Committee/Panel: Excellence Initiative - Germany (Member), Study Panel - Deutsche Forschungsgemeinschaft (Member)

  National
  ▶ Editorial/Board: BioOrganic Chemistry (Member), Archives of Biochemistry & Biophysics (Member), Biochemistry (Member)

  University
  ▶ Advisory Board: Gene Technologies Laboratory (Member)
  ▶ Committee/Panel: Research Foundation - Principal Investigator Advisory Committee (Member)

  College
  ▶ Committee/Panel: Research Advisory Committee (Member)

  Department
  ▶ Research Group: Mass Spectrometry User Group (Member), NMR User Group (Member)
  ▶ Advisory Board: Protein Chemistry Laboratory (Member)
  ▶ Committee/Panel: External Review Committee (Member), Graduate Admissions and Review Committee (Member), Promotion and Tenure Committee (Member), Space Committee (Member), Undergraduate Curriculum Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ CHEM 672. — Bioorganic Reaction Mechanisms (total enrollment: 21)
  ▶ CHEM 681. — Seminar (total enrollment: 12)
  ▶ CHEM 691. — Research (total enrollment: 6)

  Summer
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 691. — Research (total enrollment: 8)
Fall
▷ CHEM 681. — Seminar (total enrollment: 11)
▷ CHEM 691. — Research (total enrollment: 6)

• PRESENTATIONS DURING 2006
  ▷ “Chemical and Mechanistic Diversity Within the Amidohydrolase Superfamily,” Canadian Chemical Society, Halifax, Canada, May, 2006. (Individual)
  ▷ “Mechanism of the Uronate Isomerase Reaction,” Protein Society Meeting, San Diego, CA, August, 2006. (Poster Contributed)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

National
▷ Event: NSF Workshop on Organic Synthesis (Organizer)
▷ Editorial/Board: NIH Medicinal Chemistry Study Section Regular Member (Panel)

Department
▷ Research Group: Mass Spectrometry User Group (Member), NMR User Group (Member), X-ray Users Group (Member)
▷ Advisory Board: Industry University Cooperative Chemistry Program (Representative)
▷ Committee/Panel: Executive Committee (Member), Faculty Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 691. — Research (total enrollment: 17)

Summer
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 691. — Research (total enrollment: 15)

Fall
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 615. — Organic Synthesis (total enrollment: 17)
▷ CHEM 691. — Research (total enrollment: 13)

• PRESENTATIONS DURING 2006

▷ “Synthetic Strategy and Methodology Development Towards the Quest of Mining Natural Product-Derived, Biological Information,” Department of Chemistry, University of Texas, San Antonio, TX, January, 2006.( Invited)

▷ “Synthetic/Mechanistic Studies of Bioactive Natural Products: Enduring Leads for Discovery of Biological Probes and Therapeutics,” Department of Pharmocalogy, Johns Hopkins University, Baltimore, MD, February, 2006.( Invited)

▷ “Synthetic Strategy and Methodology Development Towards the Quest of Mining Natural Product-Derived, Biological Information,” Department of Chemistry, University of California, Riverside, CA, March, 2006.( Invited)

▷ “Synthetic/Mechanistic Studies of Bioactive Natural Products: Enduring Leads for Discovery of Biological Probes and Therapeutics,” Department of Chemistry, University of California, Santa Cruz, CA, March, 2006.( Invited)


“Small Molecule Anti-Cancer Compounds Derived From Natural Products,” BioHouston Oncology Emerging Technology Showcase, Houston, TX, September, 2006. (Invited)


**PUBLICATIONS DURING 2006**


• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ◦ Graduate Advisor, Chemistry Graduate Advising Office, [2002]
  ◦ Associate Department Head, Chemistry, [1981]

• SERVICE DURING 2006

College
  ◦ Committee/Panel: Graduate Instruction Committee (Member), Technology-Mediated Instruction Committee (Member)

Department
  ◦ Service Position: Industry-University Cooperative Chemistry Program (Director)
  ◦ Advisory Board: IUCCP Advisory Board (Member)
  ◦ Committee/Panel: Colloquium and Seminar Committee (Member), Graduate Admissions and Review Committee (Member), Graduate Curriculum Committee (Member), Internal Awards Committee (Member), Safety Committee (Chair), Space Committee (Chair), Undergraduate Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ◦ CHEM 470. — Industrial Chemistry (total enrollment: 52)
  ◦ CHEM 690. — Theory of Chemical Research (total enrollment: 1)
  ◦ CHEM 691. — Research (total enrollment: 2)
  ◦ CHEM 691. — Research (total enrollment: 4)
  ◦ CHEM 691. — Research (total enrollment: 9)

Summer
  ◦ CHEM 691. — Research (total enrollment: 10)
  ◦ CHEM 691. — Research (total enrollment: 13)
  ◦ CHEM 691. — Research (total enrollment: 2)
  ◦ CHEM 691.300 — Research (total enrollment: 3)

Fall
  ◦ CHEM 101.201-202(H) — Fundamentals of Chemistry I (total enrollment: 28)
  ◦ CHEM 690. — Theory of Chemical Research (total enrollment: 4)
  ◦ CHEM 691. — Research (total enrollment: 10)
  ◦ CHEM 691. — Research (total enrollment: 30)
• SERVICE DURING 2006

University
▷ Advisory Board: Study Abroad Scholarship Review Committee (Member)
▷ Committee/Panel: National Scholarship Committee (Member)

Department
▷ Service Position: Quantitative Analysis Laboratory Program (Coordinator)
▷ Committee/Panel: Post-Tenure Review Committee (Chair), Search Committee for Nuclear Chemistry Chair (Member), Undergraduate Awards Committee (Member)

• PUBLICATIONS DURING 2006

No report received from faculty member.
DAVID H. RUSSELL

PROFESSOR (979) 845-3345
CHEM- Analytical Chemistry russell@mail.chem.tamu.edu

• CHAIRS/PROFESSORSHIPS

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Member, Interdisciplinary Faculty, Biotechnology, [2006]

• SERVICE DURING 2006

  National
  ▷ Event: NIH Special Emphasis Panel/Scientific Review Group 2005/05 ZRG1 BCMB-M (10) (B), Washington, DC, 9-11 (Member), NIH Teleconference Reviewer for the October 27th NIH Study Section (Reviewer), US Department of Energy Environmental Molecular Sciences Laboratory Review held in Richland, VA (Reviewer)
  ▷ Editorial/Board: Department of Energy (2 site visits, PNNL & ORNL) (Reviewer), National Science Foundation, National Institutes of Health (Review: Proposals)

  University
  ▷ Research Group: Council of Principal Investigators (Chair elect)
  ▷ Committee/Panel: Transportation Construction Committee (Member)

  College
  ▷ Committee/Panel: Executive Committee (Member), Research Advisory Committee (Member)

  Department
  ▷ Advisory Board: Industry University Cooperative Chemistry Program (Representative)
  ▷ Committee/Panel: Chemistry Department Executive Committee (Member), Executive Committee (Member), Graduate Curriculum Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▷ CHEM 691. — Research (total enrollment: 13)

  Summer
  ▷ CHEM 491. — Research (total enrollment: 1)
  ▷ CHEM 491. — Research (total enrollment: 1)
  ▷ CHEM 691. — Research (total enrollment: 1)
  ▷ CHEM 691. — Research (total enrollment: 12)

  Fall
  ▷ CHEM 691. — Research (total enrollment: 11)
• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

National
▷ Committee/Panel: NIH Biological Chemistry & Macromolecular Biophysics Integrated Review Group (Member), Scientific Advisory Committee Bill & Melinda Gates Grand Challenges in Global Health Project 'Drugs for Treatment of Latent Tuberculosis Infection' (Member), Scientific Advisory Committee NIH-NIAID TB TARGET Panel (Member)

University
▷ Committee/Panel: Center of Structural Biology, Institute of Biosciences and Technology (Director), Intellectual Property and Commercialization Working Committee (Member), Interdisciplinary Lifesciences Building Scientific Advisors Committee (Member), TB Structural Genomics Consortium (Director)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 691. — Research (total enrollment: 7)

Summer
▷ CHEM 691. — Research (total enrollment: 1)
▷ CHEM 691. — Research (total enrollment: 6)

Fall
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 691. — Research (total enrollment: 7)

• PRESENTATIONS DURING 2006

▷ American Crystallographic Association, Honolulu, Hawaii, 2006.( Individual)
▷ ASM Biodefense Meeting, Washington D.C., 2006.( Individual)
▷ Center for Advanced Microstructures and Devises, Louisiana State University Keystone Symposium, Tahoe City, CA, 2006.( Individual)
▷ First African Structural Biology Conference, Cape Town, South Africa, 2006.( Individual)
▷ International Centre for Genetic Engineering & Biotechnology, New Delhi, India, 2006.( Individual)
▷ NIH-NIAID TB TARGET Meeting, Washington D.C., 2006.( Individual)

• PUBLICATIONS DURING 2006

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• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ CHEM 227. — Organic Chemistry I (total enrollment: 73)
▷ CHEM 227. — Organic Chemistry I (total enrollment: 89)
▷ CHEM 234. — Organic Synthesis and Analysis IV (total enrollment: 14)

• PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Computational Nanoscience and Materials - IGERT, [2006]
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• AWARDS DURING 2006
  National
  ▶ Beckman Young Investigator Award, Arnold and Mabel Beckman Foundation
  ▶ DuPont Young Professor Grant, DuPont Fellows Forum
  ▶ Faculty Early Career Development (CAREER), National Science Foundation

• SERVICE DURING 2006
  State
  ▶ Committee/Panel: Materials Science and Engineering Ph.D. Program (Executive Committee)
  University
  ▶ Service Position: Texas A&M University, Chapter of Phi Lambda Upsilon (Advisor)
  ▶ Committee/Panel: Electron Microscopy Advisory Committee of the Microscopy and Imaging Center (Member)
  Department
  ▶ Event: Inorganic Student Research Seminars (Coordinator)
  ▶ Committee/Panel: Center for Integrated Microchemical Systems (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ CHEM 433. — Advanced Inorganic Chemistry Laboratory (total enrollment: 8)
  ▶ CHEM 491. — Research (total enrollment: 2)
  ▶ CHEM 491. — Research (total enrollment: 2)
  ▶ CHEM 691. — Research (total enrollment: 6)
  Summer
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 1)
  ▶ CHEM 491. — Research (total enrollment: 2)
  ▶ CHEM 491. — Research (total enrollment: 2)
  ▶ CHEM 691. — Research (total enrollment: 8)
Fall

▷ CHEM 107. — **General Chemistry for Engineering Students** (total enrollment: 316)
▷ CHEM 491. — **Research** (total enrollment: 2)
▷ CHEM 491. — **Research** (total enrollment: 2)
▷ CHEM 691. — **Research** (total enrollment: 8)

- **PRESENTATIONS DURING 2006**

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- **PUBLICATIONS DURING 2006**
• **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  ▶ Department Head, Chemistry, [1994/]

• **SERVICE DURING 2006**
  Department
  ▶ Research Group: X-Ray Diffraction User Group (Member), Center for Chemical Characterization and Analysis (Director), Mass Spectrometry User Group (Member), NMR User Group (Member)
  ▶ Advisory Board: Industry University Cooperative Chemistry Program (Representative)
  ▶ Committee/Panel: Trace Elemental Analysis User Group (Chair)

• **TEACHING ASSIGNMENTS DURING 2006**
  Spring
  ▶ CHEM 691. — **Research** (total enrollment: 4)
  Summer
  ▶ CHEM 691. — **Research** (total enrollment: 4)
  Fall
  ▶ CHEM 691. — **Research** (total enrollment: 3)

• **PRESENTATIONS DURING 2006**
  ▶ “CN Emission Under C-60 Bombardment,” 19th Annual Workshop on SIMS, Rancho Mirage, CA, May, 2006. (Contributed)
  ▶ “Prompt In-Situ Emission of Gold Adducts From Single Impacts of Large Gold Clusters on Organic Solids,” 19th Annual Workshop on SIMS, Rancho Mirage, CA, May, 2006. (Contributed)
  ▶ “SIMS With Massive Projectiles,” Seminar, University of Nice, France, September, 2006. (Individual)
“Nanovolume Analysis With SIMS Using Massive Projectiles,” 62nd Annual Southwest Regional ACS Meeting, November, 2006. (Contributed)

**PUBLICATIONS DURING 2006**

• CHAIRS/PROFESSORSHIPS
  ➤ Robert A. Welch Foundation Chair and Derek Barton Professor in Chemistry [2001]

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ➤ Distinguished Professor, Biochemistry, [1981]

• SERVICE DURING 2006
  International
  ➤ Committee/Panel: IUPAC Committee Bioorganic Chemistry (Member)

  National
  ➤ Editorial/Board: Bio-organic Chemistry (Member), Chemistry and Biology (Member), Study Section on Natural Products, NIH (Panel), Tetrahedron Publications (Member)
  ➤ Committee/Panel: ACS National Prize (Member)

  Department
  ➤ Committee/Panel: Biological Chemistry Faculty Search Committee (Member), Faculty Awards Committee (Member)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

National
  ▶ Advisory Board: NSF IGERT in Nanophotonics external advisory board, Rice University (Member)
  ▶ Editorial/Board: IEEE Transactions of Medical Imaging (Member), Journal of Biomedical Optics (Member), National Institutes of Health Medical Imaging Study Panel (appointed) (Panel), National Institutes of Health Review Panel, Special Study Section (ad hoc) (Panel), National Institutes of Health, In Vivo Cellular and Molecular Imaging Centers (ad hoc) (Panel), National Institutes of Health, Radiology (ad hoc) (Review: Proposals), National Science Foundation CAREER panel, Fluid, Participate and Hydraulic Systems (ad hoc) (Panel)
  ▶ Committee/Panel: Society of Molecular Imaging (Member)

University
  ▶ Committee/Panel: Council of Principal Investigators (Member)

Department
  ▶ Committee/Panel: Faculty Senate Member (Member)

On leave.
No report received from faculty member.
Eric E. Simanek
Associate Professor
(979) 845-4242
simanek@mail.chem.tamu.edu

- **Additional University Titles Held During 2006**
  - Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]
  - Member, Interdisciplinary Faculty, Toxicology, [2006]

- **Service During 2006**

  National
  - Editorial/Board: Molecular Pharmacology Special Issue (Editor)
  - Committee/Panel: NIH SBCA Study Section (Review Panel)

  Department
  - Advisory Board: Industry University Cooperative Chemistry Program (IUCCP) (Representative)
  - Committee/Panel: Advisory Council (Member)

- **Teaching Assignments During 2006**

  Spring
  - CHEM 242. — **Elementary Organic Chemistry Laboratory** (total enrollment: 69)
  - CHEM 285. — **Directed Studies** (total enrollment: 4)
  - CHEM 691. — **Research** (total enrollment: 3)
  - CHEM 697. — **Methods in Teaching Chemistry Laboratory** (total enrollment: 27)

  Summer
  - CHEM 685. — **Directed Studies** (total enrollment: 8)
  - CHEM 691. — **Research** (total enrollment: 6)

  Fall
  - CHEM 101. — **Fundamentals of Chemistry I** (total enrollment: 302)
  - CHEM 242. — **Elementary Organic Chemistry Laboratory** (total enrollment: 49)
  - CHEM 285. — **Directed Studies** (total enrollment: 8)
  - CHEM 685. — **Directed Studies** (total enrollment: 1)
  - CHEM 691. — **Research** (total enrollment: 7)
  - CHEM 697. — **Methods in Teaching Chemistry Laboratory** (total enrollment: 11)

- **Presentations During 2006**
  - “Dendrimers Based on Melamine,” Trinity University, San Antonio, TX, 2006. (Individual)
  - “Dendrimers Based on Melamine,” Tulane University, New Orleans, LA, 2006. (Individual)
  - “Dendrimers Based on Melamine,” University of St. Thomas, Saint Paul, MN, 2006. (Individual)
• PUBLICATIONS DURING 2006
• **CHAIRS/PROFESSORSHIPS**
  ▶ Davidson Chair in Science [2005]

• **SERVICE DURING 2006**
  **National**
  **College**
  ▶ Committee/Panel: College Quality Enhancement Plan Council (Member)
  **Department**
  ▶ Research Group: Computer User Group (Member), NMR User Group (Chair)
  ▶ Committee/Panel: Department Head Search Committee (Member), Departmental Advisory Committee (Member), External Review (Member), External Review Self-Study Committee (Chair), Nuclear Search Committee (Member), Promotion and Tenure Committee (Member), Undergraduate Curriculum Committee (Chair)

• **TEACHING ASSIGNMENTS DURING 2006**
  **Spring**
  ▶ CHEM 234. — *Organic Synthesis and Analysis IV* (total enrollment: 43)
  ▶ CHEM 491. — *Research* (total enrollment: 1)
  ▶ CHEM 491. — *Research* (total enrollment: 1)
  ▶ CHEM 691. — *Research* (total enrollment: 7)
  **Summer**
  ▶ CHEM 691. — *Research* (total enrollment: 9)
  **Fall**
  ▶ CHEM 234. — *Organic Synthesis and Analysis IV* (total enrollment: 15)
  ▶ CHEM 491. — *Research* (total enrollment: 1)
  ▶ CHEM 491. — *Research* (total enrollment: 1)
  ▶ CHEM 691. — *Research* (total enrollment: 7)

• **PUBLICATIONS DURING 2006**
No report received from faculty member.
• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▶ CHEM 691. — Research (total enrollment: 3)

Summer
  ▶ CHEM 691. — Research (total enrollment: 3)

Fall
  ▶ CHEM 325. — Physical Chemistry Laboratory I (total enrollment: 16)
  ▶ CHEM 691. — Research (total enrollment: 2)
• SERVICE DURING 2006
  Department
  ▷ Committee/Panel: Physical Chemistry Laboratory Development Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ CHEM 317. — Quantitative Analysis (total enrollment: 40)
  ▷ CHEM 318. — Quantitative Analysis Laboratory (total enrollment: 11)
  ▷ CHEM 325. — Physical Chemistry Laboratory I (total enrollment: 24)
  Summer
  ▷ CHEM 316. — Quantitative Analysis (total enrollment: 24)
  ▷ CHEM 318. — Quantitative Analysis Laboratory (total enrollment: 21)
  Fall
  ▷ CHEM 325. — Physical Chemistry Laboratory I (total enrollment: 21)
  ▷ CHEM 434. — Analytical Instrumentation Laboratory (total enrollment: 21)

• PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• SERVICE DURING 2006
  National
  ▷ Professional Affiliation: Phi Lambda Upsilon (President)
  ▷ Advisory Board: Continuing International Conferences on Electrified Interfaces (Member)
  ▷ Editorial/Board: The Physics and Chemistry of Surfaces and Interfaces (Referee: Journals)

  Department
  ▷ Committee/Panel: Faculty Awards Committee (Chair), First-Year Chemistry Program Director Search Committee (Member), Research Awards Committee (Chair), Service Courses Curriculum Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ CHEM 691. — Research (total enrollment: 7)
  ▷ CHEM 695. — Frontiers in Chemical Research (total enrollment: 52)
  Summer
  ▷ CHEM 102. — Fundamentals of Chemistry II (total enrollment: 95)
  ▷ CHEM 691. — Research (total enrollment: 5)
  Fall
  ▷ CHEM 415. — Analytical Chemistry (total enrollment: 28)
  ▷ CHEM 691. — Research (total enrollment: 4)

• PUBLICATIONS DURING 2006
No report received from faculty member.
• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 102. — Fundamentals of Chemistry II (total enrollment: 304)

Fall
▷ CHEM 101. — Fundamentals of Chemistry I (total enrollment: 304)

No report received from faculty member.
• SERVICE DURING 2006

College
▷ Event: Jr. Science Bowl (Moderator), Regional Science Bowl (Judge), Texas Jr. Academy of Science (Judge)

Department
▷ Service Position: Graduate Visitation Weekend (GVW) (Mentor)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 227. — Organic Chemistry I (total enrollment: 104)
▷ CHEM 228. — Organic Chemistry II (total enrollment: 104)
▷ CHEM 228. — Organic Chemistry II (total enrollment: 104)

Fall
▷ CHEM 227. — Organic Chemistry I (total enrollment: 96)
▷ CHEM 227. — Organic Chemistry I (total enrollment: 96)
▷ CHEM 227. — Organic Chemistry I (total enrollment: 96)

No report received from faculty member.
• SERVICE DURING 2006

   University
   ▶ Service Position: Student Affiliate Chapter of the American Chemical Society (Faculty Advisor)
   ▶ Event: MSC OPAS (Director)

   Department
   ▶ Service Position: Undergraduate Studies, Department of Chemistry (Associate Coordinator)
   ▶ Committee/Panel: Undergraduate Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

   Spring
   ▶ CHEM 228. — Organic Chemistry II (total enrollment: 101)
   ▶ CHEM 228. — Organic Chemistry II (total enrollment: 104)

   Fall
   ▶ CHEM 100. — Horizons in Chemistry (total enrollment: 85)
   ▶ CHEM 227 — Organic Chemistry I (total enrollment: 96)
   ▶ CHEM 227. — Organic Chemistry I (total enrollment: 96)
• CHAIRS/PROFESSORSHIPS
  ▶ Gradipore Chair in Separation Science in Chemistry [2001]

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• SERVICE DURING 2006
  National
  ▶ Editorial/Board: Special Issue of Electrophoresis (Editor), Electrophoresis (Member), Journal of Chromatography (Member), Journal of Separation Science (Member)
  Department
  ▶ Committee/Panel: Graduate Awards Committee (Member), Graduate Curriculum Committee (Chair), Graduate Curriculum Committee (Member), Library Committee (Member), Undergraduate Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ CHEM 689. — Special Topics in (total enrollment: 8)
  ▶ CHEM 691. — Research (total enrollment: 7)
  Summer
  ▶ CHEM 691. — Research (total enrollment: 5)
  Fall
  ▶ CHEM 689. — Special Topics in (total enrollment: 5)
  ▶ CHEM 691. — Research (total enrollment: 6)

• PUBLICATIONS DURING 2006

No report received from faculty member.
• SERVICE DURING 2006

National

University
▷ Committee/Panel: Various Student Committees (Member)

Department
▷ Committee/Panel: Faculty recruiting for organic divisions and biological divisions (Participant)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 446. — Organic Chemistry III (total enrollment: 10)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 681. — Seminar (total enrollment: 47)
▷ CHEM 691. — Research (total enrollment: 4)

Summer
▷ CHEM 491. — Research (total enrollment: 2)
▷ CHEM 491. — Research (total enrollment: 2)
▷ CHEM 691. — Research (total enrollment: 6)

Fall
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 491. — Research (total enrollment: 1)
▷ CHEM 691. — Research (total enrollment: 7)

• PRESENTATIONS DURING 2006
▷ “Azinomycin B: Mode of Action and Biosynthesis,” Texas Enzyme Mechanisms Conference, Austin, TX, January, 2006.(Invited)
▷ “Azinomycin B: Mode of Action and Biosynthesis,” GRC: Enzymes Coenzymes and Metabolic Pathways, Biddeford, ME, July, 2006.(Invited)
▷ “Pyocyanin Isolated From a Marine Microbial Population,” GRC: Enzymes Coenzymes and Metabolic Pathways, Biddeford, ME, July, 2006.(Poster Invited)


“Azinomycin B: Mode of Action and Biosynthesis,” Regional ACS Conference, Houston, TX, October, 2006. (Invited)


“Inspiration From Nature: Natural Products in Drug Discovery Efforts,” University of New Mexico, Albuquerque, NM, October, 2006. (Individual)

“Inspiration From Nature: Natural Products in Drug Discovery Efforts,” Oregon State University, Corvallis, OR, November, 2006. (Individual)


“Inspiration From Nature: Natural Products in Drug Discovery Efforts,” Stony Brook University, Stony Brook, NY, December, 2006. (Individual)

**PUBLICATIONS DURING 2006**


- Kelly, GT; Liu, CM; Smith, R; Coleman, RS; Watanabe, CMH. (2006) Cellular effects induced by the antitumor agent azinomycin B *Chemistry and Biology*, vol. 13, 485-492.

• SERVICE DURING 2006
  International
  ▸ Committee/Panel: Texas A&M University; Radiological Safety Committee (Member)
  College
  ▸ Committee/Panel: Tenure and Promotion Advisory Committee (Member)
  Department
  ▸ Committee/Panel: College of Science Promotion and Tenure Review Committee (Member), Colloquium and Seminar Committee (Chair), Faculty Awards Committee (Chair), Space Committee (Member), Undergraduate Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▸ CHEM 324. — Physical Chemistry (total enrollment: 28)
  ▸ CHEM 691. — Research (total enrollment: 1)
  Summer
  ▸ CHEM 691. — Research (total enrollment: 2)
  Fall
  ▸ CHEM 101.203-204(H) — Fundamentals of Chemistry I (total enrollment: 24)
  ▸ CHEM 691. — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006
  ▸ “A Pyroelectric Crystal Particle Accelerator,” 2006 Meeting of the Division of Nuclear Physics, American Physical Society, Nashville, TN, October, 2006. (Contributed)

• PUBLICATIONS DURING 2006
• CHAIRS/PROFESSORSHIPS
  ▶ Robert A. Welch Endowed Chair in Chemistry at the Institute of Biosciences and Technology [1990]

• SERVICE DURING 2006
  International
  ▶ Service Position: Served on scientific, academic, governmental, and industrial affairs in foreign countries including: Australia, Brazil, Canada, Costa Rica, Czechoslovakia, Denmark, England, France, Germany, Italy, Japan, Mexico, The Netherlands, Norway, Poland, Puerto Rico, South Korea, Sweden, and Switzerland (Co-novener)
  ▶ Professional Affiliation: Poland-United States Science Foundation (Co-Founder), Polish Academy of Sciences (Foreign Member)
  ▶ Event: The Japanese Biochemical Society in Kyoto, Japan (President Elect), The Korean Biochemical Society Meeting in Seoul, Korea (President Elect)

  National
  ▶ Professional Affiliation: American Society for Biochemistry and Molecular Biology (President), Federation of American Societies for Experimental Biology (President)
  ▶ Event: Coalition of American Scientific Society Presidents (Organizer)
  ▶ Advisory Board: Helen Keller Eye Research Foundation (Member)
  ▶ Editorial/Board: ASBMB Today (Member), Campaign for Medical Research, Board of Directors (Member), CHEMTRACTS-Biochemistry and Molecular Biology (Member), DNA Structure, Genomic Rearrangements, and Human Disease (Co-Organizer), International Bulletin of Molecular Medicine (Member), NIH Study Section Committees (Panel), Invited Review for Special Issue of the Journal, DNA Repair (Reviewer), Journal of Biochemistry and Molecular Biology (Advisor), Journal of Biochemistry and Molecular Biology (Guest Associate Editor), Journal of Experimental Therapeutics and Oncology (Associate Editor)
  ▶ Committee/Panel: American Academy of Microbiology, American Society of Microbiology (Fellow), American Society for Biochemistry and Molecular Biology Centennial Organization Committee (Member), American Society for Biochemistry and Molecular Biology Council (Member), American Society for Biochemistry and Molecular Biology Finance and Marketing Committees (Member), American Society for Biochemistry and Molecular Biology Membership Task Force (Member), American Society for Biochemistry and Molecular Biology Publications Committee (Member), American Society for Biochemistry and Molecular Biology, Search Committee for New Executive Officer (Member), Damon Ruyon-Walter Winchell Cancer Research Fund, National Steering Committee of Former Fellows (Member), Federation of American Societies for Experimental Biology Executive Director Search Committee (Member), Federation of American Societies for Experimental Biology Finance and Science Policy Committee (Member), Federation of American Societies for Experimental Biology Location Committee (Member), National Institute of Environmental Health Sciences Directorship Search Committee (Member), National Institutes
of Environmental Health Sciences, External Review Committee, Division of Extramural Research and Training (Member), National Institutes of Environmental Health Sciences, National Advisory Environmental Health Science Council (Member), National Institutes of Health, Site Visit Committee (Member), NIH, National Institute of Environmental Health Science Scientific Advisory Council (Member), Nominations Committee, American Society for Biochemistry and Molecular Biology (ASBMB) (Elected Member), U.S. National Committee, International Union of Biochemistry and Molecular Biology (Member), Molecular and Cellular Proteomics (Founding Associate Editor)

State
▷ Advisory Board: Baylor College Of Medicine, External Advisory Board, Specific Progress of Research Excellence in Prostate Cancer (Member)
▷ Committee/Panel: Cullen College of Engineering, University of Houston, Engineering Leadership Board (Member)

• PUBLICATIONS DURING 2006
• AWARDS DURING 2006
  National
  ▶ Best Practices Course, College Board Advanced Placement

• SERVICE DURING 2006
  International
  ▶ Event: Chemed 07 (Exhibits Chair)

  National
  ▶ Event: Biennial Conference on Chemical Education (Exhibits Chair), Research in Chemical Education, 232nd National Meeting of the American Chemical Society (Organizer), Using Particulate Visualization in General Chemistry Classes, 231st National Meeting of the American Chemical Society (Organizer)

  ▶ Editorial/Board: Chemical Education Research Section, Journal of Chemical Education (Feature Editor), Journal for Science Education and Technology (Member), Journal of Chemical Education (Associate Editor), National Science Foundation Review Panelist for the CCLI Proposals (Review: Proposals), School Science and Mathematics Journal (Assistant Advisor)

  ▶ Committee/Panel: ACS General Chemistry Blended Exam Committee (Member), ACS General Chemistry Conceptual Exam Chairperson (Chair), Awards Committee Member, School Science and Mathematics Association (Member), National Science Foundation - Funded Grant (Advisory Committee)

  State
  ▶ Committee/Panel: Region V, Associated Chemistry Teachers of Texas (Alternate Director)

  Department
  ▶ Event: Chemistry 101-102 TA Lab Training (Organizer), New Graduate Student Training (Organizer)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ CHEM 102. — Fundamentals of Chemistry II (total enrollment: 314)
  ▶ CHEM 685. — Directed Studies (total enrollment: 4)

  Summer
  ▶ CHEM 685. — Directed Studies (total enrollment: 1)
  ▶ CHEM 685. — Directed Studies (total enrollment: 1)

  Fall
CHEM 101. — Fundamentals of Chemistry I (total enrollment: 308)
CHEM 116. — Molecular Science for Citizens Laboratory (total enrollment: 21)
CHEM 685. — Directed Studies (total enrollment: 2)

PRESENTATIONS DURING 2006

“Does the Order of Video Demonstrations and Animations Affect Students Particulate Explanations?,” 231st National Meeting of the American Chemical Society, Atlanta, GA, March, 2006. (Contributed)

“Owl Electronic Homework Workshop,” University of North Texas, Denton, TX, March, 2006. (Invited)


“Visualization to Promote Conceptual Change,” National Science Foundation During the Future Directions for Visualization in Science and Education Workshop, Arlington, VA, September, 2006. (Poster Individual)

“Teaching General Chemistry for Student Understanding,” Southwest Regional Meeting of the American Chemical Society, Houston, TX, October, 2006. (Individual)

“Using Visualization Techniques in Chemistry Teaching,” Southwest Regional Meeting of the American Chemical Society, Houston, TX, October, 2006. (Contributed)

“Particulate Mental Models: The Quest for Student Understanding,” Department of Chemistry, Purdue University, West Lafayette, IN, November, 2006. (Invited)

PUBLICATIONS DURING 2006


• SERVICE DURING 2006

University
▷ Service Position: Equal Rights Alliance (Faculty Advisor), Texas A&M University (ALLY)
▷ Committee/Panel: Texas A&M University, Chapter of the American Association of University Professors (Membership Chair)

Department
▷ Committee/Panel: Computer Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ CHEM 631. — Statistical Thermodynamics (total enrollment: 9)
▷ CHEM 681. — Seminar (total enrollment: 16)
▷ CHEM 691. — Research (total enrollment: 1)

Summer
▷ CHEM 323. — Physical Chemistry (total enrollment: 24)
▷ CHEM 691. — Research (total enrollment: 1)

Fall
▷ CHEM 323. — Physical Chemistry (total enrollment: 32)
▷ CHEM 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006


• PUBLICATIONS DURING 2006

SHERRY J. YENNELLO
PROFESSOR (979) 845-7361
CHEM-Physical/Nuclear Chemistry yennello@comp.tamu.edu

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Associate Dean for Diversity, Office of Diversity, [2004]

• SERVICE DURING 2006

  National
  ▷ Committee/Panel: APS Committee on the Status of Women in Physics (Chair), APS Division of Nuclear Physics Education Committee (Member), APS Division of Nuclear Physics LRP Town Meeting "Nuclear Astrophysics/Study of Nuclei" Organizing Committee (Member), APS Division of Nuclear Physics Nominating Committee (Chair), APS Division of Nuclear Physics Program Committee (Member), APS Program Committee (Member), Nuclear Science Advisory Committee: Long Range Plan Writing Group (Member), Nuclear Science Advisory Committee: Rare Ion Beam Task Force (Member), Rare Isotope Accelerator (RIA) Education Working Group (Chair), Women Encouraging the Competitive Advancement in Nuclear Science (Executive Committee)

  University
  ▷ Service Position: Texas A&M University (Mediator)
  ▷ Committee/Panel: Children’s Center Advisory Committee (Co-Chair), Diversity Advisory Committee (Member), Diversity Fellowship Selection Committee (Member), Graduate Appeals Panel (Member), Sigma Xi Executive Committee (Chair), Women’s Faculty Network Steering Committee (Member)

  College
  ▷ Committee/Panel: Diversity Committee (Chair), Executive Committee (Member)

  Department
  ▷ Committee/Panel: Faculty Awards Committee for Teaching/Service (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▷ CHEM 691. — Research (total enrollment: 5)

  Summer
  ▷ CHEM 491. — Research (total enrollment: 8)
  ▷ CHEM 691. — Research (total enrollment: 5)

  Fall
  ▷ CHEM 660. — Nuclear Chemistry (total enrollment: 5)
  ▷ CHEM 691. — Research (total enrollment: 4)

• PRESENTATIONS DURING 2006


- PUBLICATIONS DURING 2006
  
  
  
  
  
  
  
  
  
No report received from faculty member.
6. Research Activity, 2006

This section contains information on all funded research activity for the calendar year 2006. Information was initially reported by faculty and verified whenever possible through the granting agency. Because of calculations and rounding there is a small margin of error.

Information reported by faculty:

▷ Title
▷ Granting Agency
▷ PIs, Co-PIs, and co-workers (internal/external)
▷ Total Funding
▷ Indirect Costs
▷ Start & End Dates

Calendar year calculations:

▷ Total - Indirect = Direct
▷ # Days Total Grant = End Date - Start Date
▷ Daily Grant Award = Total Funding Reported / # Days Total Grant
▷ Grant Award for 2006 = # Days 2006 × Daily Grant Award
6.1 Summary of Research Support, 2006

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<td>Dunbar, K.R.</td>
<td>Design Principles of Nanomagnets Based on Molecules: Investigation of Spin, Orbital, and Molecular Shape Anisotropies</td>
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318 2006 CHEMISTRY ANNUAL REPORT
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<td>Synthetic/Mechanistic Studies of Bioactive Marine Agents</td>
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SEC. 6. RESEARCH ACTIVITY 319
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<td>Enzymatic Detoxification of Organophosphate Nerve Agents</td>
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<td>Mechanism and Control of Urea Biosynthesis</td>
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<td>Sacchettini, J.C.</td>
<td>A Novel Endoribonuclease of the SARS Virus</td>
<td>9/15/2006</td>
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<td>Scott, A.</td>
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<td>Wells, R.D.</td>
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**Subtotal: National Institutes of Health**

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<td>Darenbourg, D.J.</td>
<td>Biodegradable Copolymers Produced from Carbon Dioxide and Epoxides by Well-Defined Metal Catalysts: Mechanistic and Technology Enabling Studies</td>
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<td>The Physical and Chemical Properties of Nanosized Metal Clusters on Oxide Surfaces</td>
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<td>How Do Proteins Fold into Their Native and Functional In Vitro and in the Physiological Milieu of the Living Cell</td>
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• U.S. Civilian Research and Development Foundation

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326 2006 CHEMISTRY ANNUAL REPORT
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<td>United States Air Force</td>
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<td>North, S.W.</td>
<td>Hypersonic Transition and Turbulence with Non-Equilibrium Thermo-Chemistry</td>
<td>5/1/2004</td>
<td>4/30/2007</td>
<td>461,287</td>
<td>81,751</td>
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<td>10,321,389</td>
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**Industrial/Corporate Agencies**

|               | Amersham Biosciences AB                                                |             |             |        |          |          |
| Burgess, K.   | Compound Screening                                                     | 12/18/2001  | 12/17/2007  | 5,142  | 0        | 5,142    |
|               | **Subtotal: Amersham Biosciences AB**                                  |             |             | 5,142  | 0        | 5,142    |
|               | Dow Chemical Co.                                                       |             |             |        |          |          |
|               | **Subtotal: Dow Chemical Co.**                                         |             |             | 46,539 | 0        | 46,539   |
|               | DuPont, Inc.                                                           |             |             |        |          |          |
| Schaak, R.E.  | Young Professor Grant                                                  | 9/1/2006    | 8/31/2009   | 8,288  | 0        | 8,288    |
|               | **Subtotal: DuPont, Inc.**                                             |             |             | 8,288  | 0        | 8,288    |
|               | GlaxoSmithKline                                                        |             |             |        |          |          |
|               | **Subtotal: GlaxoSmithKline**                                          |             |             | 60,247 | 0        | 60,247   |
|               | Lymtech Corp.                                                          |             |             |        |          |          |
|               | **Subtotal: Lymtech Corp.**                                            |             |             | 14,034 | 6,386    | 20,420   |
|               | Sasol North America                                                    |             |             |        |          |          |

SEC. 6. RESEARCH ACTIVITY 327
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<tr>
<td>Gabbai, F.P.</td>
<td>Understanding Alkyl Exchange Processes in Mixtures Containing ATE, a Fluorinated Boron Activator and A Zirconocene Pre-Catalyst</td>
<td>7/1/2002</td>
<td>3/15/2006</td>
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**International Agencies**

- **Bilateral Science Foundation USA-Israel**
  - Goodman, D. Sintering Resistant Catalysts: The Role of Defects on Oxide Surfaces  
    | Start     | End       | Direct | Indirect | Total |
    | 1/1/2003  | 12/31/2006 | 1,496 | 0        | 1,496 |
  - * Subtotal: Bilateral Science Foundation USA-Israel | 1,496 | 0 | 1,496 |

- **Friederich’s Ataxia Research Alliance**
  - Wells, R.D. (REN) DNA Triplexes in the Etiology of Friederich’s Ataxia  
    | Start     | End       | Direct | Indirect | Total |
    | 2/1/2004  | 1/31/2007 | 56,802 | 0        | 56,802 |
  - * Subtotal: Friederich’s Ataxia Research Alliance | 56,802 | 0 | 56,802 |

- * Subtotal: International Agencies | 58,298 | 0 | 58,298 |

**Other Government**

- **Ohio State University**
  - Dunbar, K.R. Design of New Ru(II) Complexes as Potential Photo-Cisplatin Analogs  
    | Start     | End       | Direct | Indirect | Total |
    | 6/1/2005  | 8/31/2008 | 43,655 | 18,231   | 61,885 |
  - * Subtotal: Ohio State University | 43,655 | 18,231 | 61,885 |

- **University of Illinois**
  - Raushel, F.M. Deciphering Enzyme Specificity: Amidhydrolase Superfamily  
    | Start     | End       | Direct | Indirect | Total |
    | 7/1/2005  | 6/30/2006 | 107,719 | 49,012   | 156,732 |
  - * Subtotal: University of Illinois | 107,719 | 49,012 | 156,732 |

- * Subtotal: Other Government | 151,374 | 67,243 | 218,617 |

**Private/Non-Profit Agencies**

- **American Chemical Society**
  - Gabbai, F.P. Ortho-Bis(Methylum)phenylene and Related Dications-Synthesis, Characterization and Anion Complexation  
    | Start     | End       | Direct | Indirect | Total |
    | 9/1/2006  | 8/31/2009 | 8,840 | 0        | 8,840 |

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<table>
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<tr>
<th>Grantee</th>
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<tr>
<td>Gabbai, F.P.</td>
<td>Supramolecular Chemistry of Trimeric Ortho-TetrafluoroPhenylene Mercury with Arenes and Related Other Unsaturated Substrates</td>
<td>9/1/2002</td>
<td>8/31/2006</td>
<td>13,260</td>
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<td>Gao, Y.</td>
<td>Using Chemical Energy at a Single Molecule Level-Chemomechanical Coupling of Molecular Motors</td>
<td>9/1/2005</td>
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<td>17,524</td>
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<td>Cremer, P.S.</td>
<td>Using Temperature Gradients to Study Polymer and Protein Solubility</td>
<td>5/1/2003</td>
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<td>11,993</td>
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**SEC. 6. RESEARCH ACTIVITY 329**
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<tr>
<td>Miller, S.A.</td>
<td>Activation of Carbon Dioxide: Polyester Formation via Coordination Polymerization of Carbon Dioxide and Olefins</td>
<td>5/15/2002</td>
<td>5/14/2007</td>
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<td>Watanabe, C.M.</td>
<td>Research Corporation Innovation Award</td>
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**Subtotal: Research Corporation**

12,831

**Searle Scholars Program**

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<td>Gao, Y.</td>
<td>Searle Scholar Program</td>
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<td>37,138</td>
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**Subtotal: Searle Scholars Program**

37,138

**The Robert A. Welch Foundation**

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<tr>
<td>Batteas, J.D.</td>
<td>Probing Molecular Interactions and Defect Nucleation in Nanoscopic Contacts</td>
<td>6/1/2006</td>
<td>5/31/2009</td>
<td>29,178</td>
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<td>Burgess, K.</td>
<td>Accelerated Catalyst Discovery and Optimization</td>
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<td>5/31/2006</td>
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<td>Crooks, R.M.</td>
<td>A Fundamental Study of Size-Selective CatalysisF</td>
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<td>Darenbourg, D.J.</td>
<td>Mixed Metal Cyanide Derivatives and Their Role in Catalysis</td>
<td>6/1/2003</td>
<td>5/31/2007</td>
<td>21,918</td>
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<td>Darenbourg, D.J.</td>
<td>(REN) Mixed Metal Cyanide Derivatives and Their Role in Catalysis</td>
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<td>Fitzpatrick, P.</td>
<td>(REN) Mechanisms of Oxidative Enzymes</td>
<td>6/1/2005</td>
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<tr>
<td>Gabbai, F.P.</td>
<td>1, 8-Bis(methylium)naphthalenediyl Dications and Related Borane/Methylium Species</td>
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<td>Goodman, D.</td>
<td>Chemical, Electronic, and Structural Properties of Supported Metal Clusters</td>
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<td>Goodman, D.</td>
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<td>Hall, M.B.</td>
<td>(REN) Molecular Orbital Calculations on Chemical Reactions of Transition Metals</td>
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<td>Lindahl, P.A.</td>
<td>Biochemistry and Biophysics of YFH1p from Saccharomyces Cervisiae</td>
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<td>5/31/2007</td>
<td>50,046</td>
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<td>Lucchese, R.R.</td>
<td>Nuclear Motion in the Photoionization of Polyatomic Molecules</td>
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<td>Miller, S.A.</td>
<td>Controlling Polyolefin Architectures with Sterically Expanded Transition Metal Polymerization Catalysts</td>
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<td>Based on the 2-Oxetanone (beta-Lactone) Framework</td>
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<td>Semiconductor Nanocrystals</td>
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<td>Watanabe, C.M.</td>
<td>Investigation of the Biological Roles of 1,2,4-Trisubstituted and</td>
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<td>Self-Consistent Field and Multiconfigurational Electron Propagator</td>
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<td>Methods with Complex Scaled Hamiltonians</td>
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<td>Yennello, S.J. (REN)</td>
<td>The Equation of State for a Two-Component Nuclear System</td>
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**STATE AGENCIES**

- **Advanced Research Program/Advanced Technology Program**

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<tr>
<td>Gabbai, F.P.</td>
<td>Heavy Atom-Induced Phosphorescence of Organic Materials for OLED Applications</td>
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<td>12/31/2006</td>
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- **Texas A&M University**

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<tr>
<td>Keeney-Kennicutt, W.</td>
<td>Quality Enhancement Plan Grant: Enhancing the Teaching Assistant/Undergraduate Student Experience in the First Year Chemistry Program, (with: W. Keeney-Kennicutt, M. Peck, V. Williamson)</td>
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<td>Williamson, V.M.</td>
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- **Texas Air Research Center**

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<tr>
<td>North, S.W.</td>
<td>Measurement of $NO_3$ and $N_2O_5$ Using Cavity Ring Down During Texaqs II</td>
<td>1/1/2006</td>
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- **Texas Higher Education Coordinating Board**

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<tr>
<td>Batteas, J.D.</td>
<td>Scanned Probe Lithography Approaches for the Fabrication of Plasmon Enhanced Quantum Optics</td>
<td>5/1/2006</td>
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<td>33,425</td>
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<td>Schaak, R.E.</td>
<td>Chemical Synthesis of Nanostructured Shape Memory Alloys</td>
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* Subtotal: State Agencies

**SEC. 6. RESEARCH ACTIVITY**

333
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| **Bergbreiter, D.E.**                |                                                                       |             |             |        |          |        |
| National Science Foundation          | Designing New Soluble Polymers to Facilitate Separations and Reactions | 1/1/2005    | 12/31/2008  | 34,321 | 9,929    | 44,250 |
| National Science Foundation          | New Syntheses of Hyperbranched Ultrathin Grafts                       | 1/1/2004    | 12/31/2006  | 87,013 | 27,672   | 114,685|
| National Science Foundation          | (REN) REU Site-Research Experiences for Undergraduates in Chemistry at Texas A&M University, (with: D. Bergbreiter, G. Sulikowski) | 4/1/2003    | 3/31/2006   | 17,595 | 2,438    | 20,034 |
| **Subtotal Bergbreiter, D.E.**       |                                                                       |             |             |        |          | 163,271|

| **Bevan, J.W.**                     |                                                                       |             |             |        |          |        |
| National Institutes of Health        | Submillimeter Technology for Molecular Biomarkers                    | 1/1/2005    | 3/31/2006   | 8,709  | 3,963    | 12,672 |

SEC. 6. RESEARCH ACTIVITY

335
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**Burgess, K.**  

| National Institutes of Health | Fluorescent Probes for Multiplexed Intracellular Imaging      | 8/1/2004    | 7/31/2008   | 146,135 | 49,263   | 195,398  |
| National Science Foundation | Asymmetric Hydrogenations of Unfunctionalized Alkenes Mediated by Ir-N-Heterocyclic Carbene Complexes | 3/1/2005    | 2/28/2009   | 78,338  | 31,662   | 110,000  |
| Amersham Biosciences AB | Compound Screening                                             | 12/18/2001  | 12/17/2007  | 5,142   | 0        | 5,142    |
| The Robert A. Welch Foundation | Accelerated Catalyst Discovery and Optimization               | 6/1/2003    | 5/31/2006   | 20,548  | 0        | 20,548   |
| **Subtotal Burgess, K.**                                                                                         |             |             | **1,809,451** | **255,884** | **2,065,335** |

**Clearfield, A.**  


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| * Subtotal Cotton, F.          |                                                                       |             |             | 32,204   | 8,664    | 40,868    |


SEC 6. RESEARCH ACTIVITY 337
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<td>6/30/2008</td>
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  $458,752$  $147,135$  $605,888$

- **Crooks, R.N.**

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- **Subtotal Crooks, R.N.**

  $182,743$  $60,221$  $242,964$

- **Darensbourg, D.J.**

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338  2006 CHEMISTRY ANNUAL REPORT
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* Fackler, J.P.

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<td>Supramolecular Chemistry of Trimeric Ortho-TetrafluoroPhenylene Mercury with Arenes and Related Other Unsaturated Substrates</td>
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| • Hughes, T.A.                  |                                                                       |            |            |        |          |        |

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- **North, S.V.**

| Texas Air Research Center | Measurement of $NO_3$ and $N_2O_5$ Using Cavity Ring Down During Texaqs II | 1/1/2006 | 12/31/2006 | 36,937  | 0        | 36,937    |

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  | 559,376 | 81,751 | 641,128 |

- **Rauschel, F.M.**

<p>| National Institutes of Health | Deciphering Enzyme Specificity | 6/1/2004 | 5/30/2009 | 222,122 | 98,054   | 320,175   |
| National Institutes of Health | Enzymatic Detoxification of Organophosphate Nerve Agents | 7/1/2003 | 6/30/2007 | 200,000 | 67,000   | 267,000   |
| National Institutes of Health | Graduate Training in Molecular Biophysics, (with: P. Cremer, V. DeRose, P. Fitzpatrick, M. Hall, A. Holzenburg, A. Johnson, F. Rauschel, D. Russell) | 7/1/2003 | 6/30/2008 | 9,068   | 0        | 9,068     |
| National Institutes of Health | Mechanism and Control of Urea Biosynthesis | 9/1/2001 | 8/31/2006 | 109,530 | 49,859   | 159,388   |</p>
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<tr>
<td>National Science</td>
<td>Track I, GK-12: Building Understanding Through Research Partnerships and IT, (with: J. Schielack, E. Simanek)</td>
<td>1/1/2006</td>
<td>12/31/2008</td>
<td>126,646</td>
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<td>126,646</td>
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<tr>
<td>The Robert A. Welch Foundation</td>
<td>(REN) Surface Coordination Chemistry of Noble-Metal Electrodes</td>
<td>6/1/2004</td>
<td>5/31/2007</td>
<td>50,046</td>
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<td>Watanabe, C.H.</td>
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**Subtotal Simanek, E.E.** 328,794 60,090 388,884

**Subtotal Singleton, D.A.** 190,966 61,308 252,264

**Subtotal Son, D.** 29,178 0 29,178

**Subtotal Soriaga, M.P.** 116,047 0 116,047

SEC. 6. RESEARCH ACTIVITY 351
<table>
<thead>
<tr>
<th>Granting Agency</th>
<th>Title</th>
<th>Start</th>
<th>End</th>
<th>Direct</th>
<th>Indirect</th>
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<tr>
<td>Research Corporation</td>
<td>Research Corporation Innovation Award</td>
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<td>12/31/2008</td>
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<td>The Robert A. Welch Foundation</td>
<td>Investigation of the Biological Roles of 1,2,4-Trisubstituted and 1,4-Disubstituted Cyclohexadienes</td>
<td>9/1/2004</td>
<td>8/31/2007</td>
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<td>National Institutes of Health</td>
<td>Mechanisms of Genetic Instabilities of Triplet Repeats</td>
<td>6/1/2001</td>
<td>5/31/2006</td>
<td>107,726</td>
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<td>Friederich's Ataxia Research</td>
<td>(REN) DNA Triplexes in the Etiology of Friederich's Ataxia</td>
<td>2/1/2004</td>
<td>1/31/2007</td>
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<tr>
<td>The Robert A. Welch Foundation</td>
<td>Kinetics and Thermodynamics of GAA·TCC Repeat Sequences</td>
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<td>5/31/2006</td>
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<tr>
<td>National Science Foundation</td>
<td>Student View of Visualizations: What do they See? (Molecular Visualization and Science Education: Research)</td>
<td>9/1/2005</td>
<td>8/31/2006</td>
<td>665</td>
<td>0</td>
<td>665</td>
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<tr>
<td>Texas A&amp;M University</td>
<td>Quality Enhancement Plan Grant: Enhancing the Teaching Assistant/Undergraduate Student Experience in the First Year Chemistry Program, (with: W. Keeney-Kennicutt, M. Peck, V. Williamson)</td>
<td>1/1/2005</td>
<td>12/31/2007</td>
<td>392</td>
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<td><em>Subtotal Williamson, V.M.</em></td>
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<td>Yeager, D.L.</td>
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352 2006 CHEMISTRY ANNUAL REPORT
<table>
<thead>
<tr>
<th>Granting Agency</th>
<th>Title</th>
<th>Start</th>
<th>End</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Robert A. Welch Foundation</td>
<td>(REN) Multiconfigurational-Based Green’s Function Approaches for Directly Calculating Inner Valence Principal and Valence Shake-up Ionization Potentials</td>
<td>6/1/2003</td>
<td>5/31/2006</td>
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<td><strong>Subtotal Yeager, B.L.</strong></td>
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<td>60,833</td>
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| National Science Foundation     | REU Site: Nuclear Science at the Texas A&M Cyclotron Institute      | 4/1/2004 | 3/31/2007 | 78,314  | 8,758    | 87,072 |
| The Robert A. Welch Foundation  | (REN) The Equation of State for a Two-Component Nuclear System      | 6/1/2005 | 5/31/2008 | 50,000  | 0        | 50,000 |
| **Subtotal Yennello, S.J.**     |                                                                      |          |          |        |          | 520,922 |

*** Total: All Faculty          |                                                                      |          |          | 13,042,264 | 2,496,535 | 15,538,799 |
## Contents

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   4.1 Graduate Degrees Awarded ....................................... 368  
   4.2 Undergraduate Degrees Awarded ............................... 371  
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   6.1 Professional Activities ........................................... 406  
7. Research Activity ....................................................... 529  
   7.1 By Granting Agency ............................................... 530  
   7.2 By Faculty Member ............................................... 541
1. **Foreword from the Department Head**

The 2006 calendar year was full of many fine accomplishments for the Department of Mathematics. Four new tenure-track faculty started their appointments during the Fall of 2006, including Guido Kanschat, Colleen Robles, Eric Rowell, and Yaroslav Vorobets at the assistant professor level. The faculty as a whole received $3.6 million in federal, state, industrial and private grants during 2006. Nearly two-thirds of our tenured and tenure-track faculty are receiving external funding which nearly doubles the national average. Our faculty received many distinguished awards, (some very recently) including the Banach Medal for Bill Johnson, the Wilkinson Prize in computing for Wolfgang Bangerth and Guido Kanschat, the Mathematics Association of America Ford Prize for Harold Boas, and an AFS College level teaching award to Ms. Amy Austin. Our department graduated 13 Ph.D. students, 31 masters students and 68 bachelors degree students in 2006. Many of these masters recipients received their degrees through our popular online (distance) masters degree program.

Our National Science Foundation funded Research Experiences for Undergraduates and Undergraduate Mathematics Biology grants have funded over 25 undergraduates in research projects mentored by our faculty. Many of these students have given presentations at professional conferences and workshops around the country. Overall, our department taught nearly 75,000 credit hours which is the largest of any department on campus. Our excellent staff help manage this enormous workload for the benefit of our students and faculty.

I am sincerely proud of the many fine accomplishments of our faculty, staff and students.
## 2. Statistical Abstract

### I. Personnel

<table>
<thead>
<tr>
<th>Category</th>
<th>2005</th>
<th>2006</th>
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</thead>
<tbody>
<tr>
<td><strong>a. Tenured and Tenure-Track Faculty</strong></td>
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<td></td>
</tr>
<tr>
<td>Professor</td>
<td>41</td>
<td>43</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>13</td>
<td>14</td>
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<tr>
<td>Associate Professor</td>
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<td>19</td>
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<tr>
<td>Distinguished Professor</td>
<td>5</td>
<td>5</td>
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<tr>
<td><strong>b. Non-Tenure-Track Faculty</strong></td>
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<tr>
<td>Visiting Professor</td>
<td>7</td>
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<tr>
<td>Visiting Assistant Professor</td>
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<td>Visiting Associate Professor</td>
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<td>Lecturer</td>
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<td>Senior Lecturer</td>
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<td>14</td>
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<tr>
<td><strong>c. Postdoctoral Fellows</strong></td>
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<tr>
<td><strong>d. Graduate Students</strong></td>
<td>132</td>
<td>121</td>
</tr>
<tr>
<td><strong>e. Undergraduate Majors</strong></td>
<td>296</td>
<td>261</td>
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<td><strong>f. Support Staff</strong></td>
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### II. Instructional Activities

<table>
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<th>Category</th>
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<td><strong>a. Graduate Semester Credit Hours</strong></td>
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<td><strong>b. Undergraduate Semester Credit Hours</strong></td>
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<td><strong>c. PhD Degrees</strong></td>
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<td><strong>d. Masters Degrees</strong></td>
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<tr>
<td><strong>e. Undergraduate Degrees</strong></td>
<td>67</td>
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### III. Research Activities

<table>
<thead>
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<th>Category</th>
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<th>2006</th>
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</thead>
<tbody>
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<td><strong>a. Research Publications</strong></td>
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<td>139</td>
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<tr>
<td><strong>b. Research Presentations</strong></td>
<td>341</td>
<td>418</td>
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<tr>
<td><strong>c. Federal</strong></td>
<td>3,390,422</td>
<td>3,158,311</td>
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<td><strong>d. State</strong></td>
<td>214,259</td>
<td>249,773</td>
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<td><strong>e. University</strong></td>
<td>69,991</td>
<td>75,103</td>
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<td><strong>f. Private/Non-Profit</strong></td>
<td>11,552</td>
<td>1,068</td>
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<tr>
<td><strong>g. Industrial/Corporate</strong></td>
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<tr>
<td><strong>h. International</strong></td>
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<td>25,270</td>
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<tr>
<td><strong>i. Other Govt</strong></td>
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<tr>
<td><strong>Total</strong></td>
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<td>3,545,199</td>
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</table>
3. Honors & Awards, 2006

By Faculty

▷ This section contains all honors and awards, as reported by individual faculty members, during the calendar year 2006.

By Students

▷ This section contains all honors and awards, as reported by the department, during the calendar year 2006.
### 3.1 Honors & Awards Received by Faculty, 2006

<table>
<thead>
<tr>
<th>Name</th>
<th>Award</th>
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</thead>
<tbody>
<tr>
<td>M. Arnold</td>
<td>Award of Merit for Teaching, Texas A&amp;M University Agriculture Honor Society</td>
</tr>
<tr>
<td>A. Austin</td>
<td>Distinguished Achievement Award - Teaching, Association of Former Students</td>
</tr>
<tr>
<td>R. Ewing</td>
<td>Magnus Distinguished Lecturer, Colorado State University</td>
</tr>
<tr>
<td></td>
<td>Richard Ewing Award for Excellence in Science, Technology, and Economic Development, Texas A&amp;M University</td>
</tr>
<tr>
<td>P. Howard</td>
<td>Outstanding Teaching Award, Texas A&amp;M University Department of Mathematics</td>
</tr>
<tr>
<td>D. Larson</td>
<td>Distinguished Achievement Award - Teaching, Association of Former Students</td>
</tr>
<tr>
<td>G. Petrova</td>
<td>Outstanding Teaching Award, Texas A&amp;M University</td>
</tr>
<tr>
<td>V. Schielack</td>
<td>National Science Bowl Service Award, Department of Energy</td>
</tr>
</tbody>
</table>
3.2 Honors & Awards Received by Students, 2006

Undergraduate

▷ Academic Achievement Scholarship
  Lisa L. Can
  Greg Johnson
  Austin Prochaska

▷ Best in Class Award for Math 409
  John Fulk
  Ben Holladay
  Bret Lockhart
  Amanda Simon

▷ Best in Class Award for Math 409H
  Katie Schlecht

▷ Best in Class Award for Math 410
  Stacy Lodden

▷ Best in Class Award for Math 411
  Not awarded this year.

▷ Best in Class Award for Math 417
  Not awarded this year.

▷ Best in Class Award for Math 425
  Not awarded this year.

▷ Best in Class Award for Math 446/447
  Not awarded this year.

▷ Best in Class Award for Math 446/447H
  Andrew Harrell
  Andrew Matteson

▷ Best in Class Award for Math 467
  Warren Reichel
  Janna Szydloski

▷ Best in Class Award for Math 467H
  Hannah Saugier

▷ Best in Class for Math 415/416
  Ryan Newman

▷ Continuing Academic Excellence Award
  Not awarded this year.

▷ Dr. Walter E. Koss, Roger McGee
  Jacqueline Haines
Andrew Matteson  
John McNear  
Michelle S. Moyer

Dr. Walter E. Koss, Roger McGee and John Hillman Endowed Scholarships in Mathematics

Benjamin Holladay  
Cara Montgomery  
Mark Zobeck

Elizabeth W. Lepley Scholarship in Science

Suzy Hicks  
Mark Houston  
Michelle S. Moyer  
Danielle Schroeder  
Kenneth Taliaferro

Freshman Calclab Scholarship

Allicia Israel

Joseph H. Emmert, Jr. ’69 Endowed Scholarship in Science

Lisa L. Cangelose

Mary & Robert N. Walker Endowed Scholarship

Karen Cockrum  
Jessica Hayworth  
Bret Lockhart  
Cara Montgomery  
Patience Sanders  
Melissa Walton

Math Actuarial Scholarship

Nicholas Wayne Barry  
Thomas Read Grady  
Ashley Lynn Griffith  
Christen Marie MacDermaid  
Sarah Ashley Schott  
Karla Ann Schram  
Angela Michelle Stewart

Math Actuarial Scholarshipement Scholarship

Angela Michelle Stewart

Melvin Hamilton ’71 Memorial Endowed Scholarship

John Fulk

New Phi Beta Kappa Member

Ryan Patrick Mulligan  
Janna Evalyn Szydloski

New Pi Mu Epsilon Member
Christian Allison
Amy Doslich
Meghan Dragisic
Lacy Erwin
John Fulk
Jillian Harvey
Jarrod Hutson
Kacie Jeppesen
Bret Lockhart
Ashley Pagnotta
Jason Pfister
Hannah Saugier
Katie Schlecht
Anna Seybert
Melissa Walton
Justin Wilson
Tracy Yee
Katie Zimmerman

▷ Walter E. Koss/E.C. Klipple Endowed Scholarship in Mathematics
Christian Allison
Mark Bayless
Shannon Cavanaugh
Matthew Davis
Greg Johnson
Brain Nazier
Sean Sedlock
Katie Zimmerman

▷ Watson Wyatt Actuarial Scholarship
Xue Chen
Wes McNear
Doug Nistetter
Sarah Schott
Allison Sloan
4. Students, 2006

This section contains all degrees awarded, as reported by the department, during the calendar year 2006.
4.1 Graduate Degrees Awarded, 2006

Fall

▷ M.S.

Larry Noble Holifield
Advisor(s): J. Zinn
Rufino Abdon Marcelino
Advisor(s): J. Walton
Amber Dawn Worley
Advisor(s): G. Allen

▷ Ph.D.

Mariana Pereira Lopez
On Simple Modules For Certain Pointed Hopf Algebras
Advisor(s): S. Witherspoon

Spring

▷ M.S.

Benjamin Aurispa
Advisor(s): S. Geller
Daniel John Bishop
Advisor(s): N. Sivakumar
Rebecca Anne Black
Advisor(s): G. Allen
Edmond Miles Brophy
Advisor(s): R. DeBlassie
Amy Lynn Collins
Advisor(s): S. Geller
Christopher Joel Cowan
Advisor(s): R. Douglas
Thomas Pinkney Davis
Advisor(s): P. Yasskin
Rachel Amanda Derber
Advisor(s): R. DeBlassie
Aaron Michael Dutle
Advisor(s): P. Yasskin
Cameron Wallace Macky
Advisor(s): G. Allen
Jared Neal Teslow
Advisor(s): T. Vogel
Ginger Wickham Walker
Dinara Temurovna Yunusova
Advisor(s): G. Allen

Dylan Matthew Copeland
Negative-Norm Least-Squares Methods For Axisymmetric Maxwell Equations
Advisor(s): J. Pasciak

Edward Jules Fuselier
Refined Error Estimates For Matrix-Valued Radial Basis Functions
Advisor(s): F. Narcowich

Taejong Kim
Mesh Independent Convergence Of Modified Inexact Newton Methods For Second Order Nonlinear Problems
Advisor(s): J. Pasciak

Terry Lynn McDonald
Piecewise Polynomial Functions On A Planar Region: Boundary Constraints And Polyhedral Subdivisions
Advisor(s): H. Schenck

Sonmez Sahutoglu
Compactness Of The Dbar-Neumann Problem And Stein Neighborhood Bases
Advisor(s): E. Straube

Summer

Crystal Anne Bartels
Advisor(s): G. Allen

De-Vonna Lee Clark
Advisor(s): G. Allen

Cary Bliss Crawford
Advisor(s): G. Allen

Candace Ann Dibiano
Advisor(s): R. DeBlassie

Thomas Ashley Green
Advisor(s): G. Allen

Stephanie Rae Green
Advisor(s): G. Allen

Marta Anna Kobiela
An Eighth Grade Curriculum Incorporating Logical Thinking And Active Learning
Advisor(s): P. Yasskin

Molly Johanne Mason
Advisor(s): G. Allen

Elicia Rae Moody
Advisor(s): J. Pitts

SEC. 4.1 GRADUATE DEGREES 369
Karen Mayumi Nabb  Advisor(s): P. Howard
Jennifer Lynn Owens  Advisor(s): J. Walton
Alma Fabiola Rangel Chavez  Advisor(s): R. DeBlassie
William James Skerbitz  Advisor(s): S. Geller
Maria Valentina Vega Veglio  Advisor(s): M. Papanikolas
Jennifer Leigh Wellman  Advisor(s): G. Allen

Gaik Ambartsoumian  Advisor(s): P. Kuchment
Spherical Radon Transform And Mathematical Problems Of Thermoacoustic Tomography

Marvin Glen Decker  Advisor(s): P. Lima-Filho
Loop Spaces In Motivic Homotopy Theory

Tao Mei  Advisor(s): G. Pisier
Operator Valued Hardy Space And Related Subjects

Samangi Munasinghe  Advisor(s): E. Straube
Geometric Sufficient Conditions in $C^N$ Which Imply Compactedness Of The d-bar Neumann Operator

Beng Seong Ong  Advisor(s): P. Kuchment
Spectral Problems Of Optical Waveguides And Quantum Graphs

Marco Antonio Roque Sol  Advisor(s): G. Chen
Sensitivity And Fourier Spectrum Of Topological Dynamical Systems and Chaotic Interval Maps

Zhigang Zhang  Advisor(s): G. Chen
Modeling, Analysis And Control Of Quantum Electronic Devices
### 4.2 Undergraduate Degrees Awarded, 2006

#### Fall

| B.A. | Cheri Michelle Bullock  
|      | Ashley Jenae Ham  
|      | Kimberly Lynn Moen  
|      | Ryan Patrick Mulligan  
|      | Scott Wade Patrick  
|      | Anna Elizabeth Sperry  
|      | Marissa Anne Ybarra  
|      | Erica Michelle Zrubek |
| B.S. | William Anthony Barron  
|      | David Dakota Blair  
|      | Joey Lee Bruns  
|      | Jacqueline Teresa Haines  
|      | Ashley Nicole Jackson  
|      | John Wesley McNear  
|      | Douglas Harrison Nistetter  
|      | Karla Ann Schram  
|      | Janna Evalyn Szydloski  
|      | Charlotte Anne Terrel  
|      | Joseph Paul Valdez  
|      | Jennifer Lynn Williams  
|      | Christopher Matthew Wooten  
|      | Brian Michael Worthy |

#### Spring

| B.A. | Phillip Glynn Adams  
|      | Albert Nathaniel Brown  
|      | Whitney Cheyanne Brown  
|      | Kimberly Joy Condra  
|      | Jennifer Marie Contreras  
|      | Kelly Marie Haisten  
|      | Maria Eugenia Hernandez  
|      | Rodney Kent Horn  
|      | Britt Alix Mangrum  
|      | Alexis Nicole Ariel Mechura  
|      | Meredith Leigh Neie  
|      | Stephanie Gail Nite  
|      | Amanda Lynn Raiborn  
|      | Michelle Rene Reeder  
|      | Rebekah Lynn Story  
|      | Kara Elizabeth Stucky  
|      | Amber Nicole Threlkeld  
|      | Kimberly Ann Willis |
B.S.
Nicholas Wayne Barry
Walker Nolan Carlisle
John Thatcher Cook
Randall Edward Gil
Jonathan Edward Glass
Jessica Lee Koehn
Victoria Lynn Malloy
Ryan Paul Newman
Andrew Joseph Persyn
Philip Neil Riley
Rachel Erin Saul
Sarah Ashley Schott
Chapman Douglas Shoop
Angela Michelle Stewart
Shannon Lee Strine
Jarrod Maurice Thompson
Quynh-Anh Thi Tran
Tera Lynne Utley
Kyle Lee Vigil
Zorawar Wadiasingh
Amy Elizabeth Williams

Summer
B.A.
Jennifer Annette Goldsmith
William Douglas O’Donnell
Rosalva Ramos

B.S.
Terri Linn Foster
Erik Leonel Gomez
Katie Lynn Humphrey
Jacob Barr Morath
<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
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<tr>
<td>5/20/2006</td>
<td>Laura Matusevich</td>
<td>Texas A&amp;M University</td>
<td>Polytopes, Triangulations, Toric Varieties and Discriminants</td>
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<tr>
<td>2/3/2006</td>
<td>Swapneel Mahajan</td>
<td>Texas A&amp;M University</td>
<td>Quantum Groups and Differential Forms</td>
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<td>2/17/2006</td>
<td>Juan Migliore</td>
<td>Notre Dame</td>
<td>The Weak Lefschetz Property and it’s Chemistry</td>
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<tr>
<td>2/17/2006</td>
<td>Uwe Nagel</td>
<td>University of Kentucky</td>
<td>Ferrers Graphs and Related Ideals</td>
</tr>
<tr>
<td>2/24/2006</td>
<td>Sue Geller</td>
<td>Texas A&amp;M University</td>
<td>Hochschild Homology</td>
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<tr>
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## Free Probability

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_Institut des Hautes Etudes Scientifique, France_  
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_Kyiv State University_  
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Roger Smith
Texas A&M University
Cones Arising From C*-Subalgebras and Complete Positivity
<table>
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<tr>
<th>Date</th>
<th>Name</th>
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<tr>
<td>2/3/2006</td>
<td>Andrew Comech</td>
<td>Texas A&amp;M University</td>
<td>On a Global Attractor for the Klein-Gordon Equation with Nonlinearity Supported at a Point</td>
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<td>2/10/2006</td>
<td>Peter Howard</td>
<td>Texas A&amp;M University</td>
<td>Asymptotic Behavior Near Transition Fronts for Equations of Cahn–Hilliard Type</td>
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<td>2/16/2006</td>
<td>Ruth Gornet</td>
<td>University of Texas, Arlington</td>
<td>Laplace and Length Spectra and the Wave Invariants on Riemannian Two-Step Nilmanifolds</td>
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<td>2/24/2006</td>
<td>Dmitry Pelinovsky</td>
<td>McMaster University</td>
<td>Modeling of Wave Resonances in Low-contrast Photonic Crystals</td>
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<tr>
<td>3/3/2006</td>
<td>Kamil Serkan Gunturk</td>
<td>Texas A&amp;M University</td>
<td>Covariant Weyl Quantization, Symbolic Calculus, and the Product Formula</td>
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<td>4/7/2006</td>
<td>Alex Sprintson</td>
<td>Texas A&amp;M University</td>
<td>A Tutorial on Network Coding</td>
</tr>
<tr>
<td>4/14/2006</td>
<td>Yalchin Efendiev</td>
<td>Texas A&amp;M University</td>
<td>Numerical Homogenization of Nonlinear Partial Differential Equations and Applications</td>
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<tr>
<td>4/19/2006</td>
<td>Mark Agranovsky</td>
<td>Bar-Ilan University</td>
<td>CR-foliations and Morera Type Theorems for Manifolds with Attached Analytic Discs</td>
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<td>4/28/2006</td>
<td>Olaf Post</td>
<td>University of Kentucky</td>
<td>Smooth Approximations of Quantum Graphs</td>
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<td>5/12/2006</td>
<td>Evgenii Semenov</td>
<td>Voronezh State University</td>
<td>Banach Limits</td>
</tr>
<tr>
<td>9/1/2006</td>
<td>Denis Gaydashev</td>
<td>University of Toronto</td>
<td>Renormalization and Universality for Siegel Disks</td>
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<td>9/8/2006</td>
<td>Greg Berkolaiko</td>
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Texas A&M University
A Lower Bound for Nodal Count on Discrete and Metric Graphs
9/15/2006 Melanie Pivarski
Texas A&M University
Heat Kernels on Euclidean Complexes

9/22/2006 Peter Kuchment
Texas A&M University
Spherical Mean Transform: New Results About an old Operator

10/6/2006 Brian Winn
Texas A&M University
Spectral Edges for Periodic Operators - Some Quantum Graph Examples

10/13/2006 Zoran Sunik
Texas A&M University
Schreier Spectra and Self-similar Groups

10/27/2006 Melaine Becker
Texas A&M University
Anomaly Cancellation and Smooth Non-Kahler Solutions in Heterotic String Theory

11/3/2006 Vladimir Peller
Michigan State University
Multiple Operator Integrals and Higher Operator Derivatives

11/10/2006 Katrin Becker
Texas A&M University
Moduli Stabilization in Non-Geometric Backgrounds

11/17/2006 Ed Fry
Texas A&M University
Integrating Cavities and the Average Distance Traveled Between Intersections with the Wall of an Arbitrarily Shaped Cavity

12/1/2006 Boris Vainberg
University North Carolina
Scattering Solutions in a Network of Thin Fibers: Small Diameter Asymptotics
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<th>Topic</th>
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<tr>
<td>1/25/2006</td>
<td>Lenny Fukshansky</td>
<td>Texas A&amp;M University</td>
<td>Effective Theorems for Quadratic Spaces Over $\overline{\mathbb{Q}}$</td>
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<td>2/1/2006</td>
<td>Bogdan Petrenko</td>
<td>Texas A&amp;M University</td>
<td>Orbits of Normal Basis Generators I</td>
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<tr>
<td>2/8/2006</td>
<td>Bogdan Petrenko</td>
<td>Texas A&amp;M University</td>
<td>Orbits of Normal Basis Generators II</td>
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<td>3/1/2006</td>
<td>Matt Papanikolas</td>
<td>Texas A&amp;M University</td>
<td>Hypergeometric Functions Over Finite Fields</td>
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<td>3/8/2006</td>
<td>Matt Papanikolas</td>
<td>Texas A&amp;M University</td>
<td>Hypergeometric Functions Over Finite Fields</td>
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<tr>
<td>3/22/2006</td>
<td>Chris Hall</td>
<td>University of Texas</td>
<td>Finite Orthogonal Groups and Twists of Elliptic Curves</td>
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<td>4/12/2006</td>
<td>Michael Joyce</td>
<td>Tulane University</td>
<td>Rational Points on del Pezzo Surfaces</td>
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<tr>
<td>4/17/2006</td>
<td>Francisco Portillo Bobadilla</td>
<td>Universidad Nacional Autnoma de Mxico</td>
<td>Computations on the Mazur-Tate Conjecture</td>
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<tr>
<td>4/26/2006</td>
<td>Chris Rasmussen</td>
<td>Rice University</td>
<td>A Finiteness Conjecture for Abelian Varieties Over Number Fields</td>
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<tr>
<td>9/6/2006</td>
<td>Doug Hensley</td>
<td>Texas A&amp;M University</td>
<td>How Many Steps are Needed to Execute the Euclidean Algorithm</td>
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<tr>
<td>9/13/2006</td>
<td>Chieh-Yu Chang</td>
<td>Texas A&amp;M University</td>
<td>Determination of Algebraic Relations Among Special Zeta Values in Positive Characteristic</td>
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<td>9/20/2006</td>
<td>Bogdan Petrenko</td>
<td>Texas A&amp;M University</td>
<td>The Three-point Theorem of Belyi</td>
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<tr>
<td>9/27/2006</td>
<td>Lenny Fukshansky</td>
<td>Texas A&amp;M University</td>
<td>On the Distribution of Integral Well-rounded Lattices in Dimension two</td>
</tr>
</tbody>
</table>
10/4/2006  Alan Haynes  
*University of Texas, Austin*  
Martingales and Continued Fractions

10/9/2006  Ahmad El-Guindy  
*Texas A&M University*  
Magma Workshop, Part 1

10/11/2006  Maurice Rojas  
*Texas A&M University*  
New Complexity Thresholds for Sparse Polynomials in one Variable

10/16/2006  Ahmad El-Guindy  
*Texas A&M University*  
Magma Workshop, Part 2

10/18/2006  Ahmad El-Guindy  
*Texas A&M University*  
Linear Relations and Congruences for the Coefficients of Cusp Forms

10/25/2006  Ahmad El-Guindy  
*Texas A&M University*  
Weierstrass Polynomials on $X_0(p)$

11/1/2006  Jeff Vaaler  
*University of Texas, Austin*  
A Survey of Work on the Lehmer Conjecture

11/8/2006  Lenny Fukshansky  
*Texas A&M University*  
Lehmer’s Conjecture, Salem Numbers, and Growth of Groups

11/15/2006  Yaacov Kopeliovich  
*University of California, Irvine*  
Theta Function Identities at Periods of Covers of Order 3 and Representation Theory of Symmetric Groups

11/29/2006  Matt Papanikolas  
*Texas A&M University*  
Transcendence Over Function Fields and Difference Galois Groups

12/6/2006  Eduardo Duenex  
*University of Texas, San Antonio*  
Convolution of Families of GL(2) L-functions
Numerical Analysis

1/16/2006  Tom Russell  
National Science Foundation  
Adjoint Methods are Particle Methods: Implications for Eulerian-Lagrangian Modeling of Multiphase Multicomponent Transport

1/18/2006  Alexandre Ern  
Cermics, Ecole Nationale des Ponts et Chaussees  
Approximation of Friedrichs’ Systems by Continuous and Discontinuous Finite Elements

1/30/2006  Alan Demlow  
University of Freiburg  
Adaptive Finite Element Methods for Controlling Pointwise Errors

2/1/2006  Joe Ward  
Texas A&M University  
Radial Basis Functions: An Introduction and Potential Applications to P.D.E.s

2/8/2006  Roland Glowinski  
University of Houston  
On the Numerical Solution of a Two-dimensional Pucci’s Equation with Dirichlet Boundary Conditions: A Least Square Approach

2/22/2006  Siu Chin  
Texas A&M University  
Forward Symplectic Integrators For Solving Physical Dynamic Problems

3/22/2006  Irene Gamba  
University of Texas  
Quantum Trajectory Models and the Boundary Value Problem

3/29/2006  Dietrich Braess  
Ruhr University Bochum  
A Posteriori Error Estimates for Maxwell’s Equations

4/4/2006  Rolf Rannacher  
University of Heidelberg  
Adaptive FEM in Optimal Control of PDE

4/12/2006  Juhani Pitkaranta  
Helsinki University of Technology, Finland  
Shell Deformation Under a Concentrated Load: Theory and Finite Element Modeling

4/24/2006  Eugenio Aulisa  
Texas Tech University  
Modeling Two Phase Flows with a FEM Solver of the Navier-Stokes equations

5/3/2006  Guillermo Hauke  
Universidad de Zaragoza, Spain  
Explicit A-Posteriori Error Estimation of Advection-Dominated Flows: The Variational Multiscale Paradigm

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9/13/2006  Panagiotis Chatzipantelidis  
*University of Crete*  
Parabolic Finite Volume Element Equations in Nonconvex Polygonal Domains

9/20/2006  Raycho Lazarov  
*Texas A&M University*  
Hybridization of Discontinuous Galerkin FEM for Second Order Elliptic Problems

9/27/2006  Fabien Marpeau  
*Texas A&M University*  
Modelization of Interactions Between Populations and Environment

9/29/2006  Andreas L. Wiegmann  
*Fraunhofer Institut Techno-und Wirtschaftsmathematik*  
Explicit Jump Solvers and Virtual Material Design

10/4/2006  Jean-Luc Guermond  
*Texas A&M University*  
New Results on the Characterization of Suitable Weak Solutions to the 3D Navier–Stokes Equations in Bounded Domains with Dirichlet Boundary Conditions

10/11/2006  Christo I. Christov  
*University of Louisiana at Lafayette*  
An Absolutely Stable Operator-Splitting Scheme for the Stream-Function Formulation of Unsteady Navier-Stokes Equations

10/18/2006  Daniele Di Pietro  
*cole Nationale des Ponts et Chausses*  
Discontinuous Galerkin Methods for Anisotropic and Locally Vanishing Diffusion with Advection

10/25/2006  Alexander Kurganov  
*Tulane University*  
Particle Method: Advantages, Limitations, and Future Perspectives

11/1/2006  Vivette Girault  
*Laboratoire Jacques-Louis Lions, Universit Pierre et Marie Curie*  
A Darcy-Forchheimer Model

11/2/2006  Thierry Goudon  
*University Lille*  
Kinetic Equations, Hydrodynamic Limit and Applications

11/8/2006  Paul Cizmas  
*Texas A&M University*  
A Method for the Numerical Solution of Boundary Value Problems Ordinary Differential Equations

11/9/2006  Constantin Bacuta  
*University of Delaware*  
A Unified Approach for Uzawa Algorithms

11/21/2006  Oleg Iliev  
*Fraunhofer Inst. for Industrial Mathematics*  
Accurate and Robust Algorithms for Solving a Class of Poroelasticity Equations
11/22/2006  Christian Michler
   University of Texas
   Efficient Computation of Acoustic Sensing by Means of Hp-Adaptive Finite Elements

11/29/2006  Sergei Lapin
   University of Houston
   A Lagrange Multiplier Based Domain Decomposition Method for Wave Propagation in Heterogeneous Media
Several Complex Variables

3/8/2006  Andy Raich
Texas A&M University
A Very Elementary Introduction to the $d - \bar{b}$ Problem on the Heisenberg Group in $C^n$

3/22/2006  Andy Raich
Texas A&M University
A Very Elementary Introduction to the $d - \bar{b}$ Problem on the Heisenberg group in $C^n$, II

3/29/2006  Andy Raich
Texas A&M University
A Very Elementary Introduction to the $d - \bar{b}$ Problem on the Heisenberg group in $C^n$, III

4/5/2006  Andy Raich
Texas A&M University
A Very Elementary Introduction to the $d - \bar{b}$ Problem on the Heisenberg group in $C^n$, IV: Convolution and the Group Structure on the Heisenberg Group with an Application to the $\partial_b - problem$

4/12/2006  Scott Zrebiec
Johns Hopkins University
The Zeros of Gaussian Random Holomorphic Functions on $C^n$ and Hole Probability

4/19/2006  Mark Agranovsky
Bar Ilan University
CR-foliations and Morera Type Theorems for Manifolds with Attached Analytic Discs

4/26/2006  Andy Raich
Texas A&M University
Pointwise Estimates on Kernels of a Family of Heat Equations in R Times C with Applications to Several Complex Variables

5/3/2006  Mehmet Celik
Texas A&M University
The Hopf Lemma

9/22/2006  Harold Boas
Texas A&M University
Everything you Know is Wrong (About Convergence of Power Series)

9/29/2006  Mehmet Celik
Texas A&M University
Invariance of Compactness and Subelliptic Estimates for Smooth Metrics

10/6/2006  Mehmet Celik
Texas A&M University
Invariance of Compactness and Subelliptic Estimates for Smooth Metrics. (Part II)

10/13/2006  Mehmet Celik
Texas A&M University
Ideal of Compactness Multipliers

10/20/2006  **Michael Fulkerson**  
*Texas A&M University*  
Radial Limits of Holomorphic Functions

10/27/2006  **Fanny Dos Reis**  
*Texas A&M University*  
On the Regularity of Elliptic Cycles

11/10/2006  **Andy Raich**  
*Texas A&M University*  
Pointwise Heat Kernel Estimates with Applications to Complex Analysis

12/1/2006  **Andreea Nicoara**  
*Harvard University*  
Equivalence of Types on Smooth Domains
<table>
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<tr>
<th>Date</th>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
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<tr>
<td>1/11/2006</td>
<td>Joseph Landsberg</td>
<td>Texas A&amp;M University</td>
<td>Introduction to Bryant’s Paper on Rigidity of Cycles in Hermitian Symmetric Spaces</td>
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<td>1/17/2006</td>
<td>Joseph M. Landsberg</td>
<td>Texas A&amp;M University</td>
<td>Introduction to Bryant’s Paper on Rigidity of Cycles in Hermitian Symmetric Spaces</td>
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<td>1/24/2006</td>
<td>Joseph M. Landsberg</td>
<td>Texas A&amp;M University</td>
<td>Schubert Varieties of Grassmannians</td>
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<td>2/7/2006</td>
<td>Joseph M. Landsberg</td>
<td>Texas A&amp;M University</td>
<td>Rigidity of Cycles I: Candidate Tangent Spaces</td>
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<td>2/21/2006</td>
<td>Joseph M. Landsberg</td>
<td>Texas A&amp;M University</td>
<td>Rigidity of some Schubert Cycles in Grassmannians</td>
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<td>Texas A&amp;M University</td>
<td>Tango’s Work on Holomorphic Mappings of Projective Space Into Grassmannians</td>
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<td>3/7/2006</td>
<td>Laura Matusevich</td>
<td>Texas A&amp;M University</td>
<td>Toric Cohomology and the g-Theorem</td>
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<tr>
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<td>4/25/2006</td>
<td>Joseph M. Landsberg</td>
<td>Hong’s Rigidity Results</td>
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<td>8/15/2006</td>
<td>Joseph M. Landsberg</td>
<td>Introduction to Lie Algebra Cohomology</td>
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<tr>
<td>8/29/2006</td>
<td>Joseph M. Landsberg</td>
<td>What is a Kahler manifold and why Should you Care</td>
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<tr>
<td>9/5/2006</td>
<td>Colleen Robles</td>
<td>Kahler Geometry and the Calabi Conjecture Part I</td>
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<tr>
<td>9/12/2006</td>
<td>Colleen Robles</td>
<td>Kahler Geometry and the Calabi Conjecture Part II</td>
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<td>9/19/2006</td>
<td>Emil Straube</td>
<td>Proof of the Calabi-Yau Theorem - After Z. Blocki</td>
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<td>9/26/2006</td>
<td>Emil Straube</td>
<td>Proof of the Calabi-Yau theorem II</td>
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<td>10/10/2006</td>
<td>Emil Straube</td>
<td>Proof of the Calabi-Yau Theorem III</td>
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<tr>
<td>10/17/2006</td>
<td>Jimmy Dilles</td>
<td>A Gentle Introduction to Calabi-Yau Manifolds</td>
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<tr>
<td>11/14/2006</td>
<td>Jimmy Dilles</td>
<td>Everything you Always Wanted to Know About Calabi-Yau Manifolds, but Were Afraid to Ask Last Lecture.</td>
<td></td>
</tr>
</tbody>
</table>
6. Faculty, 2006

Marcelo Aguiar ........................................... Associate Professor
Angela Allen ............................................... Lecturer
G. Donald Allen .......................................... Professor
Michael Anshelevich .................................... Assistant Professor
Margaret Arnold .......................................... Senior Lecturer
Ben Aurispa ............................................... Lecturer
Amy L. Austin ............................................. Senior Lecturer
Wolfgang Bangerth ........................................ Assistant Professor
David L. Barrow .......................................... Associate Professor
Guy A. Battle ............................................. Professor
Arthur P. Belmonte ...................................... Senior Lecturer
Gregory Berkolaiko ..................................... Assistant Professor
G. Robert Blakley ......................................... Professor
Harold P. Boas ............................................ Professor
Albert Boggess ........................................... Professor
Kathryn L. Bollinger ..................................... Senior Lecturer
Itshak Borosh ............................................ Professor
James H. Bramble ........................................ Distinguished Professor
Goong Chen ............................................... Professor
Chia-Rong Chen ......................................... Lecturer
Li Chen .................................................. Senior Lecturer
Amy Collins ............................................... Lecturer
Andrew Comech .......................................... Assistant Professor
Prabir Daripa ............................................. Associate Professor
Richard D. DeBlassie .................................... Associate Professor
Ronald G. Douglas ...................................... Distinguished Professor
Marcia L. Drost ......................................... Senior Lecturer
Kenneth J. Dykema ..................................... Professor
Yalchin R. Efendiev .................................... Associate Professor
Janice L. Epstein ......................................... Senior Lecturer
Tamas Erdelyi ............................................ Professor
Richard E. Ewing ........................................ Distinguished Professor
Ciprian I. Foias ........................................... Professor
Stephen A. Fulling ...................................... Professor
Susan C. Geller .......................................... Professor
Mel Griffin ............................................... Senior Lecturer
Rostislav I. Grigorchuk ................................ Professor
Jean-Luc Guermond ..................................... Professor
Robert A. Gustafson .................................... Associate Professor
Douglas A. Hensley ..................................... Professor
Arthur M. Hobbs ........................................ Professor
Peter B. Howard ......................................... Assistant Professor
William B. Johnson .................................... Distinguished Professor
Lori Jones ................................................ Lecturer
Joseph E. Kahlig ........................................ Senior Lecturer
Guido Kanschat .......................................... Assistant Professor
David Kerr ................................................ Assistant Professor
Emil J. Straube ................................................................. Professor
Zoran Sunik ............................................................... Assistant Professor
Jamie Sutherland ......................................................... Senior Lecturer
Steven D. Taliaferro ..................................................... Associate Professor
Paula Tretkoff ............................................................. Professor
Thomas I. Vogel ............................................................ Associate Professor
Yaroslav Vorobets ......................................................... Assistant Professor
Jay R. Walton ............................................................. Professor
Joseph D. Ward .......................................................... Professor
Jennifer G. Whitfield ...................................................... Senior Lecturer
Sarah Witherspoon ...................................................... Associate Professor
Catherine Huafei Yan ...................................................... Professor
Philip B. Yasskin .......................................................... Associate Professor
Jianxin Zhou ............................................................. Professor
Joel Zinn ................................................................. Professor

*For the Annual Report, Faculty are defined as tenure and non-tenure track employees who were employed at any time during 2006 (01/01/2006-12/31/2006).
6.1 Professional Activities, 2006

This section contains information, as reported by individual faculty members, encompassing each faculty member’s professional activities for the calendar year 2006.

Subsections of professional activities are defined as follows:

Honors and Awards
▷ All professional honors and awards, both internal and external.

Service Activities
▷ All professional service and leadership roles, including: departmental, college, university, state, national and international.

Teaching
▷ Classes taught during the Spring, Summer and Fall sessions of 2006.
▷ Any missing enrollment numbers were gathered from the Student Information Management System (SIMS) at Texas A&M University.

Research Projects
▷ All research projects, funded and unfunded.
▷ Whenever possible, all research-related employees of that faculty member are listed along with the citation. Key for employees: (P)=Postdoc, (G)=Graduate Student, (U)=Undergraduate Student.
▷ Renewals are marked by “(REN)” at the beginning of their title.
▷ Unfunded grants are marked by “(UNFUNDED)” at the end of the citation.
▷ Additional information (including PIs, CoPIs, and funding) on all funded grants are listed in Section 7.

Presentations
▷ All posters, invited and contributed lectures (plenary, conferences, colloquia, seminars, etc.).
▷ Whenever reported, posters, invited and contributed lectures are noted in parentheses following the citation.
▷ Citations are in chronological order.

Publications
▷ All printed materials published during 2006.
▷ Pre-press, in-press and submitted publications were not included.
▷ Citations were formatted in APA Style and are in alphabetical order by lead author.
• SERVICE DURING 2006

International
▷ Editorial/Board: CONICET (Review: Proposals), CONICYT (Review: Proposals), ISAAC (Referee: Journals)

National
▷ Event: Special Session on Algebraic and Enumerative Combinatorics, AMS Meeting (Organizer), Special Session on Algebraic Combinatorics, AMS Meeting (Organizer)

Department
▷ Committee/Panel: Graduate Programs Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 302. — Discrete Mathematics (total enrollment: 29)
▷ MATH 685. — Directed Studies (total enrollment: 1)

Summer
▷ MATH 685. — Directed Studies (total enrollment: 1)

Fall
▷ MATH 653. — Algebra I (total enrollment: 8)

• PRESENTATIONS DURING 2006

▷ Funcional Analysis Seminar, University of California, Los Angeles, CA, February, 2006.( Individual)
▷ “Hopf Algebras, Combinatorics and Renormalization,” Max Planck Institute, Leipzig, Germany, September, 2006.( Individual)
▷ CMS Annual Meeting, Toronto, December, 2006.( Invited)

• PUBLICATIONS DURING 2006

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Associate Department Head, Mathematics, [2006]

• SERVICE DURING 2006

National
  ▷ Research Group: NSF PEER Distance Learning Community Group (Member)
  ▷ Professional Affiliation: American Educational Research Association (Member), Mathematical Association of America, Society for Industrial and Applied Mathematics, Southwest Educational Research Association, Merlot-Multimedia Educational Resource for Learning and Online Teaching (Member)
  ▷ Committee/Panel: Assessement Strand Speakers Committee (Member)

State
  ▷ Service Position: On College Readiness, Before the Texas Higher Education Coordinating Board and the Texas Education Agency (Presenter)
  ▷ Event: Math Summit Between UH, UT, and TAMU (Organizer), PEIC, Fractions, Measurement and Scaling for Professional Development (Presenter), The Grass-roots P-16 Consortium (Organizer)
  ▷ Committee/Panel: THECB Panel on Online Professional Development (Member)

Regional
  ▷ Event: 5E Lessons Applied to Topics of Measurement (Developer), Pre-conference Workshop Visual Algebra and Pre-calculus (Presenter), Workshop on Digital Devices as Related to Mathematics (Presenter), Workshop on Using the Digital Camera, Excel, and Digitizing Software to Situations and Problems Related to Mathematics (Presenter)
  ▷ Editorial/Board: MTM3 Project in Algebra II (Review: Proposals)

University
  ▷ Service Position: Regents Scholar Mentor Program (Mentor)
  ▷ Advisory Board: Geometry Advisory Board (Member)
  ▷ Committee/Panel: NSF G-K12 Fellows Recruiting and Selection Committee (Chair), NSF G-K12 Fellows Steering Committee (Chair), STEPS Management Team (College of Engineering) (Member)
Committee/Panel: College Quality Enhancement Plan Council (Member), Undergraduate Curriculum Committee (Member)

Department
Committee/Panel: Camtasia Steering Committee (Member), Scholarship Committee (Chair), Sigma XI Educational Outreach Committee (Member), Texas Math Talent Search (Chair), Undergraduate Studies Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 152. — Engineering Mathematics II (total enrollment: 28)
▷ MATH 664. — Seminar in Applied Mathematics (total enrollment: 15)
▷ MATH 685. — Directed Studies (total enrollment: 6)

Summer
▷ MATH 685. — Directed Studies (total enrollment: 1)
▷ MATH 696. — Mathematical Communication and Technology (total enrollment: 23)

Fall
▷ MATH 685. — Directed Studies (total enrollment: 1)
▷ MATH 685. — Directed Studies (total enrollment: 2)

• PRESENTATIONS DURING 2006
▷ “Visualizing Middle School Math,” MTA Research Project, Center for Distance Learning Research, Bryan, TX, January, 2006. (Individual)
▷ “Pre-conference Workshop Visual Algebra and Pre-calculus,” TexMATYC/TCCTA Conference, Houston, TX, February, 2006. (Invited)
▷ “Visualizing Middle School Math,” MTA Research Project, Center for Distance Learning Research, Bryan, TX, February, 2006. (Individual)
▷ “Fractions,” Texas Education Agency/P-16 Educational Improvement Consortium, Texas A&M University, College Station, TX, March, 2006. (Individual)
▷ “Should We be Teaching Undergraduate Online Courses?,” International Conference on Technology in Collegiate Mathematics, Orlando, FL, March, 2006. (Individual)
▷ “Using the Pre-Calculus Package,” Teacher Quality Grants Conference, Charles A. Dana Center and Texas Higher Education Coordinating Board, Austin, TX, March, 2006. (Invited)
• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International

National

University
▷ Committee/Panel: Dissertation Committee (Member)

Department
▷ Committee/Panel: Visiting Assistant Professor Hiring Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 311. — Topics in Applied Mathematics I (total enrollment: 35)

Fall
▷ MATH 304. — Linear Algebra (total enrollment: 66)

• PRESENTATIONS DURING 2006

▷ “AMS Special Session on Noncommutative Dynamical Systems,” University of Utah, Salt Lake City, UT, October, 2006. (Invited)

• PUBLICATIONS DURING 2006

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Computational Nanoscience and Materials - IGERT, [2006]

• SERVICE DURING 2006
  International
  ▶ Event: Minisymposium High-level Software for the Numerical Solution of Partial Differential Equations at ICIAM (Organizer), Workshop on Computational Science Issues in Geodynamics Application (Organizer)
  National
  ▶ Editorial/Board: Louisiana State Board of Education (Referee)
  ▶ Committee/Panel: Science Steering Committee, Center for Computational Infrastructure in Geodynamics (Elected Member)

University
  ▶ Committee/Panel: Faculty Senate (Faculty Senator - 12)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ MATH 664. — Seminar in Applied Mathematics (total enrollment: 11)
  Fall
  ▶ MATH 412. — Theory of Partial Differential Equations (total enrollment: 13)
  ▶ MATH 417. — Numerical Analysis I (total enrollment: 13)

• PRESENTATIONS DURING 2006
  ▶ “Computational Science Issues Geodynamics Applications,” Workshop, Austin, TX, 2006. (Invited)
  ▶ “Imaging,” SIAM Conference, Minneapolis, MN, 2006. (Contributed)
  ▶ Applied Mathematics, University of Heidelberg, Germany, 2006. (Individual)
  ▶ User Workshop, Heidelberg, Germany, 2006. (Individual)
• SERVICE DURING 2006

University
▷ Committee/Panel: Faculty Development Leave Committee (Elected Member)

College
▷ Event: Regional Science Bowl (Judge), Regional Science Fair (Judge)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 308. — Differential Equations (total enrollment: 99)

Summer
▷ MATH 251. — Engineering Mathematics III (total enrollment: 75)

No report received from faculty member.
• SERVICE DURING 2006

National
▷ Editorial/Board: *Applied and Computational Harmonic Analysis* (Member)

University
▷ Committee/Panel: Budget Information Committee (Member), Election Committee (Member), Faculty Senate (Faculty Senator - 01), Research Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 221. — *Several Variable Calculus* (total enrollment: 42)

Summer
▷ MATH 308. — *Differential Equations* (total enrollment: 81)

Fall
▷ MATH 411. — *Mathematical Probability* (total enrollment: 27)

• PUBLICATIONS DURING 2006

• SERVICE DURING 2006

International
▷ Editorial/Board: US-Israel Binational Science Foundation (Referee: Journals)

National

Department
▷ Service Position: Math Awareness Month Website (Developer)
▷ Event: Joint Summer Research Conference on Quantum Graphs and Their Applications (Co-Organizer)
▷ Committee/Panel: Math Awareness Month (Member)

• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ MATH 308.200(H) — Differential Equations (total enrollment: 22)
▷ MATH 602. — Methods and Applications of Partial Differential Equations (total enrollment: 32)

• PRESENTATIONS DURING 2006

▷ Mathematical Physics Seminar, Texas A&M University, College Station, TX, 2006.( Individual)
▷ University of Bristol, England, February, 2006.( Individual)
▷ “Nodal Counting for Quantum and Combinatorial Graphs,” The Nodal Week, Weizmann Institute, Israel, April, 2006.( Individual)
▷ “Mathematics,” University of Strathclyde, Scotland, May, 2006.( Individual)
▷ “Quantum Ergodicity on Graphs Derived from 1d Maps,” Workshop, Evolution on Networks, Blaubeuren, Germany, May, 2006.( Individual)
▷ “Statistics and Modelling Science,” University of Strathclyde, Scotland, May, 2006.( Individual)
▷ Max-Planck-Institut für Dynamik und Selbstorganisation, Göttingen, Germany, May, 2006.( Individual)
▷ University of Bristol, England, May, 2006.( Individual)
• SERVICE DURING 2006

International

▷ Editorial/Board: Springer-Verlag’s International Journal of Information Security (Co-Founder)

▷ Committee/Panel: Management Board, Information Security Research Centre, Faculty of Information Technology, Queensland University (Member)

No report received from faculty member.
• SERVICE DURING 2006

International

National
▷ Service Position: Mathematical Reviews, Zentralblatt MATH (Reviewer)
▷ Committee/Panel: AMS Central Section Program Committee (Chair), NSF Panel for Real, Complex, and Harmonic Analysis (Participant)

University
▷ Event: Summer Honors Invitational Program (Participant)

College
▷ Committee/Panel: Diversity Committee (Member)

Department
▷ Committee/Panel: Awards Committee (Chair), Interviews for Rhodes, Marshall, and Mitchell Scholarships (Panel), Subcommittee P (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 618. — Theory of Functions of a Complex Variable II (total enrollment: 6)

Summer
▷ MATH 304. — Linear Algebra (total enrollment: 27)
▷ MATH 685. — Directed Studies (total enrollment: 2)

Fall
▷ MATH 415. — Modern Algebra I (total enrollment: 25)
▷ MATH 617. — Theory of Functions of a Complex Variable I (total enrollment: 12)
▷ MATH 685. — Directed Studies (total enrollment: 1)
• PRESENTATIONS DURING 2006
  ▶ “Everything you Know (About Convergence of Power Series) is Wrong,” Connecticut Valley Colloquium, Amherst College, Amherst MA, September, 2006. (Individual)

• PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Department Head, Mathematics, [2002]

• SERVICE DURING 2006

  International
  ▶ Editorial/Board: *Mathematische Annalen, Israel Journal of Mathematics* (Referee: Journals)

  National

  Regional
  ▶ Committee/Panel: High School Mathematics Competition Committee (Member)

  University
  ▶ Service Position: Recruitment of Mathematics Faculty (Recruiting)
  ▶ Committee/Panel: SIMS/FAMIS Replacement Committee (Member), University Department Heads Council (Member)

  College
  ▶ Committee/Panel: Executive Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Fall
  ▶ MATH 640. — *Linear Algebra for Applications* (total enrollment: 19)

• PRESENTATIONS DURING 2006
  ▶ “CR Approximation,” University of Missouri, Rolla, MO, September, 2006. (Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International
▷ Editorial/Board: Austrian Academy of Science (Review: Proposals)

National

Department
▷ Service Position: (Research Standards Officer), Math 151 Common Exam (Coordinator)
▷ Committee/Panel: Library Committee (Member), Talent Search (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 152. — *Engineering Mathematics II* (total enrollment: 80)
▷ MATH 152. — *Engineering Mathematics II* (total enrollment: 82)

Summer
▷ MATH 433. — *Applied Algebra* (total enrollment: 28)

Fall
▷ MATH 152. — *Engineering Mathematics II* (total enrollment: 97)
▷ MATH 367. — *Basic Concepts of Geometry* (total enrollment: 47)
• SERVICE DURING 2006

National
   ▶ Editorial/Board: Advances in Computational Mathematics (Member), Communications in Applied Analysis (Member), Numerical Functional Analysis and Optimization (Member), Panamerican Mathematical Journal (Member), RAIRO (Member)

State
   ▶ Event: The Texas Finite Element “Rodeo” (Co-Organizer)

Department
   ▶ Event: Numerical Analysis Weekly Seminars (Co-Organizer)
   ▶ Committee/Panel: Search Committee for Koss Chair (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
   ▶ MATH 691. — Research (total enrollment: 1)

Summer
   ▶ MATH 691. — Research (total enrollment: 1)
   ▶ MATH 691. — Research (total enrollment: 1)

Fall
   ▶ MATH 664. — Seminar in Applied Mathematics (total enrollment: 5)
   ▶ MATH 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006

   ▶ “A Finite Element PML Approximation for the Three Dimensional Time-harmonic Maxwell Scattering Problem,” Meeting Honoring Richard Ewing, Texas A&M University, College Station, TX, November, 2006. (Invited)
• SERVICE DURING 2006

International
▷ Event: National Center for Theoretical Sciences, Tsing Hua University (Organizer)
▷ Editorial/Board: International Journal of Quantum Information (Member)

National
▷ Editorial/Board: Chapman & Hall/CRC Press Applied Mathematics and Nonlinear Sciences Series (Editor-in-Chief), Electronic Journal of Differential Equations (Member), Journal of Mathematical Analysis and Applications (Associate Editor), Journal of Mathematical Analysis and Applications (Editor-in-Chief), Various Journals (Referee: Journals)

Department
▷ Research Group: Institute for Quantum Studies (Department Representative)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 251 — Engineering Mathematics III (total enrollment: 67)
▷ MATH 612. — Partial Differential Equations (total enrollment: 6)
▷ MATH 691. — Research (total enrollment: 2)

Summer
▷ MATH 602. — Methods and Applications of Partial Differential Equations (total enrollment: 26)
▷ MATH 691. — Research (total enrollment: 1)

Fall
▷ MATH 251 — Engineering Mathematics III (total enrollment: )

• PRESENTATIONS DURING 2006

▷ “Computation and Dimensional Scaling for Some Three Body Problems in Atomic and Molecular Quantum Mechanics,” Texas PDE Conference, Mathematics Department, University of Texas, Arlington, TX, March, 2006.( Individual)
▷ “Superconducting Quantum Computing Devices (I),” Quantum Computing Seminar, Department of Computer Science, Texas A&M University, College Station, TX, March, 2006.( Individual)
“Superconducting Quantum Computing Devices (II),” Quantum Computing Seminar, Department of Computer Science, Texas A&M University, College Station, TX, April, 2006. (Individual)

“Introduction to Quantum Computing Devices,” Institute of Applied Mechanics, National Taiwan University, Taipei, Taiwan, September, 2006. (Invited)

“A Chitchat on English Technical Writing,” Department of Agricultural Economics, National Taiwan University, Taipei, Taiwan, November, 2006. (Invited)

“Introduction of Three Fundamental Principles of Quantum Computing,” Mathematics Department, National Tsing Hua University, Hsinchu, Taiwan, November, 2006. (Invited)

“Mathematical Analysis of the Bohr Atom Model,” Mathematics Department, National Changhua University of Education, Changhua, Taiwan, November, 2006. (Invited)

“Visualization and Dimensional Scaling for the Schrödinger-Born-Oppenheimer Model of Helium,” Mathematics Department, National Cao-Tung University, Hsinchu, Taiwan, November, 2006. (Invited)

“Demonstration of Manuscript Submission and Editorial Review Criteria and Processes for Scientific Journal,” Department of Agricultural Economics, National Taiwan University, Taipei, Taiwan, December, 2006. (Invited)


“Visualization and Dimensional Scaling for the Schrödinger-Born-Oppenheimer Model of Helium,” Institute of Mathematics, National Taiwan University, Taipei, Taiwan, December, 2006. (Invited)

“Wavelet Analysis of the Spectrum of Chaotic Time Series,” Annual Meeting of the Taiwan Mathematical Society, National Normal University, Taipei, Taiwan, December, 2006. (Invited)

**PUBLICATIONS DURING 2006**


• SERVICE DURING 2006
   International
   ▶ Editorial/Board: Acta Mathematics Sinica (Referee: Journals)

   National
   ▶ Editorial/Board: American Journal of Mathematics (Referee: Journals)

• TEACHING ASSIGNMENTS DURING 2006

   Spring
   ▶ MATH 311. — Topics in Applied Mathematics I (total enrollment: 33)
   ▶ MATH 311. — Topics in Applied Mathematics I (total enrollment: 36)

   Fall
   ▶ MATH 308. — Differential Equations (total enrollment: 36)

• PRESENTATIONS DURING 2006

   ▶ Mathematical Physics Seminar, Texas A&M University, College Station, TX, February, 2006. (Individual)
   ▶ Mathematical Physics Seminar, Texas A&M University, College Station, TX, March, 2006. (Individual)
   ▶ Geometric Analysis Seminar, University of Oregon, Eugene OR, May, 2006. (Individual)
   ▶ Colloquium, Texas A&M University, College Station, TX, September, 2006. (Individual)
   ▶ Mathematical Physics Seminar, University of Texas, Austin, TX, October, 2006. (Individual)
   ▶ Geometry/Analysis Seminar, Columbia University, New York, NY, December, 2006. (Individual)
   ▶ PDE Seminar, Brown University, Providence, RI, December, 2006. (Individual)

• PUBLICATIONS DURING 2006

• SERVICE DURING 2006

International

National

University
▷ Committee/Panel: Faculty Development Leave Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 401. — *Advanced Engineering Mathematics* (total enrollment: 29)
▷ MATH 689. — *Special Topics in* (total enrollment: 20)

Summer
▷ MATH 601. — *Methods of Applied Mathematics I* (total enrollment: 30)

Fall
▷ MATH 601. — *Methods of Applied Mathematics I* (total enrollment: 35)

• PRESENTATIONS DURING 2006


• PUBLICATIONS DURING 2006

• SERVICE DURING 2006

International

National

Regional
  ▶ Event: High School Math Contest (Member)

University
  ▶ Committee/Panel: Disciplinary Appeals Panel (Member), Faculty Senate University Bookstore Advisory Committee (Member), Undergraduate Studies Committee (Member), Who’s Who in American Universities and Colleges (Member)

College
  ▶ Committee/Panel: College Quality Enhancement Plan Council (Member)

Department
  ▶ Committee/Panel: Teaching Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▶ MATH 311. — *Topics in Applied Mathematics I* (total enrollment: 39)

Summer
  ▶ MATH 311. — *Topics in Applied Mathematics I* (total enrollment: 26)

Fall
  ▶ MATH 409. — *Advanced Calculus I* (total enrollment: 17)
  ▶ MATH 619. — *Applied Probability* (total enrollment: 10)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International
➢ Editorial/Board: Bilateral Israeli/United States Foundation, Joint India-NSF (Review: Proposals)

National
➢ Professional Affiliation: John Simon Guggenheim Memorial Foundation (Fellow)
➢ Editorial/Board: CRC Research Notes in Mathematics (Editor), Integral Equations and Operator Theory (Member), Journal of Functional Analysis and Applications (Member), Journal of Operator Theory (Member), Various Research Journals (Referee: Journals)
➢ Committee/Panel: Pure and Applied Mathematics Grant Selection Committee NSERC (Member), Review Committee for Department of Mathematics, University of Florida (Member)

State
➢ Service Position: Dean of Science, University of Texas-San Antonio (Consultant)

Department
➢ Committee/Panel: Department Committee D (Chair), Distinguished Position Recruitment Committee (Member), Honor System Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
➢ MATH 608. — Real Variables II (total enrollment: 7)
➢ MATH 685. — Directed Studies (total enrollment: 1)

Fall
➢ MATH 467.200(H) — Modern Geometry (total enrollment: 2)
➢ MATH 467.500 — Modern Geometry (total enrollment: 26)

• PRESENTATIONS DURING 2006
➢ Mathematics Department, University of California, San Diego, CA, March, 2006. (Individual)
➢ Mathematics Department, University of California, Santa Barbara, CA, March, 2006. (Individual)
➢ “Legacy of R.L. Moore,” Austin, TX, May, 2006. (Invited)
➢ Canadian Operator Algebras Meeting, Calgary, Canada, May, 2006. (Individual)
• Operator Theory Conference, Timisoara, Romania, July, 2006.( Invited)
• Mathematics Department, Texas A&M University, College Station, TX, September, 2006.( Individual)
• Wabash Mini-conference, September, 2006.( Invited)
• Mathematics Department, Penn State University, PA, October, 2006.( Individual)
• Mathematics Department, University of Cincinnati, Cincinnati, OH, October, 2006.( Individual)

• PUBLICATIONS DURING 2006
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• SERVICE DURING 2006

International

National
▷ Committee/Panel: National Science Foundation (Panelist)

University
▷ Event: Concentration Week in Free Probability (Co-Organizer)

Department
▷ Event: Linear Analysis Seminar (Organizer), Linear Analysis Seminar (Organizer)
▷ Committee/Panel: Executive Committee (Member), Scientific Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 410. — Advanced Calculus II (total enrollment: 24)
▷ MATH 691. — Research (total enrollment: 3)

Summer
▷ MATH 691. — Research (total enrollment: 1)

Fall
▷ MATH 220. — Fundamentals of Discrete Mathematics (total enrollment: 15)
▷ MATH 409. — Advanced Calculus I (total enrollment: 14)
▷ MATH 691. — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006
• PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Computational Nanoscience and Materials - IGERT, [2006]

• SERVICE DURING 2006
  International
  ▶ Editorial/Board: Norway Research Council (Reviewer), Swiss National Science Foundation (Reviewer)

  National

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ MATH 308. — Differential Equations (total enrollment: 110)
  ▶ MATH 691. — Research (total enrollment: 5)

  Summer
  ▶ MATH 691. — Research (total enrollment: 5)

  Fall
  ▶ MATH 251. — Engineering Mathematics III (total enrollment: 169)
  ▶ MATH 691. — Research (total enrollment: 5)

• PRESENTATIONS DURING 2006
  ▶ “Adaptive Model Reduction Method for PDE Constrained Optimization,” Rice University, Houston, TX, May, 2006.( Individual)
  ▶ “Mathematical Analysis and it’s Applications,” International Conference, Bangkok, Thailand, May, 2006.( Individual)
  ▶ “Multiscale Transport Phenomena,” Summer School GDR-CNRS GRIP, Centre International de Sejours, Seix, France, June, 2006.( Individual)
  ▶ Upscaling Workshop, Kaiserlautern, Germany, June, 2006.( Individual)


Washington State University, Pullman, WA, November, 2006. (Individual)


**PUBLICATIONS DURING 2006**


• SERVICE DURING 2006

International
▷ Professional Affiliation: Mathematical Institute of the Hungarian Academy of Science (Associate Member)

National
▷ Professional Affiliation: Janos Bolyai Mathematical Society (Member), Mathematical Association of America (Member)

University
▷ Research Group: Center for Experimental and Constructive Mathematics at Simon Fraser University (Associate Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 151. — Engineering Mathematics I (total enrollment: 164)

Fall
▷ MATH 152. — Engineering Mathematics II (total enrollment: 91)

• PRESENTATIONS DURING 2006

• PUBLICATIONS DURING 2006
• CHAIRS/PROFESSORSHIPS
  ▶ Distinguished Research Chair (TEES) [1992]
  ▶ Mobil Technology Company Endowed Chair in Computational Science [1999]

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Vice President for Research, Vice President for Research, [2000]

• AWARDS DURING 2006
  University
  ▶ Magnus Distinguished Lecturer, Colorado State University
  ▶ Richard Ewing Award for Excellence in Science, Technology, and Economic Development, Texas A&M University

• SERVICE DURING 2006
  International
  ▶ Advisory Board: International Advisory Board, Institute for Mathematics of Life Sciences, Texas Tech (Member)
  ▶ Professional Affiliation: European Society of Computational Methods in Sciences and Engineering (Member), International Association for Computational Mechanics (Member), International Association for Mathematics and Computers in Simulation (Member), International Federation of Nonlinear Analysis (Member)

  National
  ▶ Professional Affiliation: American Association for the Advancement of Science (Fellow), American Chemical Society (Member), American Geophysical Union (Member), American Mathematical Society (Member), Institute of Electrical and Electronics Engineers Inc. (Member), Mathematics Association of America (Member), United States Association for Computational Mechanics (Member)
  ▶ Advisory Board: Advisory Committee, In-Situ (Member)
  ▶ Editorial/Board: Environmental Software (Member), Communications in Applied Analysis (Referee: Journals), Computing and Visualization in Science (Member), Journal of Computational Engineering Sci. (Referee: Journals), Mathematical Modeling and Computational Experiment (Member), Nonlinear World (Member), Numerical Methods for
Partial Differential Equations (Member)

Committee/Panel: Bi-National Sustainability Laboratory (Board of Directors), Big 12 Center for Economic Development, Operations Committee (Member), Council, Oak Ridge Associated Universities (Member), Oak Ridge Associated Universitites (Board of Directors)

Service Position: National Space Biomedical Research Institute (Board of Directors), Software Commercialization and Innovation Center (Board of Directors)

State

Committee/Panel: FutureGen Texas (Advisory Board), Steering Committee, Texas Telecommunications Engineering Consortium, State of Texas (Member), Texas Product Development and Small Business Incubator Board (Member)

Service Position: Houston Technology Center (Board of Directors), Texas Healthcare and Biosciences Institute (Board of Directors), Texas Society for Biomedical Research (Board of Directors)

Research Group: Houston Advanced Research Center (Board of Directors), Texas Institute for Genomic Medicine (Board of Directors)

Regional

Service Position: Associated Western Universities (Board of Directors), Southeastern Universities Research Association (Board of Directors)

University

Event: Texas GigaPOP, Internet2 (Executive Liaison)

Advisory Board: Board of Trustees, Texas A&M University Research Foundation (Member), Scientific Board, Industrial Mathematics Institute, University of South Carolina (Member)

Department

Committee/Panel: Endowed Professorship Committee (Member)

Research Group: Center for Animal Biotechnology and Genomics, TAES (Steering Committee)

Professional Affiliation: Society for Industrial and Applied Mathematics (Member), Society of Engineering Science (Member), Society of Petroleum Engineers of AIME (Member)

• PRESENTATIONS DURING 2006

Fraunhofer Institute, Kaiserslautern, Germany, January, 2006. (Individual)

University of Bergen, Bergen, Norway, January, 2006. (Individual)

University of Heidelberg, Heidelberg, Germany, January, 2006. (Individual)


Institute for Water Engineering, University of Stuttgart, Stuttgart, Germany, February, 2006. (Individual)

Joint Advisory Board, Texas A&M University at Qatar, College Station, TX, February, 2006. (Individual)

Bi-National Sustainability Laboratory, Santa Teresa, NM, March, 2006. (Individual)

International Program Office, Board Meeting, College Station, TX, April, 2006. (Individual)


Border Governors Conference Committee of Science and Technology, College Station, TX, May, 2006. (Individual)

Faculty Abroad Seminar, Palenque, Mexico, May, 2006. (Individual)

Monterey Tech University, Monterey, Mexico, May, 2006. (Individual)

University of Nuevo Leon, Monterrey, Mexico, May, 2006. (Individual)


“Competitiveness of the Border Region,” Border Governors’ Conference Science and Technology Committee Meeting, Monterey, Mexico, August, 2006. (Individual)

“Technology Needs for the Border Region,” Border Governors’ Conference, Austin, TX, August, 2006. (Individual)

“Computational Sciences in Environmental Applications,” Xiamen University, Xiamen, China, September, 2006. (Individual)


TGen, College Station, TX, September, 2006. (Individual)

“Global Strategic Partnership in Critical Regions,” NASULGC National Conference, Houston, TX, November, 2006. (Individual)

Joint Advisory Board, Texas A&M University - Qatar, Doha, Qatar, November, 2006. (Individual)

• PUBLICATIONS DURING 2006


TEACHING ASSIGNMENTS DURING 2006

Spring
- MATH 663. — Seminar in Analysis (total enrollment: 6)

PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International
▷ Professional Affiliation: Royal Society of Sciences at Uppsala (Sweden) (Foreign Member)
▷ Editorial/Board: Austrian Science Fund Post-project Review (Reviewer), NSERC (Referee: Journals)

National
▷ Committee/Panel: AMS-IMS-SIAM Joint Summer Research Conference on Quantum Graphs and Their Applications (Member)

University
▷ Service Position: Texas A&M University (Research Standards Officer)
▷ Committee/Panel: Phi Beta Kappa, Texas A&M University Chapter (Member)

Department
▷ Committee/Panel: Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 401. — Advanced Engineering Mathematics (total enrollment: 17)

Fall
▷ MATH 412.200(H) — Theory of Partial Differential Equations (total enrollment: 12)
▷ MATH 491.200(H) — Research (total enrollment: 1)
▷ MATH 629. — History of Mathematics (total enrollment: 18)

• PRESENTATIONS DURING 2006
▷ Oklahoma-Texas-Louisiana Quantum Vacuum Research Group, Norman, OK, June, 2006. (Individual)
▷ Mathematics Department, Bristol University, August, 2006. (Individual)
Conference on Heat Kernels in Mathematics and Physics, Blaubeuren, Germany, November, 2006. (Invited)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

National
▷ Professional Affiliation: Association of Women in Mathematics Mentor at January AMS/MAA meetings (Member)
▷ Event: Women In Mathematics (Speaker)
▷ Editorial/Board: Bioinformatics (Referee: Journals)
▷ Committee/Panel: Firefighting, Paper, Trailing, and cat Herding: Everything you Wanted to Know to be an Administrator but Were Afraid to ask, Joint Mathematics Meetings (Panel), MAA Committee on Early Career Development (Member), MAA Committee on Science Policy (Member), MAA Committee on the Profession (Chair), MAA Subcommittee on Early Career Development (Member), Scholarship Scenarios, MAA Committee on the Profession, Joint Mathematics Meetings (Panel)

Regional
▷ Service Position: ADADEC (Academic Decathelon) (Participant)

University
▷ Service Position: AWM Student Chapter (Faculty Sponsor), Dean of Faculties (Mediator), Junior Faculty (Mentor), Student Conflict Resolution Center (Mediator)
▷ Committee/Panel: Women’s Faculty Network (Mentor)

Department
▷ Service Position: Students in MS in Mathematics, Teaching Option (Mentor)
▷ Committee/Panel: Goldwater Scholarship Selection Committee (Member), Honors Committee (Chair), Honors Programs in Mathematics (Director), Scholarship Committee (Member), Undergraduate Programs Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 423.200(H) — Linear Algebra II (total enrollment: 1)
▷ MATH 423.500 — Linear Algebra II (total enrollment: 19)

Summer
▷ MATH 485. — Directed Studies (total enrollment: 1)

Fall
▷ MATH 220. — Fundamentals of Discrete Mathematics (total enrollment: 11)
▷ MATH 645. — A Survey of Mathematical Problems I (total enrollment: 21)

• PRESENTATIONS DURING 2006
“Course Design Administrivia and How to Deal With IT, Project Next,” MathFest, 2006. (Individual)

“Special Mathematical Outreach Program,” Joint Mathematics Meetings, San Antonio, TX, January, 2006. (Individual)

“Hochschild Homology Revisited,” Algebra and Combinatorics Seminar, Texas A&M University, College Station, TX, February, 2006. (Individual)

“Using Mathematics in Microarray,” Texas A&M University Summer High School Program, College Station, TX, June, 2006. (Individual)

“Microarrays: What are They? How Do They Work? What are They Good For? And What Do You Do With All the Data?,” Piney Woods Lecture Series, Sam Houston, State University, Huntsville, TX, October, 2006. (Individual)
• SERVICE DURING 2006

International
▷ Editorial/Board: Switzerland National Science Foundation, Science and Engineering Research Canada, Israel Science Foundation, Marie Curie (EPPS) (Referee), Geometriae Dedicata, International Journal of Mathematics and Mathematical Sciences, International Journal of Algebra and Computation, Matematicheskii Sbornik, Inventiones Mathematicae (Referee: Journals), Geometriae Dedicata (Editor), International Journal of Algebra and Computation (Editor), Mathematicni Studii (Editor)

National

University
▷ Editorial/Board: Groups, Geometry and Dynamics (Editor-in-Chief)

Department
▷ Event: Groups and Dynamics Seminar (Head)
▷ Committee/Panel: Committee P&T (Member), Postdoc Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 614. — Dynamical Systems and Chaos (total enrollment: 11)
▷ MATH 685. — Directed Studies (total enrollment: 1)
▷ MATH 691. — Research (total enrollment: 3)

Summer
▷ MATH 685. — Directed Studies (total enrollment: 1)
▷ MATH 691. — Research (total enrollment: 1)
▷ MATH 691. — Research (total enrollment: 3)

Fall
▷ MATH 415.200(H) — Modern Algebra I (total enrollment: 6)
▷ MATH 662. — Seminar in Algebra (total enrollment: 6)
▷ MATH 691. — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006

SEC. 6.1 PROFESSIONAL ACTIVITIES 445
△ “Topological and Geometric Methods in Group,” Hanoi Towers Group, Oberwolfach, Germany, April, 2006. (Invited)
△ “Spectral Analysis of Ukrainian Automatic Groups and Semigroups,” P vs NP Workshop, University of California, Berkeley, CA, June, 2006. (Invited)
△ “Spectral Properties of Hanoi Towers Group,” University of Marseille 1, France, June, 2006. (Individual)
△ Self-similar Groups, Palo Alto, CA, June, 2006. (Individual)
△ “Serre Property (FA) and Homomorphic Images of Branch Groups,” University of Florida, Gainesville, FL, December, 2006. (Individual)
• SERVICE DURING 2006

International
▷ Event: Minisymposium (Numerical Simulation of MHD Flows), ECCOMAS (Organizer), Minisymposium on Multiscale Methods in Computational Fluid Dynamics, ECCOMAS (Organizer)

National

Department
▷ Committee/Panel: Executive Committee (Member), Post-Doc Hiring Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 602. — Methods and Applications of Partial Differential Equations (total enrollment: 32)

Fall
▷ MATH 412. — Theory of Partial Differential Equations (total enrollment: 15)
▷ MATH 689. — Special Topics in (total enrollment: 5)

• PRESENTATIONS DURING 2006

▷ “Nonlinear Finite Element Approximation of PDE’s in L1,” The 2006 Finite Element Rodeo, College Station, TX, March, 2006.( Individual)
▷ Graduate Students, Texas A&M University, College Station, TX, March, 2006.( Individual)
▷ Numerical Analysis, Tulane University, New Orleans, LA, April, 2006.( Individual)
▷ “First-order PDF’s in L1,” Fifth International Conference on Scientific Computing and Applications, Banff, Canada, May, 2006.( Invited)
▷ LIMSI, Orsay, France, June, 2006.( Individual)
▷ “Discontinuous Galerkin Methods for Friedrichs’ Systems,” Eighth IMACS Conference on Iterative Methods, College Station, TX, November, 2006.( Individual)
• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

National
▷ Editorial/Board: *Journal of Math Analysis and Applications* (Associate Editor)

Regional
▷ Service Position: Middle School Math Counts Team (Coach)

Department
▷ Committee/Panel: SEE Math Camp (Instructor)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 152. — *Engineering Mathematics II* (total enrollment: 74)
▷ MATH 152. — *Engineering Mathematics II* (total enrollment: 86)

Summer
▷ MATH 367. — *Basic Concepts of Geometry* (total enrollment: 17)

Fall
▷ MATH 302. — *Discrete Mathematics* (total enrollment: 23)
• SERVICE DURING 2006

National
▷ Committee/Panel: Advisory Panel, AIME (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 411. — Mathematical Probability (total enrollment: 22)

Fall
▷ MATH 152.201-202(H) — Engineering Mathematics II (total enrollment: 38)
▷ MATH 490. — The Putnam Challenge (total enrollment: 9)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International
▷ Editorial/Board: *Discussiones Mathematicae Graph Theory* (Referee: Journals)

National
▷ Professional Affiliation: Phi Beta Kappa Chapter (Treasurer)
▷ Editorial/Board: Math Reviews (Reviewer)

State
▷ Event: Texas State Conference of AAUP (Vice President)

Regional
▷ Event: High School Mathematics Tournament (Grader)

University
▷ Committee/Panel: Faculty Senate (Faculty Senator - 10), Faculty Senate Academic Affairs Committee (Member), Faculty Senate Executive Committee (Member), Faculty Senate Planning Committee (Chair), Freshman Convocation Program Subcommittee (Member), Steering Committee for Freshman Convocation (Member), Student Research Competition (Judge), Subcommittee on Legislative Affairs (Chair), System Faculty Council (Coordinator)

Department
▷ Service Position: Team Blinn (Liaison), Transfer Equivalency Committee (Chair)
▷ Committee/Panel: Budget Information Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 220. — *Fundamentals of Discrete Mathematics* (total enrollment: 23)
▷ MATH 613. — *Graph Theory* (total enrollment: 8)
▷ MATH 691. — *Research* (total enrollment: 1)

Summer
▷ MATH 302. — *Discrete Mathematics* (total enrollment: 11)
▷ MATH 304. — *Linear Algebra* (total enrollment: 30)

Fall
▷ MATH 220. — *Fundamentals of Discrete Mathematics* (total enrollment: 18)
▷ MATH 691. — *Research* (total enrollment: 1)
• AWARDS DURING 2006

Department
▷ Outstanding Teaching Award, Texas A&M University, Department of Mathematics

• SERVICE DURING 2006

National

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 442. — Mathematical Modeling (total enrollment: 18)

Summer
▷ MATH 685. — Directed Studies (total enrollment: 1)

Fall
▷ MATH 289. — Special Topics in (total enrollment: 22)
▷ MATH 442. — Mathematical Modeling (total enrollment: 23)

• PRESENTATIONS DURING 2006

▷ Joint Mathematics Meeting, San Antonio, TX, January, 2006. (Individual)
▷ SIAM PDE Conference, Boston, MA, July, 2006. (Individual)
▷ Texas A&M University, College Station, TX, September, 2006. (Individual)
• CHAIRS/PROFESSORSHIPS
  ▶ Arthur George and Mary Emolene Owen Chair in Mathematics /1984/

• SERVICE DURING 2006

  International
  ▶ Editorial/Board: Mathematische Annalen, Extracta Mathematicae (Member)

  National
  ▶ Editorial/Board: G extracta Mathematicae (Member), Houston Journal of Mathematics (Member), Methods in Banach Space Theory (Editor), Positivity (Member), Various Journals (Referee: Journals)
  ▶ Committee/Panel: Organizing Committee, SUMIRFAS (Chair)

  Department
  ▶ Event: Workshop in Linear Analysis and Probability (Director)
  ▶ Committee/Panel: Endowed Professorship Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ MATH 656 — Functional Analysis II (total enrollment: 6)
  ▶ MATH 689. — Special Topics in (total enrollment: 8)
  ▶ MATH 691. — Research (total enrollment: 2)

  Summer
  ▶ MATH 663. — Seminar in Analysis (total enrollment: 6)
  ▶ MATH 691. — Research (total enrollment: 2)

  Fall
  ▶ MATH 607. — Real Variables I (total enrollment: 14)
  ▶ MATH 691. — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006

  ▶ “Function Spaces,” Fifth Conference, Edwardsville, IL, May, 2006.( Invited)


• SERVICE DURING 2006
  
  International  
  ▶ Event: International Deal II User Workshop, Heidelberg (Organizer)

  National  
  ▶ Event: Minisymposium Fast Solvers for Saddle-point Problems With Applications in Fluid Dynamics (Organizer), Minisymposium High-level Software for the Numerical Solution of Partial Differential Equations (Organizer)

  University  
  ▶ Committee/Panel: IWR Parallel Computer Committee (Member)

  Department  
  ▶ Committee/Panel: Applied Mathematics Student Computer Pool, Heidelberg (Head), System Administration, AG Numerik, Heidelberg (Head)

• TEACHING ASSIGNMENTS DURING 2006

  Fall  
  ▶ MATH 417. — Numerical Analysis I (total enrollment: 11)

• PRESENTATIONS DURING 2006

  ▶ European Finite Element Fair, Zürich, January, 2006. (Individual)
  ▶ Max-Planck-Institut Leipzig, Leipzig, Germany, January, 2006. (Individual)
  ▶ Texas A&M University, College Station, TX, February, 2006. (Individual)
  ▶ “Iterative Methods,” IMACS Symposium, College Station, TX, November, 2006. (Individual)
  ▶ FEMTEC, El Paso, Mexico, December, 2006. (Individual)

• PUBLICATIONS DURING 2006

• SERVICE DURING 2006

National
(Referee: Journals)

Department
▷ Event: Led a Session on Google, Matrices, and Random Walks for SEE-Math (Organizer),
Real Analysis Qualifying Exam Committee (Grader)
▷ Committee/Panel: Real Analysis Qualifying Exam Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 302. — Discrete Mathematics (total enrollment: 22)

Summer
▷ MATH 685. — Directed Studies (total enrollment: 1)

Fall
▷ MATH 251. — Engineering Mathematics III (total enrollment: 63)
▷ MATH 685. — Directed Studies (total enrollment: 1)

• PRESENTATIONS DURING 2006

▷ “Analysis Seminar,” State University of New York, New York, NY, April, 2006.( Individual)
▷ “Analysis Seminar,” University of Houston, Houston, TX, April, 2006.( Individual)
▷ “Workshop on Operator Theory and Operator Algebras,” State University of New York,
New York, NY, April, 2006.( Individual)
▷ SUMIRFAS, Texas A&M University, College Station, TX, August, 2006.( Individual)
▷ SUMIRFAS, Texas A&M University, College Station, TX, August, 2006.( Individual)
▷ “Google and Random Walks,” Texas A&M UniversityHigh School Mathematics Tournament,
College Station, TX, October, 2006.( Individual)
▷ “Group and Dynamics Seminar,” Texas A&M University, College Station, TX, October,
2006.( Individual)

• PUBLICATIONS DURING 2006

• SERVICE DURING 2006

National
▷ Editorial/Board: *Mathematical Biosciences* (Referee: Journals)

Department
▷ Service Position: Java Function Class (Developer), MacDviX, a TeX dvi previewer for OS X (Developer), MacGhost View, Postscript previewer for OS X (Developer), Main Programmer for the Java-based Finite Math and Applied Calculus Web Projects (Developer)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 417. — *Numerical Analysis I* (total enrollment: 12)

Summer
▷ MATH 417. — *Numerical Analysis I* (total enrollment: 13)

Fall
▷ MATH 171. — *Analytic Geometry and Calculus* (total enrollment: 23)
▷ MATH 172. — *Calculus* (total enrollment: 33)

• PUBLICATIONS DURING 2006

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Computational Nanoscience and Materials - IGERT, [2006]

• SERVICE DURING 2006
  International

  National

  University
  ▶ Event: Summer Honors Program (Lecturer)

  Department
  ▶ Committee/Panel: Distinguished Professor Hiring Committee (Member), Graduate Programs Committee (Member), Math Awareness Committee (Chair), Talent Search (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ MATH 308.200(H) — Differential Equations (total enrollment: 21)
  ▶ MATH 407. — Complex Variables (total enrollment: 34)
  ▶ MATH 691. — Research (total enrollment: 2)

  Summer
  ▶ MATH 691. — Research (total enrollment: 1)
  ▶ MATH 691. — Research (total enrollment: 1)
  ▶ MATH 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006
“Mathematics of Photonic Crystals,” Mathematics Department, Seoul National University, Korea, March, 2006. (Individual)

“Quantum Graphs and Their Applications,” Mathematics Department, Seoul National University, Korea, March, 2006. (Individual)


“Spherical Mean Transform, Thermoacoustic Tomography, and all That,” International Conference on Analysis and Applications, University of Science and Technology of China and City University of Hong Kong, Hefei, China, June, 2006. (Invited)


“Mathematical Problems of Thermoacoustic Tomography,” International Workshop Inverse Problems and Application, Banff International Research Station, August, 2006. (Invited)

“Some Mathematical Problems of Nanotechnology,” Opening Ceremony of the Graduate School on Analysis, Simulation and Design of Nanotechnological Processes, Karlsruhe University, Karlsruhe, Germany, August, 2006. (Invited)

“Spherical Mean Transform: New Results About an old Operator,” Math Physics Seminar, Texas A&M University, College Station, TX, September, 2006. (Individual)

“Mathematics of Photonic Crystals,” Autumn School on Analysis, Department of Mathematics, Simulation and Design of Nanotechnological Processes, University of Karlsruhe, Karlsruhe, Germany, October, 2006. (Invited)

“Spherical Mean Transform and Thermoacoustic Tomography,” Mathematics Department, Technion, Haifa, Israel, October, 2006. (Individual)

“Spherical Mean Transform and Thermoacoustic Tomography,” Mathematics Department, Bar Ilan University, Ramat Gan, Israel, October, 2006. (Individual)

“Spherical Mean Transform and Thermoacoustic Tomography,” Mathematics Department, University of California, Irvine, CA, November, 2006. (Individual)

• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

International

National

Department
▷ Committee/Panel: Graduate Reviews (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 489. — Special Topics in (total enrollment: 5)
▷ MATH 685. — Directed Studies (total enrollment: 2)
▷ MATH 691. — Research (total enrollment: 1)

Summer
▷ MATH 691. — Research (total enrollment: 1)

Fall
▷ MATH 622. — Differential Geometry of Curves (total enrollment: 9)

• PRESENTATIONS DURING 2006

▷ University of Houston, Houston, TX, January, 2006.( Individual)
▷ “Grobner Bases,” AMS Special Session, San Francisco, CA, April, 2006.( Individual)
▷ Korea Institute for Advanced Study, Seoul, Korea, June, 2006.( Individual)
▷ Seoul National University, Seoul, Korea, June, 2006.( Individual)
▷ Geometry Seminar, Duke University, Durham, NC, October, 2006.( Individual)
▷ University of Utah, Salt Lake City, UT, October, 2006.( Individual)

• PUBLICATIONS DURING 2006


• AWARDS DURING 2006

University
▷ Distinguished Achievement Award - Teaching, Association of Former Students

• SERVICE DURING 2006

International
▷ Committee/Panel: Committee for International Journal of Pure and Applied Mathematics (Editorial Board)

National

College
▷ Committee/Panel: Undergraduate Curriculum Committee (Member)

Department
▷ Research Group: Wavelets, Frames, and Operator Theory (Chair)
▷ Service Position: Undergraduate Studies (Director)
▷ Event: REU/VIGRE Program on “Wavelet Theory and Matrix Analysis” (Director)
▷ Committee/Panel: Honors Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 304. — Linear Algebra (total enrollment: 35)
MATH 482.200(H) — Research Seminar (total enrollment: 7)
MATH 691. — Research (total enrollment: 1)

Summer
MATH 663. — Seminar in Analysis (total enrollment: 6)
MATH 685. — Directed Studies (total enrollment: 1)

Fall
MATH 446.200(H) — Principles of Analysis I (total enrollment: 4)
MATH 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006
February Fourier Talks, University of Maryland, College Park, MD, February, 2006. (Individual)
Louisiana State University, Baton Rouge, LA, February, 2006. (Individual)
Washington University, St. Louis, MO, April, 2006. (Individual)
Wavelet Workshop, Washington University, St. Louis, MO, April, 2006. (Individual)
“Great Plains Operator Theory Symposium,” University of Iowa, Iowa City, IA, May, 2006. (Individual)
“Recent Results on Operator Algebras,” American Mathematical Society, University of Cincinnati, Cincinnati, OH, October, 2006. (Individual)

• PUBLICATIONS DURING 2006
• **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  - Member, Interdisciplinary Faculty, Computational Nanoscience and Materials - IGERT, [2006]

• **SERVICE DURING 2006**
  
  **International**
  - Editorial/Board: International Journal on Finite Volumes (Member), *Zentralblatt fur Mathematik* (Referee: Journals)
  
  **National**

  **College**
  - Committee/Panel: Grievance Committee (Elected Member)

  **Department**
  - Research Group: WG 2.5 Numerical Software, IFIP (International Federation for Information Processing) (Associate Member)

• **TEACHING ASSIGNMENTS DURING 2006**
  
  **Fall**
  - MATH 251. — Engineering Mathematics III (total enrollment: 75)
  - MATH 609. — Numerical Analysis (total enrollment: 5)
  - MATH 691. — Research (total enrollment: 1)

• **PRESENTATIONS DURING 2006**
  - “A Priori and a Posteriori Error Analysis in Numerical Methods for PDEs,” XXXV Spring Conference of the Union of Bulgarian Mathematicians, Borovetz, Bulgaria, April, 2006. (Individual)
  - Department of Mathematics, Penn State University, University Park, PA, May, 2006. (Individual)
  - Inst. of Mathematics, Bulgarian Academy of Sciences, Sofia, Bulgaria, May, 2006. (Individual)
  - Simulation in Technology Center, University of Heidelberg, Germany, May, 2006. (Individual)


▶ Department of Mathematics, University of Saarbrucken, Germany, June, 2006. (Individual)


▶ Numerical Analysis Seminar, Mathematics Department, Texas A&M University, College Station, TX, September, 2006. (Individual)

• PUBLICATIONS DURING 2006


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• SERVICE DURING 2006
  Department
  ▷ Committee/Panel: Subcommittee T (Member), Subcommittee T (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ MATH 409. — Advanced Calculus I (total enrollment: 17)
  ▷ MATH 425.200(H) — The Mathematics of Contingent Claims (total enrollment: 7)
  Summer
  ▷ MATH 308. — Differential Equations (total enrollment: 43)
  Fall
  ▷ MATH 325. — The Mathematics of Interest (total enrollment: 38)
  ▷ MATH 368. — Introduction to Abstract Mathematical Structures (total enrollment: 28)
  ▷ MATH 485. — Directed Studies (total enrollment: 1)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Graduate Advisor, Mathematics Graduate Advising Office, [2006]

• SERVICE DURING 2006
  National
  ▶ Event: EPSCoR Program (Panelist), Focus Group of Graduate Advisors, AMS National Meeting (Participant)

  College
  ▶ Committee/Panel: Graduate Instruction Committee (Member)

• PRESENTATIONS DURING 2006
  ▶ “Algebraic Cycles,” Workshop, Guanajuato, Mexico, February, 2006.( Individual)
  ▶ Texas Chistian University, Dallas, TX, September, 2006.( Individual)
  ▶ University of Texas, El Paso, TX, October, 2006.( Individual)
• SERVICE DURING 2006

National
▷ Editorial/Board: Inverse Problems (Referee: Journals)

Regional
▷ Committee/Panel: Exam Committee High School Math Conference (Member)

Department
▷ Service Position: Course Czar for Math 152 (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 152. — Engineering Mathematics II (total enrollment: 70)
▷ MATH 628. — Mathematics of Finance (total enrollment: 6)

Summer
▷ MATH 409. — Advanced Calculus I (total enrollment: 15)
• SERVICE DURING 2006

National
▷ Event: Special Session on Algebraic and Enumerative Combinatorics, Joint Mathematics Meetings (Organizer)

Department
▷ Event: IMA Participating Institution Graduate Summer Program on Applicable Algebraic Geometry (Organizer)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 222.200(H) — Linear Algebra (total enrollment: 11)

• PRESENTATIONS DURING 2006

▷ “Jornadas de Ciencia y Sociedad a los 50 Aos de,” Science and Society on the 50th Anniversary of the Faculty of Mathematics, Physics and Astronomy, Crdoba, Argentina, December, 2006. (Individual)

• PUBLICATIONS DURING 2006

• SERVICE DURING 2006

International
▷ Editorial/Board: *Numerische Mathematik* (Referee: Journals)

National

College
▷ Committee/Panel: Tenure and Promotion Advisory Committee (Member)

Department
▷ Service Position: Texas A&M University, Center for Approximation Theory (Director)
▷ Committee/Panel: Math 311 Review Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 311.200(H) — *Topics in Applied Mathematics I* (total enrollment: 12)
▷ MATH 642. — *Analysis for Applications II* (total enrollment: 5)

Summer
▷ MATH 311. — *Topics in Applied Mathematics I* (total enrollment: 19)

Fall
▷ MATH 641. — *Analysis for Applications I* (total enrollment: 16)

• PRESENTATIONS DURING 2006

▷ “Positive-weight Quadature and Localized Tight Frames on Spheres,” Sam Houston State University, Huntsville, TX, October, 2006. (Individual)

▷ “Positive-weight Quadature and Localized Tight Frames on Euclidean Spheres,” University of Utah, Salt Lake City, UT, November, 2006. (Individual)

• PUBLICATIONS DURING 2006


VOLODYMYR NEKRASHEVYCH
ASSOCIATE PROFESSOR (979) 845-2450
MATH-Combinatorial Group Theory & Functional Analysis nekrash@math.tamu.edu

• SERVICE DURING 2006
International
▷ Editorial/Board: Swiss National Science Foundation (Review: Proposals), Geometriae
Dedicata, International Journal of Algebra and Computation (Referee: Journals)

National
▷ Editorial/Board: Groups, Geometry and Dynamics (Member), Groups, Geometry and
Dynamics, Contemporary Mathematics (Referee: Journals)

• TEACHING ASSIGNMENTS DURING 2006
Spring
▷ MATH 222. — Linear Algebra (total enrollment: 17)

Fall
▷ MATH 636. — Topology I (total enrollment: 14)
▷ MATH 689. — Special Topics in (total enrollment: 5)

• PRESENTATIONS DURING 2006
▷ “Geometric Group Theory on the Gulf Coast Conference,” Mobile, AL, March, 2006.(Individual)
▷ “John Milnor’s 75th Birthday,” Holomorphic Dynamics Workshop, Toronto, Canada,
March, 2006.(Invited)
▷ “Asymptotic Methods in Groups and Algebras,” Sao Paulo, Brasil, April, 2006.(Invited)
▷ “Combinatorial and Geometric Group Theory,” Vanderbilt University, Nashville, TN, May,
2006.(Invited)
▷ “Self-similar Groups and Conformal Dynamics,” AIM, Palo Alto, CA, June, 2006.(Individual)
▷ “Algebra, Topology, Functional and Stochastic Analysis,” Kozyova, Lviv Region, Ukraine,
July, 2006.(Individual)
▷ “Analysis and Probability on Fractals,” AMS Eastern Section Meeting, University of Connecticu,
Storrs, CT, October, 2006.(Individual)
▷ “Special Session on Complexity and Computability in Analysis, Geometry, and Dynamics,”
CMS Meeting, Toronto, Canada, December, 2006.(Individual)
▷ Kyiv University, Ukraine, December, 2006.(Individual)
▷ Rice University, Houston, TX, December, 2006.(Individual)

• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

National
▷ Event: AMS Special Session, Arithmetic Geometry and Modular Forms (Co-Organizer)

University
▷ Event: Texas A&M University Number Theory Seminar (Co-Organizer)

Department
▷ Service Position: Post-Doctoral Mentoring (Mentor)
▷ Event: Texas A&M Summer Educational Enrichment in Mathematics, Program in Cryptography (Contributor)
▷ Committee/Panel: Post-Doctoral Hiring Committee (Member), Post-doctoral Hiring Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 251. — Engineering Mathematics III (total enrollment: 67)
▷ MATH 470. — Communications and Cryptography (total enrollment: 20)
▷ MATH 685. — Directed Studies (total enrollment: 1)
▷ MATH 691. — Research (total enrollment: 1)

Summer
▷ MATH 685. — Directed Studies (total enrollment: 1)
▷ MATH 685. — Directed Studies (total enrollment: 1)
▷ MATH 685. — Directed Studies (total enrollment: 1)

Fall
▷ MATH 627. — Theory of Numbers (total enrollment: 13)
▷ MATH 685. — Directed Studies (total enrollment: 2)
▷ MATH 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006

“Galois Groups of Frobenius Difference Equations and Transcendence,” Number Theory Seminar, University of Wisconsin, Madison, WI, April, 2006. (Individual)

“Approximation Diophantienne et Nombres Transcendants,” Centre International de Rencontres Mathématiques, Luminy, France, September, 2006. (Invited)


“Hypergeometric Functions Over Finite Fields and Modular Forms,” Tulane University, New Orleans, LA, November, 2006. (Individual)

“Palmetto Number Theory Series,” University of South Carolina, Columbia, SC, December, 2006. (Invited)

• PUBLICATIONS DURING 2006


• **SERVICE DURING 2006**

  **International**
  - Event: A Scientific Celebration of the 60th Birthday of Professor Richard E. Ewing (Organizer)

  **National**
  - Committee/Panel: Scientific Committee, Copper Mountain Multigrid Meetings (Member)

  **University**
  - Event: The Eight IMACS International Symposium on Iterative Methods in Scientific Computation (Organizer)
  - Editorial/Board: Special Issue of Numerical Linear Algebra Dedicated to the 60th Birthday of R.E.Ewing (Editor)

  **College**
  - Committee/Panel: Tenure and Promotion Advisory Committee (Member)

  **Department**
  - Committee/Panel: Graduate Programs Committee (Member)

• **TEACHING ASSIGNMENTS DURING 2006**

  **Spring**
  - MATH 308 — Differential Equations (total enrollment:)
  - MATH 601. — Methods of Applied Mathematics I (total enrollment: 28)
  - MATH 610. — Numerical Methods in Partial Differential Equations (total enrollment: 8)
  - MATH 691. — Research (total enrollment: 3)

  **Summer**
  - MATH 691. — Research (total enrollment: 1)
  - MATH 691. — Research (total enrollment: 1)

  **Fall**
  - MATH 609. — Numerical Analysis (total enrollment: 11)
  - MATH 691. — Research (total enrollment: 1)

• **PRESENTATIONS DURING 2006**


“Convergence of Multigrid Applied to the PML-Electromagnetic Scattering Problem,” Eight IMACS International Symposium on Iterative Methods in Scientific Compulation, Texas A&M University, College Station, TX, November, 2006.( Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006
  National
  University
  ▶ Advisory Board: Board of Trustees of the Development Foundation (Member)
  College
  ▶ Committee/Panel: International Programs Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ MATH 656. — Functional Analysis II (total enrollment: 5)
  Summer
  ▶ MATH 685. — Directed Studies (total enrollment: 1)
  Fall
  ▶ MATH 311. — Topics in Applied Mathematics I (total enrollment: 17)
  ▶ MATH 685. — Directed Studies (total enrollment: 1)

• PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Vice Provost, Administration (TAMU), [2004]

• TEACHING ASSIGNMENTS DURING 2006
  Fall
  ▷ MATH 640. — Linear Algebra for Applications (total enrollment: 3)

No report received from faculty member.
• AWARDS DURING 2006
  University
    > Outstanding Teaching Award, Texas A&M University

• SERVICE DURING 2006
  National
  Department
    > Committee/Panel: Undergraduate Studies Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
    > MATH 414. — Fourier Series and Wavelets (total enrollment: 22)
  Fall
    > MATH 308. — Differential Equations (total enrollment: 43)
    > MATH 485. — Directed Studies (total enrollment: 1)
    > MATH 609. — Numerical Analysis (total enrollment: 11)

• PRESENTATIONS DURING 2006
  > WavE2006, EPEL, Lausanne, Switzerland, July, 2006. (Individual)
  > Graduate Student Seminar, Texas A&M University, College Station, TX, September, 2006. (Individual)
  > University of Oklahoma, Norman, OK., September, 2006. (Individual)

• PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Associate Department Head, Mathematics, [2002]

• SERVICE DURING 2006

  College
  ▶ Service Position: Information Technology Lab (Director)
  ▶ Committee/Panel: Information Technology Committee (Member), Technology-Mediated Instruction Committee (Member)

  Department
  ▶ Committee/Panel: Executive Committee (Member), Lecturer Evaluations Committee (Member), Moving Algebra Diagnostic Committee (Member), Undergraduate Programs Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ MATH 685. — Directed Studies (total enrollment: 4)
• CHAIRS/PROFESSORSHIPS
  ▶ Arthur George and Mary Emolene Owen Chair in Mathematics [1985]

• SERVICE DURING 2006
  International
  ▶ Professional Affiliation: Section of Mathematics at Paris Academy of Science (Delegator)
  ▶ Event: Non-commutative and Matrix Valued Analysis Meeting (Organizer), Phenomena in Large Dimensions Trimester at Centre Emile Borel (Co-Organizer)

  National
  ▶ Editorial/Board: Duke Mathematical Journal (Member)

  State
  ▶ Editorial/Board: Houston Journal of Mathematics (Member)

  Department
  ▶ Committee/Panel: Endowed Professorship Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Summer
  ▶ MATH 691. — Research (total enrollment: 1)

  Fall
  ▶ MATH 689. — Special Topics in (total enrollment: 6)

• PRESENTATIONS DURING 2006
  ▶ Conference for Ed. Effros 70th Birthday, University of California, Los Angeles, CA, Mary, 2006. (Individual)
  ▶ Odense, April, 2006. (Individual)
  ▶ SUMIRFAS, August, 2006. (Individual)
  ▶ Bangalore, ISI, December, 2006. (Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

University
▷ Committee/Panel: Executive and Nominating Committees, Phi Beta Kappa, Texas A&M University, Chapter (Member)

College
▷ Committee/Panel: Faculty Advisory Council (Representative-at-large)

Department
▷ Service Position: Departmental of Mathematics (Mediator)
▷ Committee/Panel: Awards Committee (Member), Graduate Programs Committee (Member), Promotion and Tenure (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 436 — Introduction to Topology (total enrollment: 13)
▷ MATH 467. — Modern Geometry (total enrollment: 26)

Summer
▷ MATH 666. — Seminar in Geometry (total enrollment: 16)

Fall
▷ MATH 470. — Communications and Cryptography (total enrollment: 35)
• SERVICE DURING 2006
  National
  University
  ▷ Committee/Panel: Postdoctoral Committee (Chair)
  Department
  ▷ Event: Mathematical Physics and Harmonic Analysis Seminar (Organizer)

• TEACHING ASSIGNMENTS DURING 2006
  Fall
  ▷ MATH 151. — Engineering Mathematics I (total enrollment: 85)
  ▷ MATH 151. — Engineering Mathematics I (total enrollment: 92)
  ▷ MATH 685. — Directed Studies (total enrollment: 1)

• PRESENTATIONS DURING 2006
  ▷ Universidad Autonoma De Barcelona, Spain, January, 2006. (Individual)
  ▷ University of Lund, Sweden, March, 2006. (Individual)
  ▷ Universite de Provence, Marseille, France, May, 2006. (Individual)
  ▷ California Institute of Technology, CA, August, 2006. (Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International
▷ Event: Numerical Methods for Hyperbolic Problems at the Eighth IMACS International Symposium on Iterative Methods in Scientific Computation (Organizer), Numerical Methods for Hyperbolic Problems at the Sixth International Conference on Numerical Methods and Applications (Organizer)

National

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 417. — Numerical Analysis I (total enrollment: 15)
▷ MATH 685. — Directed Studies (total enrollment: 1)
▷ MATH 691. — Research (total enrollment: 1)

Summer
▷ MATH 685. — Directed Studies (total enrollment: 1)

Fall
▷ MATH 304. — Linear Algebra (total enrollment: 72)

• PRESENTATIONS DURING 2006

▷ “Pioneers of Bulgarian Mathematics,” International Conference, Sofia, Bulgaria, 2006.(Invited)
▷ Texas Finite Element Rodeo, College Station, TX, March, 2006.(Individual)
▷ “Numerical Methods and Applications,” Sixth International Conference, Borovets, Bulgaria, August, 2006.(Individual)

• PUBLICATIONS DURING 2006

MAURICE H. RAHE
ASSOCIATE PROFESSOR (979) 845-4119
MATH-Ergodic Theory rahe@math.tamu.edu

- SERVICE DURING 2006
  Department
    ▶ Committee/Panel: Textbook Evaluation (Chair)

- TEACHING ASSIGNMENTS DURING 2006
  Spring
    ▶ MATH 308. — Differential Equations (total enrollment: 111)
  Summer
    ▶ MATH 664. — Seminar in Applied Mathematics (total enrollment: 6)
  Fall
    ▶ MATH 470. — Communications and Cryptography (total enrollment: 31)
    ▶ MATH 664. — Seminar in Applied Mathematics (total enrollment: 7)
• SERVICE DURING 2006
  National
  ▶ Editorial/Board: *Differential Geometry and it’s Applications, Houston Journal of Mathematics, Transaction of the AMS* (Referee: Journals)

• TEACHING ASSIGNMENTS DURING 2006
  Fall
  ▶ MATH 308. — *Differential Equations* (total enrollment: 45)

• PRESENTATIONS DURING 2006
  ▶ Geometry and Analysis Seminar, University of Rochester, Rochester, NY, December, 2006. (Individual)
• SERVICE DURING 2006

International
▷ Event: MEGA 2005 (Referee)
▷ Editorial/Board: National Science Foundation/CONICYT (Review: Proposals)

National
▷ Event: Random Analytic Functions and Surfaces at the American Institute of Mathematics (Co-Organizer)

Department
▷ Service Position: Issues of Information Security (Coordinator)
▷ Editorial/Board: Spanish Language (Examiner)
▷ Committee/Panel: Executive Committee (Member), Textbook Committee for Math 302 (Member), Undergraduate Studies Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 304. — Linear Algebra (total enrollment: 16)
▷ MATH 431. — Structures and Methods of Combinatorics (total enrollment: 11)
▷ MATH 685. — Directed Studies (total enrollment: 3)

Summer
▷ MATH 662. — Seminar in Algebra (total enrollment: 1)
▷ MATH 685. — Directed Studies (total enrollment: 3)

Fall
▷ MATH 685. — Directed Studies (total enrollment: 2)

• PRESENTATIONS DURING 2006
▷ “Basic Tropicalia or How to Use Polyhedra to Understand Polynomials,” Workshop on Random Analytic Functions and Surfaces, American Institute of Mathematics, January, 2006. (Invited)
▷ “A-Discriminants and Real Algebraic Geometry,” Graduate Student Seminar, Texas A&M University, College Station, TX, February, 2006. (Invited)
▷ “A-Discriminants and Real Algebraic Geometry,” Undergraduate Seminar Lecture, Trinity University, San Antonio, TX, February, 2006. (Invited)

“Believe it or Prove it,” 8 Pre-calculus Classes, Bryan High School, Bryan, TX, May, 2006. (Individual)

“Distances and Angles,” Mathematics Enrichment Demonstration, 1st - 4th Grade Classes, Aggieland Country School, College Station, TX, May, 2006. (Individual)


“From Pick’s Theorem to Euler Characteristic,” SEEMATH Middle School Students, Texas A&M University, College Station, TX, June, 2006. (Individual)


“On the Effectiveness of Number Theory in Algorithmic Geometry,” Texas A&M University, College Station, TX, September, 2006. (Invited)


“Robots and Polynomials,” Texas A&M Mathematics Contest, College Station, TX, October, 2006. (Invited)

“Lines and Spaces,” Mathematics Enrichment Demonstration, 1st - 4th Grade Class, Aggieland Country School, College Station, TX, December, 2006. (Individual)
• SERVICE DURING 2006

International
▷ Editorial/Board: International J. Quantum Information (Referee: Journals), Journal Pure Applied Algebra (Referee: Journals)

National
▷ Event: Algebra and Combinatorics Seminar (Participant)

• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ MATH 311. — Topics in Applied Mathematics I (total enrollment: 28)

• PRESENTATIONS DURING 2006

▷ University of South Florida, Tampa, FL, February, 2006.( Individual)
▷ Texas A&M University, College Station, TX, March, 2006.( Individual)
▷ University of Houston, Houston, TX, March, 2006.( Individual)
▷ Banff Research Center, Canada, October, 2006.( Individual)
▷ “Combinatorial Representation Theory,” AMS Special Session, Fayetteville, AR, November, 2006.( Individual)

• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

National
▷ Editorial/Board: One Act Play The Panel Performed at AMS Meeting (Author)
▷ Committee/Panel: Imaging and Inverse Problems (Editorial Board), Inverse Problems (Editorial Board), Scientific Board, Radon Institute for Computational and Applied Mathematics (Member)

• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ MATH 308. — Differential Equations (total enrollment: 16)
▷ MATH 308. — Differential Equations (total enrollment: 43)

• PRESENTATIONS DURING 2006

▷ Chinese Academy of Sciences, Beijing, June, 2006. (Individual)
▷ “Geometrical Methods in Inverse Problems,” BIRS Workshop, Banff, Canada, August, 2006. (Individual)
• SERVICE DURING 2006

International
▷ Event: Banff Focussed Research Group, Complex Arrangements: Algebra, Geometry, Topology (Organizer)

National

University
▷ Event: Texas Algebraic Geometry Conference (Organizer)
▷ Committee/Panel: American Mathematical Society Data Committee (Member)

Department
▷ Event: Algebra-Combinatorics Seminar (Organizer), Graduate Student Seminar (Co-Organizer)
▷ Committee/Panel: Committee on Math 311 (Chair), Executive Committee (Member), Graduate Algebra Curriculum (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 689. — Special Topics in (total enrollment: 7)
▷ MATH 691. — Research (total enrollment: 2)

Summer
▷ MATH 691. — Research (total enrollment: 1)

Fall
▷ MATH 685. — Directed Studies (total enrollment: 1)
▷ MATH 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006
▷ “Holonomy Lie Algebras, Graphic Arrangements, and $\text{Tor}^A_\bullet(k,k)$,” AMS Special Session on Syzygies, San Antonio, TX, January, 2006. (Invited)
▷ University of Texas, Arlington, TX, February, 2006. (Individual)
▷ Algebra and Combinatorics Seminar, Texas A&M University, College Station, TX, April, 2006. (Individual)
▷ “$R^k$ for a K-generic Arrangement is $V(\text{ann}(Ex^{k+1}(F(A),S)))$,” BIRS Focussed Research Group on Complex Arrangement, Banff, Canada, June, 2006. (Invited)
“Fitting Ideals and Cohomology Jump Loci,” MSRI Workshop on Configuration Spaces and Arrangements, Berkeley, CA, August, 2006.(Invited)
“Configurations of Smooth Rational Curves in $P^2$,” BIRS Workshop on Hilbert Functions and Syzygies, Banff, Canada, October, 2006.(Invited)

**PUBLICATIONS DURING 2006**
• AWARDS DURING 2006

National
  ▷ National Science Bowl Service Award, Department of Energy

• SERVICE DURING 2006

National
  ▷ Committee/Panel: American Mathematics Competition (Panel)

State
  ▷ Advisory Board: Texas Academy of Science Board of Directors (Member)

College
  ▷ Event: Texas A&M Regional Science Fair (Committee Member and Judge), Texas A&M University Regional Science Bowl (Regional Coordinator), Texas Junior Academy of Science (State Director and Judge), Texas Junior Science and Humanities Symposium (Committee Member and Judge), Texas Science Olympiad (Committee Member and Official), U.S. Department of Energy National Science Bowl (Moderator and Official), Texas A&M University Regional Science Fair (Committee Member and Judge)

Department
  ▷ Service Position: Future Aggie Mathematics Educators (Faculty Advisor), Mathematics Teaching Field Advisor for Secondary Students (Advisor)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▷ MATH 366. — Structure of Mathematics II (total enrollment: 38)
  ▷ MATH 403. — Mathematics and Technology (total enrollment: 13)

Summer
  ▷ MATH 366. — Structure of Mathematics II (total enrollment: 34)

Fall
  ▷ MATH 366. — Structure of Mathematics II (total enrollment: 36)
  ▷ MATH 375. — Intermediate Real Analysis (total enrollment: 3)
  ▷ MATH 403. — Mathematics and Technology (total enrollment: 17)

• PRESENTATIONS DURING 2006

“The Mathematics of Ripley’s Believe It Or Not,” Texas Section MAA, Wichita Falls, TX, April, 2006. (Individual)


“Fermi Questions,” Texas Science Olympiad Coaches Clinic, October, 2006. (Individual)

“We’ve Got Your Number,” Texas Science Olympiad Coaches Clinic, October, 2006. (Individual)

• PUBLICATIONS DURING 2006

• **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  
  ▷ Associate Dean for Assessment and PreK-12 Education, Office of Assessment and PreK-12 Education, [2006]
  
  ▷ Director, ITS Center for Teaching and Learning, Information Technology in Science Center for Teaching and Learning (ITS), [2000]

• **SERVICE DURING 2006**

  **National**
  
  ▷ Editorial/Board: School Science and Mathematics Journal (Associate Editor)
  
  ▷ Committee/Panel: National Council of Teachers of Mathematics (Chair)

  **State**
  
  ▷ Event: Conference for the Advancement of Mathematics Teaching Executive Board (Vice Chair)

  **University**
  
  ▷ Committee/Panel: Center for Teaching Excellence Faculty Advisory Board (Member), Children, Youth, and Family Executive Committee (Member), NSF-funded Policy Research Initiative in Science Education (Chair), Quality Enhancement Plan Executive Committee (Member), Sigma Xi Education Committees (Member), University Council on Teacher Education (Member), VPR Office of Sponsored Projects (Member)

  **College**
  
  ▷ Event: Regional Junior Science Bowl (Judge), Regional Junior Science Bowl (Judge)
  
  ▷ Committee/Panel: College of Education Selection Committee for Mathematics Education Position (Member), College Quality Enhancement Plan Council (Chair), Executive Committee (Member), Executive Committee (Member), Technology-Mediated Instruction Committee (Member)

  **Department**
  
  ▷ Research Group: Information Technology in Science Center for Teaching and Learning (Director)

• **PRESENTATIONS DURING 2006**


  ▷ “Developing Questioning Skills to Enhance Students’ Mathematical Thinking: A Professional Development Experience for Middle School Mathematics Teachers,” AMS/MMA Joint Meetings, San Antonio, TX, January, 2006. (Individual)


“Creating Questions to Promote Mathematical Thinking,” Conference for the Advancement of Mathematics Teaching, Houston, TX, July, 2006. (Individual)


Teacher Quality Meeting, San Antonio, TX, December, 2006. (Individual)

**PUBLICATIONS DURING 2006**

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Graduate Advisor, Mathematics Graduate Advising Office, [2001]

• SERVICE DURING 2006
  International
  ▶ Editorial/Board: *Glasgow Mathematical Journal* (Associate Editor), *Studia Mathematica* (Referee: Journals)
  National
  ▶ Event: AMS Special Session on Extension of Functions (Organizer), AMS Special Session on Geometry of Banach Spaces and Connections With Other Areas (Organizer)
  Department
  ▶ Event: Frames, Banach Spaces and Signal Processing (Organizer)
  ▶ Committee/Panel: Subcommittee T&P (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Summer
  ▶ MATH 691. — Research (total enrollment: 1)
  Fall
  ▶ MATH 663. — Seminar in Analysis (total enrollment: 6)
  ▶ MATH 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006
  ▶ “Banach Spaces and Their Applications in Analysis,” Miami University, Oxford, OH, May, 2006.( Invited)
  ▶ Lancaster University, Lancaster, United Kingdom, June, 2006.( Individual)
  ▶ University College London, Gower Street, London, June, 2006.( Individual)
  ▶ University of Cambridge, United Kingdom, June, 2006.( Individual)

• PUBLICATIONS DURING 2006


NATARAJAN SIVAKUMAR
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MATH-Approximation Theory sivan@math.tamu.edu

• SERVICE DURING 2006
  Department
  ▶ Service Position: Undergraduate Students (Mentor)
  ▶ Event: Center for Approximation Theory CAT Seminar Series (Organizer)
  ▶ Committee/Panel: Library Committee (Member), Mathe 151 Course (Co-Coordinator),
    Speakers Committee (Member), Teaching Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ MATH 172.200(H) — Calculus (total enrollment: 8)
  ▶ MATH 663. — Seminar in Analysis (total enrollment: 6)
  Fall
  ▶ MATH 222. — Linear Algebra (total enrollment: 10)
  ▶ MATH 663. — Seminar in Analysis (total enrollment: 7)

• PUBLICATIONS DURING 2006
  ▶ Sivakumar, N. (2006) The (he)art of an analyst: some tools and techniques of
    basic mathematical analysis Texas A&M University.
• SERVICE DURING 2006
  Department
  ▶ Event: MathCOUNTS (Volunteer)
  ▶ Committee/Panel: Committee to Compose Problems for High School Mathematics Contest (Chairman), State Employee Charitable Campaign (Representative), Teaching Evaluation Committee (Member), Undergraduate Programs Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ MATH 654. — Algebra II (total enrollment: 12)
  Fall
  ▶ MATH 151. — Engineering Mathematics I (total enrollment: 178)
• SERVICE DURING 2006

International

National
▷ Service Position: External promotion and tenure cases (Panel)

Department
▷ Committee/Panel: Frontiers Committee (Chair), Graduate Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 447.200(H) — *Topics in Analysis* (total enrollment: 3)
▷ MATH 691. — *Research* (total enrollment: 1)
▷ MATH 695. — *Frontiers in Mathematical Research* (total enrollment: 5)

Summer
▷ MATH 308. — *Differential Equations* (total enrollment: 38)
▷ MATH 685. — *Directed Studies* (total enrollment: 1)
▷ MATH 685. — *Directed Studies* (total enrollment: 1)
▷ MATH 691. — *Research* (total enrollment: 1)

Fall
▷ MATH 407. — *Complex Variables* (total enrollment: 20)
▷ MATH 685. — *Directed Studies* (total enrollment: 1)
▷ MATH 691. — *Research* (total enrollment: 1)
▷ MATH 695. — *Frontiers in Mathematical Research* (total enrollment: 5)

• PRESENTATIONS DURING 2006
▷ “Singular Masas,” University of Houston, Houston, TX, April, 2006. (Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International

▷ Service Position: Banff International Research Station, International Committee for Museum Security (Reviewer)
▷ Professional Affiliation: Semester on Real Algebraic and Tropical Geometry at the Centre Bernoulli (Co-Organizer)
▷ Event: Positive Polynomials, Banff International Research Station (Co-Organizer), Workshop on Schubert Calculus and Schubert Geometry at the Banff International Research Station (Co-Organizer)
▷ Committee/Panel: SIAM Meeting on Discrete Mathematics, Scientific Committee (Member)

National

▷ Event: Special Session on Combinatorial Representation Theory, AMS Regional Meeting (Co-Organizer)
▷ Committee/Panel: NSF Panel for Focused Research Groups (Member)

University

▷ Event: IMA Summer Graduate Program, Applicable Algebraic Geometry (Co-Organizer)

Department

▷ Event: Algebra Seminar (Organizer), Positive Polynomials (Co-Organizer), SIAM Meeting on Discrete Mathematics (Organizing Committee), Workshop on Non-linear Computational Geometry (Co-Organizer), Workshop on Schubert Calculus and Schubert Geometry
(Co-Organizer)
▷ Committee/Panel: Executive Committee (Member)

- **TEACHING ASSIGNMENTS DURING 2006**
  
  **Spring**
  ▷ MATH 691. — **Research** (total enrollment: 1)

  **Summer**
  ▷ MATH 691. — **Research** (total enrollment: 1)

  **Fall**
  ▷ MATH 151.201-202(H) — **Engineering Mathematics I** (total enrollment: 51)
  ▷ MATH 311. — **Topics in Applied Mathematics I** (total enrollment: 15)
  ▷ MATH 685. — **Directed Studies** (total enrollment: 1)
  ▷ MATH 691. — **Research** (total enrollment: 2)

- **PRESENTATIONS DURING 2006**
  ▷ Universität Konstanz, January, 2006. (Individual)
  ▷ Technische Universität München, February, 2006. (Individual)
  ▷ Technische Universität, February, 2006. (Individual)
  ▷ University of Bergen, March, 2006. (Individual)
  ▷ University of Oslo, March, 2006. (Individual)
  ▷ Universität Innsbruck, April, 2006. (Individual)
  ▷ Universität Innsbruck, April, 2006. (Individual)
  ▷ Universität Bayreuth, May, 2006. (Individual)
  ▷ Universität Stuttgart, May, 2006. (Individual)
  ▷ Universität München, June, 2006. (Individual)
  ▷ Universität Zürich, June, 2006. (Individual)
  ▷ Texas A&M University, College Station, TX, September, 2006. (Individual)
  ▷ Indiana University Purdue University, Indianapolis, IN, October, 2006. (Individual)
  ▷ AMS Sectional Meeting, Fayetteville, AR, November, 2006. (Individual)
  ▷ Texas State University, San Marcos, TX, December, 2006. (Individual)

- **PUBLICATIONS DURING 2006**


Advances in Geometry, vol. 6, 301-322.


Experimental Mathematics, vol. 15, 199-221.

Advances in Mathematics, vol. 204, 116-151.
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Undergraduate Advisor, Mathematics Undergraduate Advising Office, [1990]

• SERVICE DURING 2006
  
  Regional
  ▶ Event: Annual High School Mathematics Contest (Supervisor)

  University
  ▶ Service Position: Smith Fund (Treasurer)
  ▶ Event: Summer Honors Invitational Program (Presenter)
  ▶ Committee/Panel: Tenure Mediation (Elected Member)

  Department
  ▶ Service Position: Freshmen Orientation (Mentor), Maple (Ambassador)
  ▶ Committee/Panel: Scholarship Committee (Chair), Undergraduate Programs Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  ▶ MATH 170. — Freshman Mathematics Laboratory (total enrollment: 33)
  ▶ MATH 172. — Calculus (total enrollment: 25)
  ▶ MATH 285. — Directed Studies (total enrollment: 5)
  ▶ MATH 425. — The Mathematics of Contingent Claims (total enrollment: 26)

  Fall
  ▶ MATH 170. — Freshman Mathematics Laboratory (total enrollment: 58)
  ▶ MATH 220 — Fundamentals of Discrete Mathematics (total enrollment: )
  ▶ MATH 221. — Several Variable Calculus (total enrollment: 35)
  ▶ MATH 222. — Linear Algebra (total enrollment: 25)
  ▶ MATH 285. — Directed Studies (total enrollment: 3)
  ▶ MATH 485. — Directed Studies (total enrollment: 1)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Associate Director, Institute for Scientific Computation, [1999]
  ▶ Professor (J), Computer Science, [1993]

• SERVICE DURING 2006
  International
  ▶ Editorial/Board: Research Grants Council, Hong Kong (Reviewer)

  National

  College
  ▶ Committee/Panel: Campus Community Campaign Committee (Member)

  Department
  ▶ Editorial/Board: Tenure and Promotion Cases (Reviewer)
  ▶ Committee/Panel: Algebra, Number Theory, and Combinatorics (Chair), Post-doctoral Hiring Committee (Member), Promotion Committee (Chair), Promotion Committee (Member), Subcommittee P (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ MATH 416.200(H) — Modern Algebra II (total enrollment: 3)
  ▶ MATH 691. — Research (total enrollment: 2)

  Summer
  ▶ MATH 691. — Research (total enrollment: 1)
  ▶ MATH 691. — Research (total enrollment: 1)

  Fall
  ▶ MATH 251. — Engineering Mathematics III (total enrollment: 62)
  ▶ MATH 662. — Seminar in Algebra (total enrollment: 10)
  ▶ MATH 691. — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006
  ▶ “New Mathematics and Algorithms for 3-D Image Analysis,” IMA Workshop, Institute for Mathematics and it’s Application, University of Minnesota, Minneapolis, MN, January, 2006. (Invited)

“Shape Spaces,” IMA Workshop, Institute for Mathematics and its Applications, University of Minnesota, Minneapolis, MN, April, 2006. (Invited)


Purdue University, School of Electrical and Computer Engineering, West Lafayette, IN, May, 2006. (Individual)

- PUBLICATIONS DURING 2006
  - Stiller, P.F. (2006) Electronic Imaging, Vision Geometry XIV San Jose, CA
• SERVICE DURING 2006

International
▷ Event: Program in Complex Analysis, Operator Theory, and Applications to Mathematical Physics, Vienna (Co-Organizer)
▷ Editorial/Board: *International Journal of Mathematics, Manuscripta Mathematica*, (Referee: Journals)

National
▷ Event: Special Session on PDE Methods in Several Complex Variables at AMS Meeting (Organizer)

University
▷ Committee/Panel: Faculty Senate (Faculty Senator - 09)

College
▷ Committee/Panel: Undergraduate Curriculum Committee (Member)

Department
▷ Committee/Panel: Executive Committee (Member), Subcommittee P (Member), Undergraduate Scholarship Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 222. — Linear Algebra (total enrollment: 29)
▷ MATH 689. — Special Topics in (total enrollment: 7)
▷ MATH 691. — Research (total enrollment: 3)

Summer
▷ MATH 412. — Theory of Partial Differential Equations (total enrollment: 14)
▷ MATH 691. — Research (total enrollment: 1)
▷ MATH 691. — Research (total enrollment: 1)

Fall
▷ MATH 611. — Ordinary Differential Equations (total enrollment: 5)
▷ MATH 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006

510 2006 Mathematics annual report

“Degenerate Structures in Complex Analysis: From the Past to the Future,” In Honor of K. Diederich, Bergisch-Gladbach, Germany, May, 2006.(Invited)

“Complex Analysis, and Differential Geometry,” In Honor of S. Baouendi, University of Notre Dame, Notre Dame, IN, June, 2006.(Invited)

“Several Complex Variables,” Honor of Qi-Keng Lu’s 80th Birthday, Chinese Academy of Sciences, Beijing, China, June, 2006.(Invited)

International Congress of Mathematicians, Madrid, Spain, August, 2006.(Invited)


• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

International
▷ Editorial/Board: *Geometriae Dedicata* (Referee: Journals), *Groups, Geometry and Dynamics, European Mathematical Society* (Editor)

National
▷ Professional Affiliation: Analysis and Group Actions on Trees and Buildings (Organizer)
▷ Advisory Board: MAA Advisory Panel on American Mathematical Competitions (Member)
▷ Committee/Panel: Grading Committee for United States of America Mathematics Olympiad (Member), MAA Committee on United States of America Mathematics Olympiad (Member)

State
▷ Committee/Panel: Texas Talent Search Committee (Member)

Department
▷ Event: Groups and Dynamics Seminar (Organizer), Mini Workshop Groups and Dynamics (Organizer)

• TEACHING ASSIGNMENTS DURING 2006

Summer
▷ MATH 423. — *Linear Algebra II* (total enrollment: 29)

Fall
▷ MATH 304. — *Linear Algebra* (total enrollment: 35)
▷ MATH 601. — *Methods of Applied Mathematics I* (total enrollment: 40)

• PRESENTATIONS DURING 2006

▷ Rutgers University, New Brunswick, NJ, February, 2006. (Individual)
▷ Carleton University, Ottawa, Canada, March, 2006. (Individual)
▷ Geometric Groups on the Gulf Coast Conference, Mobile, AL, March, 2006. (Individual)
Lafayette/Lehigh Geometry and Topology Mini Conference, Easton, PA, March, 2006. (Individual)
School of Mathematics Seminar, Institute for Advanced Study, Princeton, NJ, March, 2006. (Individual)
MIT Combinatorics Seminar, Massachusetts Institute of Technology, Boston, MA, April, 2006. (Individual)
Group Theory Seminar, Rutgers University, New Brunswick, NJ, May, 2006. (Individual)
Max-Planck-Institute für Mathematik, Bonn, Germany, May, 2006. (Individual)
P Versus NP Workshop, University of California, Berkeley, CA, June, 2006. (Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006
National

Department
▷ Committee/Panel: Teaching Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
Spring
▷ MATH 311. — Topics in Applied Mathematics I (total enrollment: 32)
▷ MATH 601. — Methods of Applied Mathematics I (total enrollment: 24)

Fall
▷ MATH 409. — Advanced Calculus I (total enrollment: 17)

• PRESENTATIONS DURING 2006
▷ San Diego State University, San Diego, CA, July, 2006. (Invited)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International
▷ Editorial/Board: *Inventiones, J fur die Reine und Angew Math, Israel J of Mathematics* (Referee: Journals), *International Journal of Number Theory* (Editor)

National

University
▷ Event: Number Theory Seminar (Co-Organizer)

Department
▷ Committee/Panel: Search Committee, Distinguished Chair (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 302. — *Discrete Mathematics* (total enrollment: 28)

Fall
▷ MATH 302. — *Discrete Mathematics* (total enrollment: 35)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

National

University
▷ Committee/Panel: Academic Affairs Committee (Chair), Ad hoc University Studies Degree Committee (Co-Chair), Faculty Senate (Faculty Senator - 03), Faculty Senate (Caucus Leader)

Department
▷ Service Position: Ombudsman, Department of Mathematics (Ombudsman)
▷ Committee/Panel: Awards Committee (Member), Election Committee (Chair), INEN Ph.D. Student (Graduate Council Representative), Teaching Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 451. — Theory of Ordinary Differential Equations (total enrollment: 8)

Fall
▷ MATH 221. — Several Variable Calculus (total enrollment: 32)
▷ MATH 409.200(H) — Advanced Calculus I (total enrollment: 9)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006
  
  International
  ▷ Editorial/Board: *Geometriae Dedicata, Sbornik Mathematics* (Referee: Journals)

  National
  ▷ Editorial/Board: *Ergodic Theory and Dynamical Systems, Journal of Modern Dynamics*
  (Referee: Journals)

• TEACHING ASSIGNMENTS DURING 2006

  Fall
  ▷ MATH 412. — *Theory of Partial Differential Equations* (total enrollment: 13)

• PRESENTATIONS DURING 2006

  ▷ “Free Self-similar Groups,” Rice University, Houston, TX, February, 2006. (Individual)
  ▷ “Dynamics of Billiards,” Texas A&M University, College Station, TX, March, 2006. (Individual)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Computational Nanoscience and Materials - IGERT, [2006]
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• SERVICE DURING 2006

  International

  National
  ▶ Committee/Panel: National Science Foundation Proposal Review Panel (Member)

  University
  ▶ Event: Office of Proposal Development Panel Presentation on Developing Competitive Proposal for Federal Funding Agencies (Member)
  ▶ Committee/Panel: 44th Annual Meeting of the Society of Engineering Science Organizing Committee (Member), External Advisory Board (Member)

  Department
  ▶ Service Position: Undergraduate Math Honors (Mentor), Undergraduate Mathematical Biology Majors (Advisor)
  ▶ Event: Applied Mathematics Seminar (Organizer)
  ▶ Committee/Panel: Executive Committee (Member), Faculty of Material Science and Engineering (Member), Honors Committee (Member)

  Interdisciplinary/Intercollegiate
  ▶ Committee/Panel: Admissions and Advising Committee for Graduate Program (Member)

• TEACHING ASSIGNMENTS DURING 2006
Spring
▷ MATH 647. — Mathematical Modelling (total enrollment: 18)
▷ MATH 685. — Directed Studies (total enrollment: 2)
▷ MATH 691. — Research (total enrollment: 1)

Summer
▷ MATH 669. — Seminar in Math Biology (total enrollment: 6)
▷ MATH 685. — Directed Studies (total enrollment: 1)
▷ MATH 685. — Directed Studies (total enrollment: 4)
▷ MATH 691. — Research (total enrollment: 1)
▷ MATH 691. — Research (total enrollment: 2)

Fall
▷ MATH 285. — Directed Studies (total enrollment: 5)
▷ MATH 489. — Special Topics in (total enrollment: 10)
▷ MATH 603. — Methods of Applied Mathematics II (total enrollment: 29)
▷ MATH 691. — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006
▷ “Mathematical Biology at Texas A&M University,” NSF/West Point Biology & Mathematics Workshop, West Point, NY, April, 2006. (Individual)
▷ Texas Tech University, Lubbock, TX, October, 2006. (Individual)
▷ University of California, Berkeley, CA, November, 2006. (Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

National

Department
▷ Committee/Panel: Graduate Programs Committee (Member), Subcommittee T (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 308. — Differential Equations (total enrollment: 54)
▷ MATH 409. — Advanced Calculus I (total enrollment: 17)
▷ MATH 691. — Research (total enrollment: 1)

Fall
▷ MATH 658. — Applied Harmonic Analysis (total enrollment: 5)

• PRESENTATIONS DURING 2006

▷ “A Primer on Least Squares Approximation With RBF’s,” Sixth International Conference on Curves and Surfaces, Avignon, France, June, 2006.( Individual)
▷ “Interpolation of Scattered Data on Spheres Using SBF’s: Direct and Inverse Error Estimates and a Bernstein Inequality,” Department of Mathematics, Sam Houston State University, Huntsville, TX, October, 2006.( Individual)

• PUBLICATIONS DURING 2006

• SERVICE DURING 2006

International
▷ Event: Banff International Research Station Workshop on Hochschild Cohomology of Algebras: Structure and Applications (Co-Organizer)

National

Department
▷ Committee/Panel: Graduate Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 691. — Research (total enrollment: 1)

Summer
▷ MATH 691. — Research (total enrollment: 1)

Fall
▷ MATH 166. — Topics in Contemporary Mathematics II (total enrollment: 100)
▷ MATH 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006

▷ “Oberseminar Hopfalgbebrnen,” University of Munich, Germany, May, 2006. (Individual)
▷ Algebra and Combinatorics Seminar, Texas A&M University, College Station, TX, May, 2006. (Individual)
▷ Bristol-Leicester-Oxford Colloquium, University of Oxford, United Kingdom, May, 2006. (Individual)

• PUBLICATIONS DURING 2006

• SERVICE DURING 2006

International
▷ Event: The International Conference on Formal Power Series and Algebraic Combinatorics Committee (Organizer)
▷ Editorial/Board: *Ars Combinatoria, European Journal of Combinatorics* (Referee: Journals)
▷ Committee/Panel: AMS Subcommittee on International Meetings (Member)

National
▷ Professional Affiliation: American Mathematical Society (Member)
▷ Event: Special Session on Algebraic and Enumerative Combinatorics at joint AMS-MAA-SIAM National Meeting (Organizer)
▷ Committee/Panel: American Mathematical Society (Member), AMS Committee on Conference and Meeting (Member)

State
▷ Event: CombinaTexas Conference, Texas A&M University (Organizer), CombinaTexas Conference, Texas Southern University (Organizer)

University
▷ Committee/Panel: AMS Subcommittee on New Conference, Committee on Conference and Meeting (Member)

Department
▷ Committee/Panel: Promotion Subcommittee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ MATH 689.606 — *Special Topics in* (total enrollment: 7)

Fall
▷ MATH 171.503 — *Analytic Geometry and Calculus* (total enrollment: 28)
▷ MATH 302.502 — *Discrete Mathematics* (total enrollment: 29)

• PRESENTATIONS DURING 2006
“Extended Goncarov Polynomials, Parking Functions, and Lattice Paths,” The Seventh Annual CombinaTexas Conference, Houston, TX, February, 2006. (Individual)


“Random Graphs, The Liar Game,” Center of Combinators, Nankai University, Tianjin, China, May, 2006. (Individual)

“The Appolonian Circle Packings,” Beijing University, Beijing, China, June, 2006. (Individual)

“G-parking Functions, Graph Search, and Tutte Polynomial,” The Second National Conference on Combinatorics and Graph Theory, Nankai University, Tianjin, China, August, 2006. (Invited)

• PUBLICATIONS DURING 2006

• SERVICE DURING 2006

National
  ▶ Service Position: Computer Lab Activity, Iola Middle School Math Club (Presenter), Maple Adoption Program (Coordinator)
  ▶ Professional Affiliation: Mathematics Association of America (Member)
  ▶ Event: Multivariable Calculus Focus Group (Participant), Stewart Calculus Technology Focus Group (Participant)

Regional
  ▶ Service Position: Children’s Museum of the Brazos Valley (Consultant)

University
  ▶ Service Position: Pi Mu Epsilon (Faculty Advisor)
  ▶ Event: Maple Day at Texas A&M University (Organizer)

College
  ▶ Event: Mitchell Symposium Hands-On Science Exhibition (Participant), Regional Junior Science Bowl (Volunteer), Regional Science Bowl (Judge)
  ▶ Committee/Panel: Faculty Advisory Council (Elected Member)

Department
  ▶ Service Position: Math 152 Final Review Engineering Society (Presenter)
  ▶ Event: 6th Annual Math Career Fair (Participant), First Annual Integral Bee (Organizer), High School Math Contest (Member), Math Awareness Month (Organizer), Summer Honors Invitational Program (Presenter)

• TEACHING ASSIGNMENTS DURING 2006

Spring
  ▶ MATH 152.201-202(H) — Engineering Mathematics II (total enrollment: 35)
  ▶ MATH 251. — Engineering Mathematics III (total enrollment: 67)

Summer
  ▶ MATH 691. — Research (total enrollment: 1)

Fall
  ▶ MATH 251. — Engineering Mathematics III (total enrollment: 84)
  ▶ MATH 253.201-202(H) — Engineering Mathematics III (total enrollment: 29)

• PRESENTATIONS DURING 2006

“Texas A&M’s Summer Educational Enrichment Program for Middle School Students,” Joint Mathematics Meeting, San Antonio, TX, January, 2006. (Individual)

“Maplets (Maple Apples) for Calculus,” Teaching With Technology Conference, Texas A&M University, College Station, TX, February, 2006. (Individual)


“Distance Education in Calculus,” University of Helsinki, Finland, May, 2006. (Individual)


“Texas A&M Enrichment for Middle School Students,” MAA MathFest Special Session: Attracting and Retaining Students to Mathematics Programs via Outreach, Knoxville, TN, August, 2006. (Individual)

• SERVICE DURING 2006

International
➤ Event: International Conference on Theoretical and Numerical Nonlinear PDE (Organizer)

National
➤ Editorial/Board: Various Journals (Referee: Journals)

Regional
➤ Service Position: a Local Chinese School (Advisor)

University
➤ Service Position: Table Tennis Club (Advisor)
➤ Event: China Faculty Association (Director)
➤ Advisory Board: Texas A&M University Chinese Student and Scholar Association (Advisor)

Department
➤ Service Position: Incoming Chinese Students (Mentor)

• TEACHING ASSIGNMENTS DURING 2006

Spring
➤ MATH 652. — Optimization II (total enrollment: 7)
➤ MATH 691. — Research (total enrollment: 1)

Summer
➤ MATH 691. — Research (total enrollment: 1)

Fall
➤ MATH 311. — Topics in Applied Mathematics I (total enrollment: 34)
➤ MATH 311. — Topics in Applied Mathematics I (total enrollment: 36)
➤ MATH 691. — Research (total enrollment: 1)

• PRESENTATIONS DURING 2006

➤ “Local Theory and Methods for Solving Multiple Solutions,” Shanghai University, Shanghai, China, May, 2006. (Individual)


“A Local Theory for Finding Multiple Solutions,” AMS Meeting 1019, Salt Lake City, UT, October, 2006. (Invited)

PUBLICATIONS DURING 2006

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Professor (J), Statistics, [1988]

• SERVICE DURING 2006
  National
  ▶ Event: Probability Inequalities With Applications to High Dimensional Phenomena (Co-Organizer)
  ▶ Editorial/Board: National Science Foundation, NSA (Review: Proposals), Annals of Probability (Associate Editor), Geometric and Functional Analysis Seminar (Referee: Journals), Journal of Theoretical Probability (Associate Editor), Proceedings of the AMS, Statistics and Probability Letters, and Transactions of the AMS (Referee: Journals)
  College
  ▶ Committee/Panel: Grievance Committee (Elected Member)
  Department
  ▶ Event: Workshop in Linear Analysis and Probability (Co-Organizer)
  ▶ Committee/Panel: Awards Committee (Chair), Executive Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ MATH 220. — Fundamentals of Discrete Mathematics (total enrollment: 22)
  ▶ MATH 646. — A Survey of Mathematical Problems II (total enrollment: 19)
  Fall
  ▶ MATH 606. — Theory of Probability I (total enrollment: 8)

• PRESENTATIONS DURING 2006

• PUBLICATIONS DURING 2006
7. Research Activity, 2006

This section contains information on all funded research activity for the calendar year 2006. Information was initially reported by faculty and verified whenever possible through the granting agency. Because of calculations and rounding there is a small margin of error.

*Information reported by faculty:*

- Title
- Granting Agency
- PIs, Co-PIs, and co-workers (internal/external)
- Total Funding
- Indirect Costs
- Start & End Dates

*Calendar year calculations:*

- Total - Indirect = Direct
- # Days Total Grant = End Date - Start Date
- Daily Grant Award = Total Funding Reported / # Days Total Grant
- Grant Award for 2006 = # Days 2006 × Daily Grant Award
### 7.1 Summary of Research Support, 2006

<table>
<thead>
<tr>
<th>Grantee</th>
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<td><strong>Subtotal:</strong> Air Force Office of Scientific Research</td>
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<td><strong>Department of Education</strong></td>
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530 2006 Mathematics annual report
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<tr>
<td>Allen, G.</td>
<td>TRACK1, GK-12: Fellows Integrate Science/Math In Rural Middle Schools, (with: G. Allen, V. Cassone, P. Yasskin)</td>
<td>1/1/2004</td>
<td>12/31/2007</td>
<td>25,000</td>
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**Subtotal:** Department of Education 104,408 0 104,408

**Subtotal:** Department of Energy 65,195 26,482 91,677

**Subtotal:** Lawrence Livermore National Laboratory 17,219 4,477 21,696

**Subtotal:** National Institutes of Health 57,708 0 57,708

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**National Science Foundation**

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<td>Allen, G.</td>
<td>TRACK1, GK-12: Fellows Integrate Science/Math In Rural Middle Schools, (with: G. Allen, V. Cassone, P. Yasskin)</td>
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<td>12/31/2007</td>
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SEC. 7.

RESEARCH ACTIVITY 531
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<td>Battle, G.A.</td>
<td>Osiris Wavelets and Quantum Entanglement</td>
<td>7/1/2002</td>
<td>6/30/2006</td>
<td>4,270</td>
<td>1,894</td>
<td>6,164</td>
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<td>Dykema, K.J.</td>
<td>(REN) Free Probability Theory and Applications to Free Group Factors</td>
<td>7/1/2006</td>
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<td>29,806</td>
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<td>Development of a High Density, High Performance Beowulf Cluster, ...</td>
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<td>Erdelyi, T.</td>
<td>Exponential Sums</td>
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<td>5/31/2008</td>
<td>39,349</td>
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<td>Development of a High Density, High Performance Beowulf Cluster, ...</td>
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<td>7/31/2007</td>
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<td>Ewing, R.E.</td>
<td>Noyce Scholarship (Supplement to ITS Center Grant)</td>
<td>7/31/2002</td>
<td>8/31/2006</td>
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<td>Grigorchuk, R.I.</td>
<td>Algebraic, Combinatorial, Spectral, and Algorithmic Properties ...</td>
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<td>J. Guermond, J. Ross, Jr, J. Walton)</td>
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<td>(with: J. Guermond, B. Popov)</td>
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<td>Thin Film Flows and General Conservative Systems</td>
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<td>Geometric Approach to Efficient Algorithms</td>
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<td>Johnson, G. Pisier)</td>
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<td>G. Pisier, J. Zinn)</td>
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<td>(with: W. Bangerth, P. Kuchment)</td>
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<td>Periodic Orbits in Hamiltonian Systems</td>
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<td>Operator Theory</td>
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<td>Sciences, (with: A. Boggess, D. Larson, J. Walton)</td>
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<td>Matusevich, L.F.</td>
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<td>Nekrashevych, V.</td>
<td>Iterated Monodromy Groups</td>
<td>9/1/2006</td>
<td>8/31/2009</td>
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<td>Papanikolas, M.A.</td>
<td>Special Functions and Transcendence</td>
<td>8/1/2006</td>
<td>7/31/2009</td>
<td>14,376</td>
<td>5,914</td>
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<td>Papanikolas, M.A.</td>
<td>Transcendental Numbers and Special Analytic Functions</td>
<td>8/1/2003</td>
<td>7/31/2006</td>
<td>7,498</td>
<td>3,412</td>
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<td>Popov, B.</td>
<td>Nonlinear Finite Element Approximation of First-Order PDE's in L1, (with: J. Guermond, B. Popov)</td>
<td>6/1/2005</td>
<td>5/31/2008</td>
<td>78,583</td>
<td>34,341</td>
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<td>Rojas, J.</td>
<td>CAREER: Complexity, Reality, and Rationality in Large Non-linear Equation Solving</td>
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<td>8/31/2009</td>
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<td>Schenck, H.K.</td>
<td>Collaborative Research: Symbolic Computations in Algebra and Topology</td>
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<td>Schielack, J.F.</td>
<td>Engaging Middle School Students in Student-Directed Inquiry Through Virtual Environments for Learning</td>
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<td>8/31/2011</td>
<td>28,669</td>
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<td>Schielack, J.F.</td>
<td>Noyce Scholarship (Supplement to ITS Center Grant), (with: R. Ewing, H. Newton, J. Schielack)</td>
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<td>Schielack, J.F.</td>
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<td>Schlumprecht, T.B.</td>
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<td>Smith, R.R.</td>
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<td>6/30/2008</td>
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<td>Sottile, F.</td>
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<td>7/31/2007</td>
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<td>Stiller, P.F.</td>
<td>Development of Spatially Immersive Visualization Facilities</td>
<td>8/1/2005</td>
<td>7/31/2008</td>
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<td>Straube, E.J.</td>
<td>(REN) Research and Education in Several Complex Variables</td>
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<td>Tretkoff, P.</td>
<td>Transcendence and Geometry on Shimura Varieties in the Commutative and Non-commutative Case</td>
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SEC. 7. RESEARCH ACTIVITY 537
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* Subtotal: National Science Foundation 2,326,905 296,174 2,623,079

* National Security Agency

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**University Agencies**

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| **Total Lima-Filho, P.**            |                                                                        |             |             | 10,615 | 0        | 10,615  |

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**Pasciak, J.E.**

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2006 Mathematics Annual Report
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| **Subtotal Stecher, M.J.** |                                                                     |             |             |        |          | 24,079 |

| **Stiller, P.F.** | Geometric Methods for ATR: Shape Spaces, Metrics, Object/Image Relations and Shapelets | 6/1/2004    | 5/31/2007   | 85,155 | 0        | 85,155 |
| Air Force Office of Scientific Research | Development of Spatially Immersive Visualization Facilities | 8/1/2005    | 7/31/2008   | 33,333 | 0        | 33,333 |
| National Science Foundation | Non-Standard Splines for Geometric Modeling, (with: H. Schenck, P. Stiller) | 1/1/2004    | 12/31/2006  | 24,915 | 0        | 24,915 |
| Advanced Research Program/Advanced Technology Program |                                                                     |             |             |        |          | 143,403 |
| **Subtotal Stiller, P.F.** |                                                                     |             |             |        |          | 143,403 |

| **Straube, E.J.** | (REN) Research and Education in Several Complex Variables | 6/1/2005    | 5/31/2008   | 27,980 | 12,731   | 40,711 |
| **Subtotal Straube, E.J.** |                                                                     |             |             |        |          | 40,711 |

| **Subtotal Sunik, Z.** |                                                                     |             |             |        |          | 28,068 |

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**Tretkoff, P.**

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**Walton, J.R.**

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**Witherspoon, S.**
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<th>Indirect</th>
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<tr>
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<td>Representations and Cohomology of Algebras</td>
<td>7/1/2003</td>
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<td>13,445</td>
<td>4,309</td>
<td>17,753</td>
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<tr>
<td>National Security Agency</td>
<td>Cohomology, Deformations, and Representations of Algebras</td>
<td>12/1/2006</td>
<td>11/30/2008</td>
<td>1,137</td>
<td>461</td>
<td>1,598</td>
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<tbody>
<tr>
<td>National Science Foundation</td>
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<tbody>
<tr>
<td>National Science Foundation</td>
<td>TRACK1, GK-12: Fellows Integrate Science/Math In Rural Middle Schools, (with: G. Allen, V. Cassone, P. Yasskin)</td>
<td>1/1/2004</td>
<td>12/31/2007</td>
<td>25,000</td>
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<tbody>
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<td>National Science Foundation</td>
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<td>13,005</td>
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<td>National Science Foundation</td>
<td>Fourth International Conference on High Dimensional Probability</td>
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<td>5/31/2006</td>
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SEC. 7. RESEARCH ACTIVITY 555
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<th>Indirect</th>
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<tr>
<td>Foundation</td>
<td>D. Larson, G. Pisier, J. Zinn)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Agency</td>
<td></td>
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<td></td>
<td>54,545</td>
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<td></td>
<td>*** Total: All Faculty</td>
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<td>3,179,092</td>
<td>366,107</td>
<td>3,545,199</td>
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556  

2006 Mathematics annual report
## Contents

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1. Foreword from the Department Head

The physics department has vigorous research programs in physics and astronomy. We offer B.A. and B.S. undergraduate Physics degrees and M.S. and Ph.D. graduate degrees in Physics and a Ph.D. degree in Applied Physics. We have a large number of students enrolled in our service courses. We participate in a number of outreach and service activities, such as teacher workshops and the annual Physics Festival of hands-on physics demonstrations and a public lecture by a notable physicist.

The physics department had many notable accomplishments during 2006.

Construction began on two new physics buildings, the George P. and Cynthia W. Mitchell Institute for Fundamental Physics and the George P. Mitchell Physics Building. These two new buildings will provide much needed and enhanced space for research, teaching and public events. Currently our faculty are spread over three buildings and our undergraduate teaching laboratories are in yet another building that is across campus from our offices. The new buildings will go a long way towards bringing all our activities together. These buildings are made possible by a major gift from George P. and Cynthia Mitchell of Houston.

The expansion of our department into the field of astronomy continued. Nick Suntzeff was hired as a professor to lead this effort and joined our faculty in March, 2006. Two other astronomers also joined our faculty, Lifan Wang and Kevin Krisciunas. We anticipate making several additional faculty hires in astronomy in 2007 and 2008. Through a major gift from George Mitchell, Texas A&M is a participating institution in the Giant Magellan Telescope project, a major astronomy instrumentation effort that will construct a large new optical telescope in Chile.

The Texas A&M faculty reinvestment program has made it possible for the department to make a number of outstanding additions to our faculty. Tenured or tenure-track hires in 2006 included Rainer Fries (theoretical nuclear physics), Alexei Safonov (experimental high energy physics), and Lifan Wang (observational astronomy). We had no faculty losses during 2006.

The endowments in the department continued to grow and now total over twelve million dollars. Endowments added during 2006 included the Nelson M. Duller Endowed Fund in Physics, The Friends of Cambridge Visitors’ Fellowship, and the Munnerlyn/Heep Chair in Quantum Optics.

Our faculty continue to receive national and international recognition. In 2006, Siu Chin was named a Fellow of the American Physical Society. John Hardy was named by the APS as a co-recipient of the 2006 Tom W. Bonner prize in Nuclear Physics. Dimitri Nanopoulos was awarded the Onassis International Prize. Saskia Mioduszewski received an Alfred P. Sloan Fellowship. Alexey Belyanin and Jairo Sinova received Faculty Early Career Development (CAREER) awards from the National Science Foundation. Jairo Sinova was also named a Cottrell Scholar by the Research Corporation. Leonid Keldysh received the S.I. Vavilov Gold Medal from the Russian Academy of Sciences.

Our faculty and staff also performed exceptionally within the university community and some of their accomplishments were acknowledged by awards. John Hardy received a University-Level Association of Former Students Award in Research. Jairo Sinova was named the College of Science’s 2006/2007 Montague Scholar. Chris Pope was appointed as Distinguished Professor. Tom Weimar, the physics machine shop supervisor, received a President’s Meritorious Service Award. He and Minnette Bilbo received the College of Science Outstanding Staff Achievement Awards. Feng Zhu and Andrea Burzo received Association of Former Students Distinguished Graduate Student Awards. Graduate student Haidong Lu received the Eppright Outstanding International Student Award.

Thanks everyone who contributed to an outstanding year for the department!
## 2. Statistical Abstract

### I. Personnel

#### a. Tenured and Tenure-Track Faculty

<table>
<thead>
<tr>
<th>Role</th>
<th>2005</th>
<th>2006</th>
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<tbody>
<tr>
<td>Professor</td>
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<td>Associate Professor</td>
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<td>Distinguished Professor</td>
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#### b. Non-Tenure-Track Faculty

<table>
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#### c. Postdoctoral Fellows

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#### d. Graduate Students

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#### e. Undergraduate Majors

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#### f. Support Staff

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### II. Instructional Activities

#### a. Graduate Semester Credit Hours

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#### b. Undergraduate Semester Credit Hours

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#### c. PhD Degrees

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#### d. Masters Degrees

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#### e. Undergraduate Degrees

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### III. Research Activities

#### a. Research Publications

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#### b. Research Presentations

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#### f. Private/Non-Profit

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#### g. Industrial/Corporate

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#### h. International

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#### i. Other Govt

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### Total

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3. Honors & Awards, 2006

By Faculty

▷ This section contains all honors and awards, as reported by individual faculty members, during the calendar year 2006.

By Students

▷ This section contains all honors and awards, as reported by the department, during the calendar year 2006.
## 3.1 Honors & Awards Received by Faculty, 2006

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<tr>
<th>Name</th>
<th>Award</th>
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<tbody>
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<td>K. Becker</td>
<td>Edward, Frances, and Shirley B. Daniels Fellowship, Radcliffe Institute, Harvard University</td>
</tr>
<tr>
<td>M. Becker</td>
<td>McDaniels Fellowship, Radcliffe Institute at Harvard University</td>
</tr>
<tr>
<td>A. Belyanin</td>
<td>Faculty Early Career Development (CAREER), National Science Foundation</td>
</tr>
<tr>
<td>S. Chin</td>
<td>Fellow, American Physical Society</td>
</tr>
<tr>
<td>J. Hardy</td>
<td>Distinguished Achievement Award - Research, Association of Former Students</td>
</tr>
<tr>
<td></td>
<td>Tom W. Bonner Prize in Nuclear Physics, American Physical Society</td>
</tr>
<tr>
<td>L. Keldysh</td>
<td>S.I. Vavilov Gold Medal, Russian Academy of Sciences</td>
</tr>
<tr>
<td>S. Mioduszewski</td>
<td>Alfred P. Sloan Fellowship, Alfred P. Sloan Foundation</td>
</tr>
<tr>
<td>D. Nanopoulos</td>
<td>Golden Medal and Honorary Citizen, Salonica, Greece</td>
</tr>
<tr>
<td></td>
<td>Honorary Citizen, Nauplion, Greece</td>
</tr>
<tr>
<td></td>
<td>Honorary Citizen, Zografou, Athens</td>
</tr>
<tr>
<td></td>
<td>National Award, Advanced Technical University of Crete, Greece</td>
</tr>
<tr>
<td></td>
<td>Onassis International Prize, Alexander S. Onassis Public Benefit Foundation</td>
</tr>
<tr>
<td>C. Pope</td>
<td>Honorary Professor, Theoretical Physics, Cambridge University, UK</td>
</tr>
<tr>
<td>J. Sinova</td>
<td>Cottrell Scholar, Research Corporation</td>
</tr>
<tr>
<td></td>
<td>Faculty Early Career Development (CAREER), National Science Foundation</td>
</tr>
<tr>
<td></td>
<td>Montague-Center for Teaching Excellence Scholar, Center for Teaching Excellence</td>
</tr>
<tr>
<td>N. Suntzeff</td>
<td>Most Cited Scientist, Information Sciences Institute (ISI)</td>
</tr>
</tbody>
</table>
3.2 Honors & Awards Received by Students, 2006

Graduate

- Distinguished Graduate Student Award for Doctoral Research, The Association of Former Students
  Andrea Burzo

- Distinguished Graduate Student Award for Master’s Research, The Association of Former Students
  Feng Zhu

- Eppright Outstanding International Student Award, Texas A&M University International Student Services
  Haidong Liu

- Graduate Oral Physical Sciences, Texas A&M University
  Mario Borunda
  Venkat Goruganti
  Dmitry Pestov

- Outstanding Presentation Award, Texas American Physical Society
  Eunsin Lee

- Travel Award, Texas American Physical Society
  Alfredo Gurrola
  Abram Krislock
  Eunsin Lee
  Milan Poudel
  Paul Simeon

Undergraduate

- Marianne E. ’76 & Robert W. ’77 Hamm Endowed Scholarships in Physics
  Tyler Atkinson
  John Cesar
  Wesley Hovis
  David Rahmani

- Undergrad Poster Physical Sciences, Texas A&M University
  Ashley Pagnotta
4. Students, 2006

This section contains all degrees awarded, as reported by the department, during the calendar year 2006.
4.1 Graduate Degrees Awarded, 2006

Fall

▷ M.S.

Maryna Petrovna Anatska
The Transport Coefficients In (R1.5Ce0.5)Ru0.1Sr2Cu2O10-5 (R=Gd,Eu) Ruthenocuprates
Advisor(s): G. Agnolet

Joseph Franklin Brinkley
Advisor(s): R. Tribble

David Aaron Maffei
Advisor(s): R. Webb

▷ Ph.D.

Thomas William Henry
Reconstruction And Attributes Of Jets Observed In Sqrt(S) = 200 Gev Proton-Proton And Deuteron-Gold Collisions At Star
Advisor(s): C. Gagliardi

Joseph Alan Musser
Novel Instrumentation For A Scattering Independent Measurement Of The Absorption Coefficient Of Natural Waters, And A New Diffuse Reflector For Spectroscopic Instrumentation And Close Cavity Coupling
Advisor(s): E. Fry

Oleksiy Grigorievic Pochivalov
Description Of Isoscalar Giant Dipole Resonance In Nuclei
Advisor(s): S. Shlomo

Kerim Urtekin
Bohr Model And Dimensional Scaling Analysis Of Atoms And Molecules
Advisor(s): M. Scully

Seiichiro Yokoo
Model For A Fundamental Theory With Supersymmetry
Advisor(s): R. Allen

Spring

▷ M.S.

Saeed A. Adegbenro
Advisor(s): D. Naugle

Osman Cizmeci
Advisor(s): M. Zubairy

Anastasios Peppas
Advisor(s): C. Pope

▷ Ph.D.
Tiegang Di  Entanglement Generation And Applications In Quantum Information  Advisor(s): M. Zubairy
Kamil Serkan Gunturk  Covariant Weyl Quantization, Symbolic Calculus, And The Product Formula  Advisor(s): S. Fulling
Zheng Lu  Optical Absorption Of Pure Water In The Blue And Ultraviolet  Advisor(s): E. Fry
Hongduo Wei  Spontaneous Vortices In Ferromagnet-Superconductor Systems  Advisor(s): V. Pokrovsky
Han Xiong  Coherence-Induced Entanglement  Advisor(s): M. Zubairy

Summer

▷ M.S.

Matthew C Cervantes  Advisor(s): D. Toback
Bogdan Eugen Dobrescu  Production Of Bosonic Molecules In The Nonequilibrium Dynamics Of A Degenerate Fermi Gas Across A Feshbach Resonance  Advisor(s): V. Pokrovsky
Yunfeng Li  Advisor(s): G. Paulus
Zhonghai Liu  Cylinder Kernel Expansion Of Casimir Energy With A Robin Boundary  Advisor(s): S. Fulling
Deqiang Sun  Advisor(s): R. Rapp
Geoffrey Tweedale  Advisor(s): T. Walther
Hong Zhang  Advisor(s): W. Wu

▷ Ph.D.

Ching-Ming Chen  Gut And Standard-Like Models In Intersecting D-Brane Worlds  Advisor(s): D. Nanopoulos
Hui Chen  High Resolution Laser Spectroscopy Of Cesium And Rubidium Molecules With Optically Induced Coherence  Advisor(s): D. Nanopoulos
Zhiwei Chong  Anti-De Sitter Black Holes In Supergravity  Advisor(s): C. Pope
Changhui Li  Radiative Interactions: I. Light Scattering And Emission From Irregular Particles. II. Time Dependent Radiative Coupling Of An Atmosphere-Ocean System  Advisor(s): G. Kattawar

Zoe-Elizabeth Sariyanni  Coherent Effects In Atomic And Molecular Media: Applications To Anthrax Detection And Quantum Information  Advisor(s): M. Scully

Pengwang Zhai  A Fourth-Order Symplectic Finite-Difference Time-Domain (FDTD) Method For Light Scattering And A 3D Monte Carlo Code For Radiative Transfer In Scattering Systems  Advisor(s): G. Kattawar, Ping Yang

Gang Zhao  Dark World And The Standard Model For Graduate Students  Advisor(s): D. Nanopoulos
### 4.2 Undergraduate Degrees Awarded, 2006

#### Fall

<table>
<thead>
<tr>
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<tr>
<td>B.S.</td>
<td>Alexander Blair Cook</td>
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<td>Nathan Andrew Hart</td>
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<td>Scott Leonard Willson</td>
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#### Spring

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<tr>
<td>B.A.</td>
<td>Michael Mann Chamberlin</td>
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<td>Summer Loving</td>
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<td>Kyle Lee Vigil</td>
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<td>Zorawar Wadiasingh</td>
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#### Summer

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<tr>
<td>B.S.</td>
<td>Nelson Yojan Martinez</td>
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5. Colloquium and Seminar Speakers, 2006

<table>
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<tr>
<th>Date</th>
<th>Speaker</th>
<th>Institution and Location</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1/10/2006</td>
<td>Alexander Litvak</td>
<td>Institute of Applied Physics, Russian Academy of Sciences, Nizhny Novgorod, Russia</td>
<td>Self-Focusing of Ultrashort Laser Pulses in a Dispersive Medium</td>
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<tr>
<td>1/27/2006</td>
<td>Vladislav Yakovlev</td>
<td>University of Wisconsin</td>
<td>In Vivo Biomedical Imaging</td>
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<tr>
<td>2/21/2006</td>
<td>Luiz Davidovich</td>
<td>Federal University of Rio de Janeiro</td>
<td>Entanglement as an Observable</td>
</tr>
<tr>
<td>3/3/2006</td>
<td>Maria Allegrini</td>
<td>University of Pisa, Italy</td>
<td>Nano-optics: Near-field Optical Microscopy and Spectroscopy</td>
</tr>
<tr>
<td>3/7/2006</td>
<td>Paul Corkum</td>
<td>National Research Council of Canada, Ottawa, Canada</td>
<td>Attosecond Technology as Electron Interferometry: Seeing an Electron</td>
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<tr>
<td>3/10/2006</td>
<td>Kohzo Hakuta</td>
<td>University of Electro-Communications, Chofu, Tokyo, Japan</td>
<td>Manipulation of Atoms Using a Nanofiber</td>
</tr>
<tr>
<td>3/14/2006</td>
<td>Gerhard Paulus</td>
<td>Texas A&amp;M University</td>
<td>Attosecond Double-Slit Experiment</td>
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<tr>
<td>3/14/2006</td>
<td>Gerhard G. Paulus</td>
<td>Texas A&amp;M University</td>
<td>Attosecond Double-slit Experiment</td>
</tr>
<tr>
<td>4/19/2006</td>
<td>Gershon Kurizki</td>
<td>Weizmann Institute of Science, Israel</td>
<td>Can We Protect Quantum Information from Decoherence?</td>
</tr>
<tr>
<td>4/19/2006</td>
<td>David Reitze</td>
<td>University of Florida, Gainesville</td>
<td>The Laser Interferometer Gravitational Wave Observatory: Lasers and Optics Probing the Frontiers of Astrophysics</td>
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<tr>
<td>10/3/2006</td>
<td>Sarah Kajari-Schroeder</td>
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</table>
Endre Kajari
Abteilung fuer Quantenphysik Universitaet Ulm, Germany
Sagnac Effect in Goedel’s Universe

Anatoly Swidzinsky
Texas A&M University
### Colloquia

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>1/19/2006</td>
<td>Boris Altshuler</td>
<td>Princeton University</td>
<td>Mesoscopic Physics: From Brownian Motion to Quantum Devices</td>
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<tr>
<td>1/20/2006</td>
<td>Boris Altshuler</td>
<td>Princeton University</td>
<td>Metal-insulator Transition in a Weakly Interacting Many-electron System with Localized Single-Particle States</td>
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<td>1/26/2006</td>
<td>Anatoly Svidzinsky</td>
<td>Texas A&amp;M University</td>
<td>Bose-Einstein Condensation: Fundamental Concepts and Fluctuations</td>
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<tr>
<td>1/27/2006</td>
<td>Vladislav V. Yakovlev</td>
<td>University of Wisconsin</td>
<td>Towards in Vivo Optical Imaging and Manipulation of Biological Nanostructures</td>
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<tr>
<td>2/2/2006</td>
<td>Georg Bollen</td>
<td>National Superconducting Cyclotron Laboratory, Michigan State University</td>
<td>First High-Precision Mass Measurements with Thermalized Beams From Projectile Fragmentation</td>
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<tr>
<td>2/16/2006</td>
<td>Mark Raizen</td>
<td>University of Texas</td>
<td>Experiments with a &quot;Particle in a Box&quot;: Bose Einstein Condensates, and Maxwell’s Demon</td>
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<tr>
<td>2/23/2006</td>
<td>Moses Chan</td>
<td>Penn State University</td>
<td>Superfluidity in Solid Helium and Solid Hydrogen</td>
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<tr>
<td>2/27/2006</td>
<td>Freeman J. Dyson</td>
<td>Princeton</td>
<td>Project Orion</td>
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<tr>
<td>3/2/2006</td>
<td>Ennio Arimondo</td>
<td>University of Pisa</td>
<td>Quantum Optics with Bose-Einstein Condensates</td>
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<tr>
<td>3/9/2006</td>
<td>Michael Ramsey-Musolf</td>
<td>California Institute of Technology</td>
<td>Sub-Z Supersymmetry: Precision Electroweak Physics Below the Z-Pole</td>
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<tr>
<td>3/20/2006</td>
<td>Rainer Fries</td>
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</tbody>
</table>
University of Minnesota
Ultrahot Matter at the Relativistic Heavy Ion Collider

3/24/2006 Justin Albert
California Institute of Technology
CP Asymmetry in Nature: Past, Present, and Future Investigation

3/27/2006 Carter Hall
Stanford Linear Accelerator Laboratory
Neutrinoless Double Beta Decay: A Window on the Origin of Neutrino Mass

3/29/2006 Jason Jones
Joint Institute for Laboratory Astrophysics
Femtosecond Frequency Comb: From Precision Spectroscopy to Extreme Nonlinear Optics

3/30/2006 John Hardy
Texas A&M University
Superallowed Nuclear Beta Decay: a Window on the Weak Interaction (Bonner Prize Talk)

3/31/2006 Richard Schnee
Case Western Reserve University
What’s the Matter in the Universe? Looking for WIMPs with the Cryogenic Dark Matter Search

4/3/2006 Irina Novikova
Harvard-Smithsonian Center for Astrophysics
Manipulation of Light with Atomic Ensembles (and Vice Versa)

4/3/2006 Derek Teaney
State University of New York, Stony Brook
The Physics of the Quark-Gluon Plasma and RHIC

4/3/2006 Derek Teaney
State University of New York, Stony Brook
The Physics of the Quark-Gluon Plasma and RHIC

4/4/2006 Alexandre Kolomenski
Texas A&M University
Ultrafast Laser Light From IR to XUV for Spectroscopy and Coherent Control

4/4/2006 Kim Michelle Lewis
Louisiana State University
Development of Single Electron Devices and Hybrid Nanostructures

4/5/2006 Igor Roshchin
University of California San Diego
Proximity Effects and Magnetism at Nanoscale

4/5/2006 Pengqian Wang
Kansas State University
Molecular Dynamics in Intense Femtosecond Laser Fields

4/6/2006 Aleksander Rebane
Montana State University
Tetrapyrroles: From Quantum Interference to Cancer Therapy

4/6/2006  Aleksander Rebane  
*Montana State University*
Tetrapyrroles: From Quantum Interference to Cancer Therapy

4/6/2006  Nitin Samarth  
*Pennsylvania State University*
Spin Control in Semiconductor Quantum Devices

4/7/2006  Jamal Jalilian-Marian  
*University of Washington*
Forward Physics at RHIC and LHC

4/7/2006  Denis Yavuz  
*University of Wisconsin*
Quantum Computing with Trapped Neutral Atoms

4/7/2006  Denis Yavuz  
*University of Wisconsin*
Quantum Computing with Trapped Neutral Atoms

4/10/2006  Alexandre Kolomenski  
*Texas A&M University*
Laser Excitation and Detection of Phonons and Plasmons at the Nanoscale

4/11/2006  Alexandre Kolomenski  
*Texas A&M University*
Ultrafast Laser Light from IR to XUV for Spectroscopy and Coherent Control

4/12/2006  Robert Riehn  
*Princeton University*
A Nanofluidic Toolbox for DNA Analysis

4/13/2006  Robert Kaindl  
*Lawrence Berkeley National Laboratory*
Ultrafast Terahertz Probes of Excitons and Cooper Pairs

4/13/2006  Robert Kaindl  
*Lawrence Berkeley National Laboratory*
Ultrafast Terahertz Probes of Excitons and Cooper Pairs

4/15/2006  Lawrence Krauss  
*Case Western Reserve University*
The Physics of Star Trek (Public Lecture Associated with Physics Festival 2006)

4/17/2006  Hanguo Wang  
*University of California, Los Angeles*
WIMP Dark Matter Search with the ZEPLIN II Large Liquid Xenon Discriminating Detector

4/18/2006  Madalina Furis  
*Los Alamos National Laboratory*
Probing Bright Excitons and Anisotropy Exchange in CdSe Colloidal Nanocrystal Quantum Dots

SEC. 5.  COLLOQUIUM AND SEMINAR SPEAKERS  577
4/18/2006  Anna Stasto  
*Brookhaven National Laboratory*  
Ultrahigh Energy Neutrino Physics

4/20/2006  Norman Hackerman  
*University of Texas*  
Science and Its Pursuit

4/21/2006  Ofer Naaman  
*National Institute of Standards and Technology*  
A Real-time Look at Individual Tunneling Events in Single-Cooper-pair Transistors

4/21/2006  Steve Pierson  
*American Physical Society*  
Federal Funding, Physical Sciences Research, China, and the U.S. Congress

4/24/2006  Leon Mualem  
*University of Minnesota*  
Long Baseline Neutrino Oscillations: First Results From MINOS

4/25/2006  Weng W. Chow  
*Sandia National Laboratory*  

4/27/2006  Philip Phillips  
*University of Illinois*  
Much Ado about Zeros: Mottness in the Cuprates

4/28/2006  Lifan Wang  
*Lawrence Berkeley National Laboratory*  
The Supernovae Illuminated Universe

8/31/2006  Vincent Cassone  
*Texas A&M University*  
Organic Evolution, Mysticism and the Dark Future of Science

9/7/2006  Gerhard Paulus  
*Texas A&M University*  
Strong-field Laser Atom Interaction, the Enabling Technology of Attosecond Laser Physics

9/14/2006  Gerald North  
*Texas A&M University*  
Surface Temperature Reconstructions for the Last Millennium

9/21/2006  Wenhao Wu  
*Texas A&M University*  
The Superconductor-Insulator Transition in Two-Dimensions

9/26/2006  Wolfgang Schleich  
*University of Ulm*  
Quantum Physics and Number Theory

9/28/2006  Alexey Belyanin  
*Texas A&M University*
Nonlinear Optics with Semiconductor Nanostructures

10/5/2006  **Jairo Sinova**  
*Texas A&M University*
Spin-Hall Effect: A New Twist on an Old Hat and Other Spintronics Stories at TAMU

10/12/2006  **Peter McIntyre**  
*Texas A&M University*
New Physics and Technology for Accelerators

10/19/2006  **Manfred Fink**  
*University of Texas, Austin*
NEXTEX- Texas Neutrino Mass Experiment

11/2/2006  **Steve Asztalos**  
*Lawrence Livermore National Laboratory*
Axions: The “Hot” Cold Dark Matter

11/9/2006  **Valery Kalatsky**  
*University of Houston*
Cortical Maps of Sensory World: Fourier Approach to Optical Imaging

11/15/2006  **Bernard Barbara**  
*CNRS Grenoble*
From Quantum Relaxation to Quantum Coherence in Rare-Earth Ions

11/30/2006  **Frank Paige**  
*Brookhaven National Laboratory*
<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>Institution</th>
<th>Presentation Title</th>
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<tr>
<td>1/5/2006</td>
<td>Xiaoliu Chi</td>
<td>Texas A&amp;M University, Kingsville</td>
<td>Organic Electronic Materials</td>
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<tr>
<td>1/18/2006</td>
<td>Janice Guikema</td>
<td>Texas A&amp;M University</td>
<td>Experimental Studies of Single-Molecule Transistors</td>
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<td>1/20/2006</td>
<td>Boris Altshuler</td>
<td>Columbia University</td>
<td>Metal-Insulator Transition in a Weakly Interacting Many-Electron System with Localized Single-Particle States</td>
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<tr>
<td>2/8/2006</td>
<td>James Gubernatis</td>
<td>Los Alamos National Laboratory</td>
<td>Electronic Ferroelectricity: Some New Results for a New Phenomena</td>
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<td>2/15/2006</td>
<td>Doming Seo</td>
<td>Texas A&amp;M University</td>
<td>Thin Film Fabrication and Alignment of Single Molecule Magnets</td>
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<td>2/22/2006</td>
<td>Kirill Rivkin</td>
<td>Northwestern University</td>
<td>Dynamic Response of Magnetic Nanostructures in the Discrete Dipole Approximation</td>
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<td>2/28/2006</td>
<td>Noah Bray-Ali</td>
<td>Berkeley</td>
<td>Ordering Near Percolation Threshold in Models of Interacting Bosons with Quenched Dilution</td>
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<td>3/1/2006</td>
<td>Jim Erskin</td>
<td>University of Texas</td>
<td>Spin Dynamics in Magnetic Thin Films and Microstructures</td>
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<td>3/8/2006</td>
<td>Eugene Mishchenko</td>
<td>University of Utah</td>
<td>Optical Conductivity of a Two-Dimensional Electron Liquid</td>
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<td>4/4/2006</td>
<td>Kim Michelle Lewis</td>
<td>Louisiana State University</td>
<td>Development of Single Electron Devices and Hybrid Nanostructures</td>
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<td>4/19/2006</td>
<td>Madalina Furis</td>
<td>Los Alamos National Laboratory</td>
<td>Probing Bright Exitons and Anisotropy Exchange in CdSe Colloidal Nanocrystal Quantum Dots</td>
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</table>
4/19/2006  David Reitze  
*University of Florida*  
The Laser Interferometer Gravitational Wave Observatory: Lasers and Optics Probing the Frontiers of Astrophysics

4/25/2006  Tami Pereg-Barnea  
*University of Texas*  
A Dual Vortex Lattice – From a Phase Fluctuating Superconductor to a Vibrating Pair Wigner Crystal

8/30/2006  Carlos Bolech  
*Rice University*  
Tunneling Current and Noise into Majorana Bound States and P-wave

9/6/2006  Kenny Burch  
*Los Alamos National Laboratory*  
Probing Hybridization Through Optics

9/13/2006  Konstantin Romanov  
*Texas A&M University*  
The Interaction Between Current and Magnetization in Ferromagnetic Nanostructures

9/20/2006  Kirill Rivkin  
*Texas A&M University*  
Deterministic Chaos, Lyapunov Stability Theory and Magnetic Nanoparticles

10/3/2006  Chia-Ren Hu  
*Texas A&M University*  

10/11/2006  Doug Natelson  
*Rice University*  
Mesoscopic Physics: Normal Metals, Ferromagnetic Metals, and Magnetic Semiconductors

10/18/2006  Marco Polini  
*Pisa*  
Luther-Emery Phase and Atomic-Density Waves in a Trapped Fermion Gas

10/25/2006  John Markert  
*University of Texas*  
Micro-oscillators, Micromagnets, and Force-detected Nuclear Magnetism.

11/1/2006  Dimitri Culcer  
*Argonne National Laboratory*  
Spin Precession and Spin Relaxation in Semiconductors

11/15/2006  Paul Barbara  
*Grenoble*  
From Quantum Relaxation to Quantum Coherence in Rare-Earth Ions

11/22/2006  Ray Schaak  
*Texas A&M University*  

SEC. 5.  
COLLOQUIUM AND SEMINAR SPEAKERS  

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12/6/2006
Alexey Kovalev
Texas A&M University
Current-driven Ferromagnetic Resonance, Mechanical Torques and Rotary Motion in Magnetic Nanostructures
Nuclear Physics

2/24/2006  Sevil Salur  
Yale University  
Investigation of Hadronic Resonances with STAR

3/10/2006  Michael Ramsey-Musolf  
California Institute of Technology  
Electric Dipole Moments and the Origin of Baryonic Matter

3/10/2006  Gang Wang  
Kent State University  
Anisotropic Flow at RHIC Based on Traverse Deflection of Spectator Neutrons

3/10/2006  Rainer Fries  
University of Chicago  
Electric Dipole Moments and the Origin of Baryonic Matter

3/21/2006  Lorenzo Ravagli  
State University of New York  
A Study of the QCD Phase Diagram Based on Microscopic Models

4/2/2006  Stefan Bathe  
University of California, Riverside  
Direct Photon Production at RHIC

4/4/2006  Derek Teaney  
State University of New York  
Understanding Dissipative Processes in the Quark Gluon Plasma and Heavy Ion Collisions

4/6/2006  Jamal Jalilian-Marian  
Institute for Nuclear Theory  
An Introduction to Particle Production in High Energy Nuclear Collisions

4/7/2006  Taka Kajino  
National Astronomical Observatory, University of Tokyo  
A Frontier of Nuclear Astrophysics: Big-Bang Cosmology and Supernova Nucleosynthesis

4/19/2006  Anna Stasto  
Brookhaven National Laboratory  
High-energy Limit and Parton Saturation in QCD

4/21/2006  Stefan Bathe  
University of California  
Direct Photon Production at RHIC

4/28/2006  Ahmed Hamed  
Wayne State University  
Toward the Elliptic Flow of Direct Photons

6/23/2006  Matthew Cervantes  
Texas A&M University  
Journal Summary of J/Ψ in a Quark Gluon Plasma
### 6. Faculty, 2006

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Artem G. Abanov</td>
<td>Assistant Professor</td>
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<tr>
<td>Thomas W. Adair</td>
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<tr>
<td>Girish Agarwal</td>
<td>Research Professor</td>
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<tr>
<td>Glenn Agnolet</td>
<td>Professor</td>
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<tr>
<td>Roland E. Allen</td>
<td>Professor</td>
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<tr>
<td>Richard L. Arnowitt</td>
<td>Distinguished Professor Emeritus (A)</td>
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<tr>
<td>William H. Bassichis</td>
<td>Professor</td>
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<tr>
<td>Katrin Becker</td>
<td>Professor</td>
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<td>Melanie Becker</td>
<td>Professor</td>
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<td>Alexey Belyanin</td>
<td>Assistant Professor</td>
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<td>Ronald A. Bryan</td>
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<td>Joel Bryan</td>
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<td>Siu Ah Chin</td>
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<td>Weng W. Chow</td>
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<td>Robert B. Clark</td>
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<td>Nelson M. Duller</td>
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<td>Bhaskar Dutta</td>
<td>Associate Professor</td>
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<td>Tatiana L. Erukhimova</td>
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<td>A. Lewis Ford</td>
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<td>Edward S. Fry</td>
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<td>Carl A. Gagliardi</td>
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<td>Janice W. Guikema</td>
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<td>John C. Hardy</td>
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<td>Dave Hyland</td>
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<td>Teruki Kamon</td>
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<td>George W. Kattawar</td>
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<td>Leonid V. Keldysh</td>
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<td>Robert A. Kenefick</td>
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<td>Che-Ming Ko</td>
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<td>Olga Kocharovskaya</td>
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<td>Vitaly Kocharovsky</td>
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<td>Kevin Krisciunas</td>
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<td>Igor Lyuksyutov</td>
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<td>Peter M. McIntyre</td>
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<td>Saskia Mioduszewski</td>
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<td>Dimitri V. Nanopoulos</td>
<td>Distinguished Professor</td>
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<td>Donald G. Naugle</td>
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<td>Gerhard G. Paulus</td>
<td>Associate Professor</td>
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<td>Valery L. Pokrovsky</td>
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<td>Christopher N. Pope</td>
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<td>Ralf Rapp</td>
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<td>John F. Reading</td>
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<td>Joseph H. Ross</td>
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Alexei N. Safonov ..................................................... Assistant Professor
Wayne M. Saslow .......................................................... Professor
Vladimir Sautenkov .................................................. Research Associate Professor
Hans A. Schuessler .................................................. Professor
Marlan O. Scully ........................................................ Distinguished Professor
Ergin Sezgin .......................................................... Professor
Jairo Sinova ........................................................ Assistant Professor
Alexei V. Sokolov ................................................ Associate Professor
Nicholas B. Suntzeff .................................................. Professor
Winfried Teizer .................................................. Associate Professor
David Toback .................................................. Associate Professor
Robert E. Tribble .......................................................... Professor
Lifan Wang ........................................................ Associate Professor
Robert C. Webb .......................................................... Professor
Michael B. Weimer .................................................. Professor
George R. Welch .......................................................... Professor
James T. White .......................................................... Professor
Wenhao Wu ........................................................ Associate Professor
Dave H. Youngblood .................................................. Professor
M. Suhail Zubairy .......................................................... Professor

*For the Annual Report, Faculty are defined as tenure and non-tenure track employees who were employed at any time during 2006 (01/01/2006-12/31/2006).
6.1 Professional Activities, 2006

This section contains information, as reported by individual faculty members, encompassing each faculty member’s professional activities for the calendar year 2006.

Subsections of professional activities are defined as follows:

Honors and Awards
▷ All professional honors and awards, both internal and external.

Service Activities
▷ All professional service and leadership roles, including: departmental, college, university, state, national and international.

Teaching
▷ Classes taught during the Spring, Summer and Fall sessions of 2006.
▷ Any missing enrollment numbers were gathered from the Student Information Management System (SIMS) at Texas A&M University.

Research Projects
▷ All research projects, funded and unfunded.
▷ Whenever possible, all research-related employees of that faculty member are listed along with the citation. Key for employees: (P)=Postdoc, (G)=Graduate Student, (U)=Undergraduate Student.
▷ Renewals are marked by “(REN)” at the beginning of their title.
▷ Unfunded grants are marked by “(UNFUNDED)” at the end of the citation.
▷ Additional information (including PIs, CoPIs, and funding) on all funded grants are listed in Section 7.

Presentations
▷ All posters, invited and contributed lectures (plenary, conferences, colloquia, seminars, etc.).
▷ Whenever reported, posters, invited and contributed lectures are noted in parentheses following the citation.
▷ Citations are in chronological order.

Publications
▷ All printed materials published during 2006.
▷ Pre-press, in-press and submitted publications were not included.
▷ Citations were formatted in APA Style and are in alphabetical order by lead author.
• SERVICE DURING 2006
  
  International
  ▷ Event: Workshop on Physics and Mathematics of Growing Interfaces (Organizer)
  
  Department
  ▷ Event: Condensed Matter Seminar (Co-Organizer)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▷ PHYS 202. — College Physics (total enrollment: 88)

  Fall
  ▷ PHYS 201. — College Physics (total enrollment: 177)

• PRESENTATIONS DURING 2006

  ▷ “Self-Similar Laplacian Growth,” Kavli Institute for Theoretical Physics workshop; Stochastic Geometry and Disordered Systems, Santa Barbara, CA, October, 2006. (Invited)
SERVICE DURING 2006

National
▷ Professional Affiliation: NCAA Faculty (Athletic Representative)
▷ Committee/Panel: NCAA Academic Consultants (Member), NCAA Continuing Eligibility Sub-Committee of Cabinet (Chair)

University
▷ Service Position: Texas A&M University President on Intercollegiate Athletics (Advisor)
▷ Committee/Panel: Athletic Compliance Committee (Member), Athletic Council (Member), Athletic Department Senior Administration Committee (Member), Big 12 Faculty (Athletic Representative), NCAA Academic/Eligibility/Compliance Cabinet (Member)

TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 222.501 — Modern Physics for Engineers (total enrollment: 116)

Fall
▷ PHYS 208.506-510 — Electricity and Optics (total enrollment: 111)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]
  ▶ Undergraduate Advisor, Physics Undergraduate Advising Office, [2001]

• SERVICE DURING 2006
  College
  ▶ Committee/Panel: Undergraduate Curriculum Committee (Member)
  Department
  ▶ Event: Low Temperature Demonstration for Aggieland Saturday (Presenter), Low Temperature Demonstration for Chemistry Open House (Presenter), Low Temperature Demonstrations for Physics Festival (Presenter)
  ▶ Committee/Panel: New Building Committee (Member), Society of Physics Students (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ PHYS 607. — Statistical Mechanics (total enrollment: 27)
  ▶ PHYS 685. — Directed Studies (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 1)
  Summer
  ▶ PHYS 685. — Directed Studies (total enrollment: 2)
  ▶ PHYS 691. — Research (total enrollment: 1)
  Fall
  ▶ PHYS 408. — Thermodynamics and Statistical Mechanics (total enrollment: 18)
  ▶ PHYS 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▶ NIRT: Molecular Nanomagnets: Magnetic and Electronic Properties of Novel Magnetic Nanostructures and Nanostructured Materials, National Science Foundation, coworkers: X. Chen (P), X. Chen (P)

  University
  ▶ Nanomagnets for Mobile Computing and Telecommunications, Telecommunications and Informatics Task Force

  Private
Electron Transport in Single Molecules, The Robert A. Welch Foundation, coworkers: X. chen (P), C. Chen (G), L. Ma (G)

- PUBLICATIONS DURING 2006
• **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  - Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• **SERVICE DURING 2006**
  
  National
  - Editorial/Board: National Science Foundation (Review: Proposals), *Physics Review* (Referee: Journals)

  State
  - Committee/Panel: Texas APS Executive Committee (Member)

  University
  - Committee/Panel: Tenure Mediation Committee (Member)

  Department
  - Event: Mitchell Symposium on Astronomy, Cosmology, and Fundamental Physics (Organizer)

• **TEACHING ASSIGNMENTS DURING 2006**
  
  Spring
  - PHYS 307.200(H) — *Observational Astronomy* (total enrollment: 9)
  - PHYS 485. — *Directed Studies* (total enrollment: 2)
  - PHYS 489. — *Special Topics in* (total enrollment: 30)
  - PHYS 691. — *Research* (total enrollment: 2)

  Summer
  - PHYS 489. — *Special Topics in* (total enrollment: 31)
  - PHYS 691. — *Research* (total enrollment: 1)
  - PHYS 691. — *Research* (total enrollment: 2)

  Fall
  - PHYS 208. — *Electricity and Optics* (total enrollment: 93)
  - PHYS 307.200(H) — *Observational Astronomy* (total enrollment: 15)
  - PHYS 485. — *Directed Studies* (total enrollment: 1)
  - PHYS 691. — *Research* (total enrollment: 2)

• **RESEARCH PROJECTS DURING 2006**
  
  Private
  - (REN) Response of Materials and Biological Molecules to Light, *The Robert A. Welch Foundation*
Response of Materials and Biological Molecules to Light, *The Robert A. Welch Foundation*, coworkers: P. Sauer (P), S. Yokoo (G), S. Dupont (U), Z. Washington (U)

Response of Molecules to Femtosecond-Scale Laser Pulses, *The Robert A. Welch Foundation*

**PRESENTATIONS DURING 2006**

- “International Conference on Coherent Control of the Fundamental Processes in Optics and X-ray-Optics (CCFP'2006),” Volga River from Nizhny Novgorod to Kazan and back, June-July, 2006. (Invited)
- “Vibrational modes of dipicolinic acid, and their role in the response to femtosecond-scale laser pulses,” 36th Winter Colloquium on The Physics of Quantum Electronics (PQE 2006), Snowbird, Utah, January, 2006. (Invited)
- “Response of Dipicolinic Acid (C$_5$H$_5$NCOOH$_2$) to Ultrafast Laser Pulses,” Association for Psychological Science APS March Meeting, Baltimore, Maryland, March, 2006. (Invited)
- “Supersymmetry from a Fundamental Statistical Theory,” Association for Psychological Science APS April Meeting, Dallas, Texas, April, 2006. (Invited)
- “Supersymmetry from Fundamental Statistical Theory: Further Implications,” Association for Psychological Science APS April Meeting, Dallas, Texas, April, 2006. (Invited)

**PUBLICATIONS DURING 2006**

- Xie, JRH; Smith, VH; Allen, RE. (2006) Spectroscopic properties of dipicolinic acid and its dianion *Chemical Physics*, vol. 322, 254-268.
• **CHAIRS/PROFESSORSHIPS**
  ▶ Hershel E. Burgess Chair in Physics (High Energy Physics) [1997]

• **SERVICE DURING 2006**
  Department
  ▶ Committee/Panel: Astronomy Search (Member), Distinguished Professor Committee (Member), High Energy Experimental Search Committee (Member), High Energy Phenomenology Search Committee (Chair)

• **PRESENTATIONS DURING 2006**
  ▶ “Detection of SUSY Signals in Stau Neutralino Co-annihilation Region at the LHC,” SUSY06, 14th International Conference on Supersymmetry and the Unification of Fundamental Interactions, Irvine, CA, June, 2006. (Invited)
  ▶ University of Texas of Arlington, Arlington, TX, November, 2006.

• **PUBLICATIONS DURING 2006**
• CHAIRS/PROFESSORSHIPS
  ▶ Thamann University Professorship in Undergraduate Teaching Excellence [2004]

• SERVICE DURING 2006
  University
  ▶ Service Position: ATMentors (Member)
  ▶ Committee/Panel: Discrimination Appeals Panel (Member), Executive Committee, Center for Teaching Excellence (Member), Faculty Senate (Faculty Senator - 06), Faculty Teaching Academy (Member), Undergraduate Enhancement (Member)

College
  ▶ Committee/Panel: College Quality Enhancement Plan Council (Member)

Department
  ▶ Committee/Panel: Teaching Evaluation Committee (Chair), Undergraduate Curriculum Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ PHYS 208. — Electricity and Optics (total enrollment: 177)

Fall
  ▶ PHYS 218. — Mechanics (total enrollment: 84)
  ▶ PHYS 218. — Mechanics (total enrollment: 86)
  ▶ PHYS 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▶ TAMU STEPS: Physics, Engineering, and Mathematics (PEM) Model, National Science Foundation

• PRESENTATIONS DURING 2006
• AWARDS DURING 2006
  National
  ▷ McDaniels Fellowship, Radcliffe Institute at Harvard University

• SERVICE DURING 2006
  National

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ PHYS 691. — Research (total enrollment: 2)
  Fall
  ▷ PHYS 606. — Quantum Mechanics (total enrollment: 16)
  ▷ PHYS 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▷ Flux Compactification of M-Theory, Cosmology, and the Standard Model of Elementary Particles, National Science Foundation
  ▷ Strings, Branes, and the Search for Unification, National Science Foundation

• PRESENTATIONS DURING 2006
  ▷ “Heterotic Cosmic Strings,” Harvard University, Cambridge, MA, February, 2006. (Individual)
  ▷ “Inflation and Cosmic Strings in Heterotic M-theory,” Simons Workshop at Stony Brook, Stony Brook, NY, July, 2006. (Individual)
  ▷ “Anomaly Cancellation and Smooth Non-Kahler Solutions in Heterotic M-theory,” Texas A&M, Mathematics Department, College Station, TX, September, 2006. (Individual)
  ▷ “Anomaly Cancellation and Smooth Non-Kahler Solutions in Heterotic M-theory,” University of Texas, Austin, TX, October, 2006. (Individual)
“Recent Developments in Heterotic Flux Compactifications,” Santa Barbara Workshop, Santa Barbara, CA, December, 2006. (Invited)

**PUBLICATIONS DURING 2006**

• AWARDS DURING 2006
  National
  ▷ Edward, Frances, and Shirley B. Daniels Fellowship, Radcliffe Institute, Harvard University

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ PHYS 691 — Research (total enrollment: 2)
  Summer
  ▷ PHYS 691.306 — Research (total enrollment: 2)
  Fall
  ▷ PHYS 685.606 — Directed Studies (total enrollment: 1)
  ▷ PHYS 689.602 — Special Topics in (total enrollment: 5)
  ▷ PHYS 691.606 — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▷ From the Ground State of String Theory to the Standard Model, National Science Foundation
  ▷ Strings, Branes, and the Search for Unification, National Science Foundation
  Private
  ▷ Sloan Fellowship, Alfred P. Sloan Foundation

• PRESENTATIONS DURING 2006
  ▷ High Energy Physics Seminar at TAMU, College Station, TX, 2006.( Invited)
  ▷ Radcliffe Institute for Advanced Study at Harvard, Cambridge, MA, 2006.( Invited)
  ▷ The Mathematics Department at TAMU, College Station, TX, 2006.( Invited)
  ▷ “Strings 2006,” Friendship Hotel, Beijing, June, 2006.( Invited)

• PUBLICATIONS DURING 2006

• AWARDS DURING 2006
  National
  ▷ Faculty Early Career Development (CAREER), National Science Foundation

• SERVICE DURING 2006
  International
  ▷ Event: International Conference on Infrared and Terahertz Technologies at the International Symposium Optics East (Co-Chair/Organizer)
  ▷ Advisory Board: International Advisory Board, Nizhny Novgorod State Planetarium (Member)
  ▷ Editorial/Board: Optical Methods in the Life Sciences of the Proceeding of the International Symposium Optics East 2006 (Co-Editor)

  National
  ▷ Event: Session on Quantum Cascade Lasers at the Annual Winter Colloquium on the Physics of Quantum Electronics (Organizer)

  Regional
  ▷ Event: Oakwood Intermediate School (Presenter)

  University
  ▷ Event: Grant Writing Workshop conducted by the VPR Office (Speaker)

  College
  ▷ Event: Expanding Your Horizons (Presenter)

  Department
  ▷ Event: Chemistry Open House (Presenter), Quantum cascade lasers at the annual Winter Colloquium on the Physics of Quantum Electronics (Organizer)
  ▷ Committee/Panel: AMO Search Theory Committee (Member), Mitchell Symposium (Member), Nanoscience Search Committee (Member), Performance Evaluation Committee (Member), Theoretical Condensed Matter Search Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ PHYS 691. — Research (total enrollment: 2)
Summer
▷ PHYS 685. — Directed Studies (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 2)

Fall
▷ PHYS 306. — Basic Astronomy (total enrollment: 93)
▷ PHYS 691. — Research (total enrollment: 3)

• RESEARCH PROJECTS DURING 2006

Federal
▷ New Mid/Far-Infrared CW Room-Temperature Semiconductor Lasers Based on Intralaser Wave-Mixing Technique, Air Force Office of Scientific Research
▷ New Widely Tunable Room Temperature Terahertz Coherent Sources, Air Force Office of Scientific Research, coworkers: F. Xie (G)
▷ CAREER: Active Integrated Nanostructure Devices for Infrared Photonics and Femtosecond Pulse Generation, National Science Foundation, coworkers: D. Smith (G), F. Xie (G)
▷ Engineering Research Center: Mid-Infrared Technologies for Health and the Environment, National Science Foundation, coworkers: F. Xie (G)
▷ New Types of Mid/Far-Infrared Semiconductor Lasers for CW Room-Temperature Operations, National Science Foundation
▷ PIRE: US-Japan Cooperative Research and Education: Ultrafast and Nonlinear Optics in 6.1-Angstrom Semiconductors, National Science Foundation, coworkers: V. Chaganti (G)
▷ US-Japan Cooperative Science: Optical Studies of 6.1-Angstrom Semiconductor Structures for Next Generation Optoelectric, National Science Foundation

• PRESENTATIONS DURING 2006
▷ “Quantum cascade structures from lasers to detectors,” XXXVI Winter Colloquium Physics of Quantum Electronics, Snowbird, UT, January, 2006.( Invited)
▷ “Nonlinear quantum cascade lasers: physics and applications,” Technical University, Vienna, Austria, May, 2006.( Invited)
▷ “Nonlinear dynamics of quantum cascade lasers: Raman effect, nonlinear frequency conversion and ultrashort pulse generation,” International Conference "Coherent Control of the Fundamental Processes in Optics and X-ray-Optics" (CCFP 2006), Nizhny Novgorod, Russia, June, 2006.( Invited)
▷ “Resonant nonlinear optics with quantum cascade lasers,” Institute for Physics of Microstructures, Russian Academy of Sciences, Moscow, Russia, July, 2006.( Invited)
> “Resonant nonlinear and ultrafast optics with intersubband transitions,” Tokyo University, Tokyo, Japan, August, 2006. (Invited)
> “Resonant nonlinear optics with quantum cascade structures,” Osaka Institute of Technology, Osaka City, Osaka Prefecture, August, 2006. (Invited)
> “Nonlinear optics with semiconductor nanostructures,” Department of Physics, TAMU, College Station, TX, September, 2006. (Invited)
> “In-plane integration of quantum cascade lasers with resonant intersubband nonlinearities,” International Symposium Optics East 2006, Boston, MA, October, 2006. (Contributed)

**PUBLICATIONS DURING 2006**

- Belyanin, A; Kocharovsky, VV; Capasso, F; Fry, E; Zubairy, MS; Scully, MO. (2006) Quantum electrodynamics of accelerated atoms in free space and in cavities *Physical Review A: Atomic Molecular and Optical Physics*, vol. 74, 023807.
- Jho, Y.D.; Wang, X.; Wei, X.; Kono, J.; Reitze, D.H.; Belyanin, A.A.; Kocharovsky, V.V.;


• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Senior Research Associate, Center for Mathematics and Science Education (CMSE), [2004]

• SERVICE DURING 2006
  National
  ▶ Editorial/Board: School Science and Mathematics Journal (Associate Editor)
  Department
  ▶ Committee/Panel: Science Education Faculty Search Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ PHYS 205. — Concepts of Physics (total enrollment: 55)
  Fall
  ▶ PHYS 205. — Concepts of Physics (total enrollment: 53)

• RESEARCH PROJECTS DURING 2006
  State
  ▶ High School Physics: Teacher Quality Type B Professional Development Grant, Texas Higher Education Coordinating Board
  ▶ Texas Regional Collaboratives for Excellence in Science Teaching, University of Texas
  ▶ Texas Regional Collaboratives for Excellence in Science Teaching, University of Texas

• PRESENTATIONS DURING 2006
  ▶ “The Design of a Converging Lens Simulation and it’s Effects on Image Predictions,” Southwest Association for Science Teacher Education (SW-ASTE), College Station, TX, March, 2006. (Individual)
  ▶ “Physics Activities for Family Science Nights,” Conference for the Advancement of Science Teaching (CAST), Wichita Falls, TX, November, 2006. (Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

National
▷ Editorial/Board: The Physics Teacher, Journal of Scientific Exploration (Referee: Journals)

Department
▷ Committee/Panel: Awards Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 412. — Quantum Mechanics I (total enrollment: 38)
▷ PHYS 485 — Directed Studies (total enrollment: 1)
▷ PHYS 685 — Directed Studies (total enrollment: 1)

Fall
▷ PHYS 202. — College Physics (total enrollment: 94)

• PUBLICATIONS DURING 2006

• AWARDS DURING 2006
   National
   ▶ Fellow, American Physical Society

• SERVICE DURING 2006
   International
   ▶ Committee/Panel: International Conference Series “Recent Progress in Many-Body Theories” and Awarding the Feenberg Medal for Outstanding Contribution to Many-Body Theory (Chair)
   National
   University
   ▶ Service Position: Chinese Christian Fellowship (Advisor), Hong Kong Students Association (Advisor)
   College
   ▶ Event: Texas Regional Science Bowl (Judge)
   ▶ Committee/Panel: Information Technology Committee (Member)
   Department
   ▶ Committee/Panel: Undergraduate Curriculum Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
   Spring
   ▶ PHYS 306.502 — Basic Astronomy (total enrollment: 56)
   Fall
   ▶ PHYS 606.610 — Quantum Mechanics (total enrollment: 22)
   ▶ PHYS 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006
   Federal
   ▶ Development of a High Density, High Performance Beowulf Cluster, National Science Foundation, coworkers: S. Scuro (G)
   ▶ Forward Symplectic Algorithms for Solving Physical Evolution Equations, National Science Foundation
   ▶ Hamiltonian Lattice Gauge Method of Propagating Electromagnetic Waves, National Science Foundation
• PRESENTATIONS DURING 2006
  ▶ “Forward Symplectic Integrators for Solving Physical Dynamics Problems,” Mathematics Department Seminar, Baylor University, Waco, TX, January, 2006.( Individual)
  ▶ “Forward Symplectic Integrators For Solving Physical Dynamics Problems,” Mathematics Department, Numerical Analysis Group Seminar, Texas A&M University, College Station, TX, February, 2006. (Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

National
▷ Editorial/Board: National Science Foundation, Department of Energy, National Institute of Standards and Technology Precision Measurement Program (Review: Proposals), Physical Review A, Physical Review Letters (Referee: Journals)
▷ Committee/Panel: Executive Committee of Precision Measurements and Fundamental Constants Group of the American Physical Society (Secretary/Treasurer)

Department
▷ Event: Spring Physics Demonstration Show for Pre-College Students (Presenter)
▷ Committee/Panel: Awards Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 309. — Modern Physics (total enrollment: 24)

Fall
▷ PHYS 222. — Modern Physics for Engineers (total enrollment: 29)

• RESEARCH PROJECTS DURING 2006

Federal
▷ (REN) Spectroscopy and Collisions of Stored, Cold, Highly Charged Ions, National Science Foundation

• PUBLICATIONS DURING 2006

No report received from faculty member.
• SERVICE DURING 2006
  
  **Department**
  - Service Position: Undergraduate Advisor (Advisor)
  - Committee/Panel: Astronomy Committee (Member), Undergraduate Curriculum Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  **Spring**
  - PHYS 225.501-502 — **Electronic Circuits and Applications** (total enrollment: 20)
  - PHYS 485. — **Directed Studies** (total enrollment: 1)

  **Fall**
  - PHYS 306.502 — **Basic Astronomy** (total enrollment: 64)
  - PHYS 426.500 — **Physics Laboratory** (total enrollment: 13)
• SERVICE DURING 2006

International
▷ Event: International Workshop on Interconnection Between Particle Physics and Cosmology (Co-Chair)
▷ Editorial/Board: *International Journal of Modern Physics* (Referee: Journals)

National
▷ Editorial/Board: *Physical Letters B* (Referee: Journals), *Physical Review D* (Referee: Journals)

Department
▷ Committee/Panel: Graduate Admission Committee (Member), HEP Hiring Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 615. — *Methods of Theoretical Physics I* (total enrollment: 13)
▷ PHYS 685. — *Directed Studies* (total enrollment: 2)
▷ PHYS 691. — *Research* (total enrollment: 2)

Summer
▷ PHYS 485. — *Directed Studies* (total enrollment: 1)
▷ PHYS 685. — *Directed Studies* (total enrollment: 1)
▷ PHYS 691. — *Research* (total enrollment: 1)
▷ PHYS 691. — *Research* (total enrollment: 2)

Fall
▷ PHYS 634. — *Relativistic Quantum Field Theory* (total enrollment: 9)
▷ PHYS 685. — *Directed Studies* (total enrollment: 1)
▷ PHYS 691. — *Research* (total enrollment: 2)

• PRESENTATIONS DURING 2006
▷ Oklahoma State University, Oklahoma City, OK, March, 2006. (Individual)
▷ “SUSY, GUTs, and Their Implications,” Pheno 06, Madison, WI, May, 2006. (Invited)

“Yukawa Couplings in D-Brane Models,” PASCOS 06, Boston, MA, September, 2006. (Graduate, Y. Mimura)

“Grand Unified Models and Bs-anti Bs Mixing, Cosmology and Colliders Talk Dates,” Division of particles and Fields, Hawaii, October, 2006. (Invited)

“SUSY-Cosmology at the LHC, Determining Relic Density and Testing Gaugino University at the LHC, Low Energy Tau ID for Probing SUSY-Cosmology at the LHC,” Texas Section of APS Meeting at UT Arlington, Arlington, TX, October, 2006. (Graduate, A. Gurrola)

“SUSY-Cosmology at the LHC, Determining Relic Density and Testing Gaugino University at the LHC, Low Energy Tau ID for Probing SUSY-Cosmology at the LHC,” Texas Section of APS Meeting at UT Arlington, Arlington, TX, October, 2006. (Graduate, A. Krislock)

“SUSY-Cosmology at the LHC, Determining Relic Density and Testing Gaugino University at the LHC, Low Energy Tau ID for Probing SUSY-Cosmology at the LHC,” Texas Section of APS Meeting at UT Arlington, Arlington, TX, October, 2006. (Graduate, P. Simeon)

• PUBLICATIONS DURING 2006
TATIANA L. ERUKHIMOVA

LECTURER
PHYS-Numerical Modeling

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- SERVICE DURING 2006

  Department
  - Event: Chemistry Open House and Science Exploration Gallery (Organizer), Physics Festival (Organizer)

- TEACHING ASSIGNMENTS DURING 2006

  Fall
  - PHYS 218.801-803 — Mechanics (total enrollment: 83)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Associate Department Head, Physics, [1993]

• SERVICE DURING 2006
  College
  ▷ Event: Junior Science Bowl and Science Bowl (Reviewer)
  ▷ Committee/Panel: College Quality Enhancement Plan Council (Member), Qatar Advisory Committee (Member)

  Department
  ▷ Committee/Panel: Graduate Credentials and Records Committee (Chair), Long Range Planning Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ PHYS 202.205-508 — College Physics (total enrollment: 103)
  ▷ PHYS 285. — Directed Studies (total enrollment: 3)

  Summer
  ▷ PHYS 285. — Directed Studies (total enrollment: 2)

  Fall
  ▷ PHYS 201. — College Physics (total enrollment: 217)
  ▷ PHYS 201. — College Physics (total enrollment: 49)
  ▷ PHYS 285. — Directed Studies (total enrollment: 6)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▷ Writing for Assessment and Learning in the Natural and Mathematical Sciences, National Science Foundation

  University
  ▷ Rural High School Physics Teacher Workshop, Texas Collaborative for Excellence in Teacher Preparation
• SERVICE DURING 2006

National
▷ Editorial/Board: National Science Foundation, Department of Energy (Review: Proposals)

• PRESENTATIONS DURING 2006

▷ “From Color Fields to Quark Gluon Plasma,” Texas A&M University, College Station, TX, March, 2006. (Individual)
▷ “Ultrahot Matter at the Relativistic Heavy Ion Collider,” Texas A&M University, College Station, TX, March, 2006. (Individual)
▷ “From Nuclei to Quark Gluon Plasma and Back to Hadrons – A QCD Journey,” University of Minnesota, Minneapolis, MN, April, 2006. (Individual)
▷ “From Color Fields to Quark Gluon Plasma,” Lawrence Berkeley National Laboratory, Berkeley, CA, June, 2006. (Individual)
▷ “Hadronization of Dense Partonic Matter,” IX. International Conference on Strangeness in Quark Matter (SQM2006), Los Angeles, CA, June, 2006. (Invited)
▷ “Precision Probes for Hot QCD Matter,” QCD Workshop, Washington, DC, December, 2006. (Invited)

• PUBLICATIONS DURING 2006


• CHAIRS/PROFESSORSHIPS
  ▶ George P. Mitchell Chair in Experimental Physics [2005]

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Department Head, Physics, [2002]

• SERVICE DURING 2006
  College
  ▶ Committee/Panel: Executive Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ PHYS 691. — Research (total enrollment: 7)
  Summer
  ▶ PHYS 691. — Research (total enrollment: 5)
  Fall
  ▶ PHYS 691. — Research (total enrollment: 5)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▶ Optical Absorption of Pure Water in the Blue and Ultraviolet, National Science Foundation, coworkers: Z. Lu (G)
  ▶ Bioaerosol Sampling and Collection: Optics and Forward Scattering by Aerosols, U.S. Army, coworkers: D. Haubrich (G)
  Private
  ▶ Spectroscopy and Storage of the Components of Entangled States of Mercury, The Robert A. Welch Foundation

• PRESENTATIONS DURING 2006
  ▶ “Directed Spontaneous Emission From an Extended Ensemble of N Atoms,” International Conference on Coherent Control of the Fundamental Processes in Optics and X-ray-Optics, Nizhny Novgorod, Russia, June, 2006. (Invited)
  ▶ “The Einstein-Podolsky-Rosen Gedankenexperiment: An Experimental Realization With the Spin One-half Nuclei of $^{199}\text{Hg}$,” Jagiellonian University, Krakow, Poland, June, 2006. (Individual)
  ▶ “Rotational Analysis of a Vibrational Transition in the $^{199}\text{Hg}_2$ Molecule: A First Step in an Experimental Realization of a spin-1/2 Particle Version of the EPR Experiment,”

▷ “Optical Absorption of Pure Water Throughout the Visible and Near Ultraviolet,” Ocean Optics XVIII, Montreal, Canada, October, 2006. (Contributed)

▷ “Integrating Cavities and the Average Distance Traveled Between Intersections With the Wall of an Arbitrarily Shaped Cavity,” Mathematics Department, Texas A&M University, College Station, TX, November, 2006. (Individual)

• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

International
▷ Event: QCD at Zero Temperature (Chair), Quark Matter 2006 (Chair), Session on “Parton Propagation in Dense Matter:, XXXV Int. Symp. Multiparticle Dynam., Kromeriz, Czech Republic (Referee: Journals)

National
▷ Advisory Board: STAR Advisory Board, Brookhaven National Laboratory Report (Member), STAR Trigger Board, Brookhaven National Laboratory Report (Member)
▷ Committee/Panel: DOE Science and Technology Review of the RHIC Program (Panel Member), National Superconducting Cyclotron Laboratory NSF site review (Panel Member), QCD at High Energy (Member), RHIC II White Paper Writing Committee, Brookhaven National Laboratory Report (Co-Chair)

College
▷ Committee/Panel: Information Technology Committee (Member)

Department
▷ Event: Mitchell Symposium (Chair)
▷ Committee/Panel: Cyclotron Institute Computer Committee (Chair), Cyclotron Institute Safety Committee (Member), Physics 201-202 Textbook Selection Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 202. — College Physics (total enrollment: 96)
▷ PHYS 485. — Directed Studies (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 2)

Summer
▷ PHYS 691. — Research (total enrollment: 4)

Fall
▷ PHYS 691. — Research (total enrollment: 4)

• RESEARCH PROJECTS DURING 2006

Federal
▷ (REN) Cyclotron-Based Nuclear Science, Department of Energy
▷ Fundamental Studies in Nuclear Science, Department of Energy
(REN) QCD and Standard Model Studies, Department of Energy, coworkers: M. Sarsour (P), J. Drachenberg (G), T. Henry (G), Y. Li (G)

Development of New Techniques to Determine Neutron and Charged-Particle Induced Reaction Rates, National Nuclear Security Administration

Cooperative Agreement-Czech Republic, National Science Foundation

International: Asymptotic Normalization Co-Efficients in Nuclear Astrophysics, National Science Foundation

Private

(REN) Asymptotic Normalization Co-Efficients in Nuclear Astrophysics, The Robert A. Welch Foundation, coworkers: A. Banu (P), T. Al-Abdullah (G)

• PRESENTATIONS DURING 2006
  ▶ “d+Au Collisions at STAR,” XIV Int. Workshop Deep Inelastic Scatt.(DIS2006), Tsukuba, Japan, April, 2006. (Individual)
  ▶ “Towards Determination of the Astrophysical S Factor for the $^{12}$N($p,\gamma$)$^{13}$O Reactions,” RIA Summer School, Oak Ridge, TN, July, 2006. (Poster Postdoc)
  ▶ “Recent Results From STAR,” IX Int. Conf. Nucl.-Nucl. Coll., Rio de Janeiro, Brazil, August, 2006. (Invited)
  ▶ “Future Science at RHIC,” Brookhaven National Laboratory, Upton, NY, September, 2006. (Individual)
  ▶ “Determination of the Reaction Rate for $^{17}F(p,\gamma)^{18}$Ne Using the Neutron Transfer Reaction $^{13}C(^{17}O^{18}O)^{12}C$,” Annual Meeting of the Division of Nuclear Physics of the APS, Nashville, TN, October, 2006. (Contributed, T. Al-Abdullah)
  ▶ “Recent Results From the STAR Spin Program at RHIC,” APS Topical Group on Hadronic Physics, Nashville, TN, October, 2006. (Postdoc)
  ▶ “QCD at High Energy/Small-x,” Workshop on Future Opportunities in QCD, Washington, DC, December, 2006. (Invited)

• PUBLICATIONS DURING 2006
Adams, J.; et al. (2006) Transverse-momentum $\rho_t$ Correlation on $(\eta, \phi)$ From Mean -$\rho_t$ Fluctuations in Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV *Journal of Physics G: Nuclear and Particle Physics*, vol. 32, L37.


Adams, J.; et al. (2006) Minijet Deformation and Charge-independent Angular Correlations on Momentum Subspace $(\eta, \phi)$ in Au+Au Collisions at $\sqrt{s_{NN}} = 130$ GeV *Physical Review C: Nuclear Physics*, vol. 73, 064907.


Mukhamedzhanov, A.M.; Bem, P.; Burjan, V.; Gagliardi, C.A.; Irgaziev, B.F.; Kroha, V.;

SEC. 6.1 PROFESSIONAL ACTIVITIES 621

• SERVICE DURING 2006

Department
▷ Event: Physics Festival (Participant)
▷ Committee/Panel: Physics 201-202 Textbook Selection Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 202.521-524 — College Physics (total enrollment: 98)

Fall
▷ PHYS 202.501-504 — College Physics (total enrollment: 91)

• PRESENTATIONS DURING 2006

▷ “Experimental Studies of Single-Molecule Transistors,” Condensed Matter Seminar, Department of Physics, Texas A&M University, College Station, TX, January, 2006. (Invited)

• PUBLICATIONS DURING 2006

JOHN C. HARDY

PROFESSOR (979) 845-1411
PHYS-Nuclear Physics hardy@comp.tamu.edu

• AWARDS DURING 2006

National
▷ Tom W. Bonner Prize in Nuclear Physics, American Physical Society

University
▷ Distinguished Achievement Award - Research, Association of Former Students

• SERVICE DURING 2006

International
▷ Professional Affiliation: Canadian Association of Physicists (Member), Trustee, Deep River Science Academy (Member)
▷ Committee/Panel: 30th Mazurian Lakes Conference (Member), International Advisory Committee, ENAM (Member)

National
▷ Committee/Panel: Bonner Prize Committee, American Physical Society (Member), Program Advisory Committee, Hollifield Lab Oak Ridge National Laboratory (Chair), Science Policy Committee, Hollifield Lab, Oak Ridge National Lab (Member)

University
▷ Committee/Panel: Reactor Safety Board (Member)

Department
▷ Committee/Panel: Experimental Nuclear Physics Faculty Search Committee (Chair), Graduate Student Advisors (Member), Theoretical Nuclear Physics Search Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 208. — Electricity and Optics (total enrollment: 124)
▷ PHYS 208. — Electricity and Optics (total enrollment: 97)
▷ PHYS 691. — Research (total enrollment: 1)

Summer
• PHYS 691. — Research (total enrollment: 2)

Fall
• PHYS 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006

Federal
▷ (REN) Cyclotron-Based Nuclear Science, Department of Energy, coworkers: V. Golovko (P), V. Iacob (P), N. Nica (P), J. Goodwin (G), H. Park (G), C. Bolonek (U)
▷ Nuclear Structure Evaluations for ENSDF, Department of Energy, coworkers: N. Nica (P)

Private
▷ (REN) Nuclear Decay Studies, The Robert A. Welch Foundation, coworkers: V. Golovko (P), V. Iacob (P), N. Nica (P), J. Goodwin (G), H. Park (G), C. Bolonek (U)

• PRESENTATIONS DURING 2006

▷ “Weak Interaction Parameters From Superallowed Beta Decay,” University of Jyvaskyla, Jyvaskyla, Finland, January, 2006.( Individual)
▷ “The Weak Force: Dancing to it’s own Tune,” Saturday morning physics at Texas A&M, College Station, TX, February, 2006.( Individual)
▷ “Superallowed Nuclear Beta Decay: A Window on the Weak Interaction,” Texas A&M University, College Station, TX, March, 2006.( Individual)
▷ “Beta-decay of Proton-rich Nucleus 23Al and Astrophysical Consequences,” APS Meeting, Dallas, TX, April, 2006.( Contributed)
▷ “Further Tests of Internal-conversion Theory With Precise $\gamma$- and X-ray Spectroscopy,” APS Meeting, Dallas, TX, April, 2006.( Contributed)
▷ “Precise Branching Ratio Measurements for the $\beta$ Decay of $^{21}$Na,” APS Meeting, Dallas, TX, April, 2006.( Contributed)
▷ “Superallowed Nuclear Beta Decay: A Window on the Weak Interaction,” American Physical Society Meeting, Dallas, TX, April, 2006.( Invited)
▷ “Further Tests of Internal-conversion Theory With Precise $\gamma$- and X-ray Spectroscopy: Texas A&M Program to Measure $^{134}Cs^{m}$ and $^{137}Ba$,” National Nuclear Data Center, Brookhaven National Laboratory, Upton, NY, June, 2006.( Individual)
▷ “The Weak Interaction,” Cyclotron Institute, College Station, TX, July, 2006.( Individual)
▷ “Further Tests of Internal-conversion Theory With Precise $\gamma$ and X-ray Spectroscopy: Texas A&M Program to Measure $^{134}Cs^{m}$ and $^{137}Ba$,” Predeal International School on Collective Motion and Phase Transitions in Nuclei, Predeal, Romania, August, 2006.( Contributed)

“Cross Sections for Reactions in Explosive $^1$H Burning From Indirect Methods,” APS Meeting, Nashville, TN, October, 2006. (Contributed)

“Measurement of the $\gamma$ Branches in the $\beta^+$ Decay of $^{32}$Cl,” APS Meeting, Nashville, TN, October, 2006. (Contributed)


“Precision Measurements,” RIA Summer School, ORNL, Nagoya, Japan, December, 2006. (Invited)

**PUBLICATIONS DURING 2006**


DUDLEY HERSCHBACH
PROFESSOR (979) 845-1139
PHYS-Chemical Physics dherschbach@gmail.com

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Professor (J), Chemistry, [2006]

• SERVICE DURING 2006
  National
  ▷ Professional Affiliation: National Academy of Sciences (Member)

• RESEARCH PROJECTS DURING 2006
  State
  ▷ Producing Ultracold Molecules via Magnetic Traps-on-a-Chip, Texas A&M University
  Unfunded Research
  ▷ Magnetic Deceleration of Molecular Beams, UNFUNDED

• PUBLICATIONS DURING 2006

No report received from faculty member.
• SERVICE DURING 2006

International
▷ Editorial/Board: Hong Kong Government (Review: Proposals), Scientific Journals International (Referee: Journals)

National

Department
▷ Event: Chemistry Open House (Presenter)
▷ Committee/Panel: Distinguished Lecture Series and Colloquium Committee (Chair), Graduate Curriculum Committee (Member), Graduate Student Admissions and Appointments Committee (Member), Promotions, Tenure, and Appointments Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 632.600 — Condensed Matter Theory (total enrollment: 11)
▷ PHYS 691.619 — Research (total enrollment: 1)

Summer
▷ PHYS 691.619 — Research (total enrollment: 2)

Fall
▷ PHYS 221.500 — Optics and Thermal Physics (total enrollment: 69)
▷ PHYS 691.619 — Research (total enrollment: 2)

• PRESENTATIONS DURING 2006

▷ “Midgap States as a Powerful Tool to Investigate Unconventional Superconductivity,” Florida State University, School of Computational Science, Tallahassee, FL, May, 2006. (Individual)
▷ “Midgap States as a Powerful Tool to Investigate Unconventional Superconductivity,” University of Houston Texas Center for Superconductivity, Houston, TX, June, 2006. (Individual)
▷ “Andreev Reflection, ”Midgap States” and Extension to the Fulde-Ferrell-Larkin-Ovchinnikov (FFLO) State,” Texas A&M University, Department of Physics, College Station, TX, October, 2006. (Individual)

• PUBLICATIONS DURING 2006

on the 24th International Conference on Low Temperature Physics, ed. Takano, Y.; Hershfield, S.P.; Hill, S.O.; Hirshfeld, P.J.; Goldman, A.M.


No report received from faculty member.
TERUKI KAMON
PROFESSOR
PHYS-High Energy Physics
t-kamon@tamu.edu

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Graduate Advisor, Physics Graduate Advising Office, [2002]

• SERVICE DURING 2006
  
  International
  ▶ Committee/Panel: Organizing Committee on International Workshop on the Interconnection between Particle Physics and Cosmology (Co-Chair)

  National
  ▶ Event: Texas Section of APS Fall Meeting (Judge)
  ▶ Committee/Panel: CDF SUSY Physics (Co-convener)

  University
  ▶ Committee/Panel: Scholarship of Assessment Think Tank (Member), Texas A&M Reactor Safety Board (Member)

  College
  ▶ Committee/Panel: Graduate Instruction Committee (Member)

  Department
  ▶ Event: Chemistry Open House (Presenter), Physics Open House (Presenter)
  ▶ Committee/Panel: AMO Experimental Faculty Search (Member), AMO Theory Faculty Search (Member), Graduate Credentials and Records Committee (Member), Graduate Curriculum Committee (Member), HEP Program Committee 2nd Mitchell Symposium (Member), High-Energy Exp. Faculty Search (Chair), High-Energy Exp. Faculty Search (Member), Organizing Committee for Mitchell Symposium on Observation Cosmology (Co-Chair), Organizing Committee for Mitchell Symposium on Observation Cosmology (Member), Promotions, Tenure, and Appointments Committee (Member), PTA (Member)

• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  ▶ PHYS 627.600 — Elementary Particle Physics (total enrollment: 9)
  ▶ PHYS 685.620 — Directed Studies (total enrollment: 4)
  ▶ PHYS 691.620 — Research (total enrollment: 17)
  ▶ PHYS 691.680 — Research (total enrollment: 2)

  Summer
  ▶ PHYS 691 — Research (total enrollment: 4)
  ▶ PHYS 691.120 — Research (total enrollment: 2)
  ▶ PHYS 691.220 — Research (total enrollment: 2)
PHYS 691.380 — Research (total enrollment: 3)

PHYS 627.600 — Elementary Particle Physics (total enrollment: 7)

PHYS 685.621 — Directed Studies (total enrollment: 1)

PHYS 691.621 — Research (total enrollment: 23)

• RESEARCH PROJECTS DURING 2006

Federal

▷ (REN) High Energy Physics at Texas A&M University, Department of Energy, coworkers:
  M. Goncharov (Research Scientist), S. Lee (Research Scientist), V. Khotilovich (G), V. 
  Krutelyov (G)

▷ High Energy Physics at Texas A&M University, Department of Energy, coworkers: A. 
  Aurisano (G), M. Goncharov (G), V. Khotilovich (G), P. Wagner (G), M. Weinberger (G)

▷ Development of a High Density, High Performance Beowulf Cluster, National Science 
  Foundation

• PRESENTATIONS DURING 2006

▷ “Stau-Neutralino Co-annihilation Region at the LHC,” 7th UCLA Symposium on Sources 
  and Detection of Dark Matter and Dark Energy in the Universe, UCLA, Los Angeles, CA, 
  February, 2006. (Contributed)

▷ “RPV Stop Search,” April Meeting of American Physical Society, Dallas, TX, April, 2006. ( 
  Contributed)

▷ “Signals in the Co-annihilation Region of Supersymmetry at the LHC,” April Meeting of 
  American Physical Society, Dallas, TX, April, 2006. (Contributed)

▷ “Detection of SUSY Signals in Stau-Neutralino Coannihilation at Colliders,” Complementar- 
  ity between Dark Matter Searches and Collider Experiments (pre-SUSY 2006), University 
  of California, Irvine, CA, June, 2006. (Contributed)

▷ “Detection of SUSY Signals in Stau-Neutralino Coannihilation Region at the LHC,” 14th 
  International Conference on Supersymmetry and Unification of Fundamental Interactions 
  (SUSY 2006), Irvine, CA, June, 2006. (Contributed)

▷ “Cosmology and Colliders,” 33rd International Conference on High Energy Physics 
  (ICHEP 2006), Moscow, Russia, July, 2006. (Contributed)

▷ “Cosmology and Dark Matter at the LHC,” 6th International Workshop on the Identification 
  of Dark Matter, Rhodes Island, Greece, September, 2006. (Contributed)

▷ “Cosmology at the LHC,” Joint Meeting of Pacific Region Particle Physics Communities, 
  (APS- DPF 2006 + JPS2006), Honolulu, Hawaii, October, 2006. (Contributed)

▷ “Determining Relic Density and Testing Gaugino University at the LHC,” Texas Section 
  of APS Fall Meeting, University of Texas, Arlington, TX, October, 2006. (Contributed)

▷ “Low Energy Tau ID for Probing SUSY-Cosmology at the LHC,” Texas Section of APS 
  Full Meeting, University of Texas, Arlington, TX, October, 2006. (Contributed)

▷ “Search for Third Generation Vector Leptoquark at CDF,” Joint Meeting of Pacific Region 
  Particle Physics Communities, (APS-DPF 2006 + JPS2006, Honolulu, Hawaii, October, 
  2006. (Contributed)
“SUSY-Cosmology at the LHC,” Texas Section of APS Fall Meeting, University of Texas at Arlington, Arlington, TX, October, 2006.( Individual)

**PUBLICATIONS DURING 2006**

- Abulencia A.; et al. (2006) Search for Neutral MSSM Higgs Bosons Decaying to Tau Paris in pp Collisions at $\sqrt{s} = 1.96$ TeV *Physical Review Letters*, vol. 96, 011802.
- Abulencia, A.; et al. (2006) Search for a Neutral Higgs Boson Decaying to a W Boson Pair in pp Collisions at $\sqrt{s} = 1.96$ TeV *Physical Review Letters*, vol. 97, 081802.
- Abulencia, A.; et al. (2006) Search for Anomalous Semileptonic Decay of Heavy Flavor Hadrons Produced in Association with a W Boson at CDF II *Physical Review D: Particles and Fields*, vol. 73, 051101.
- Abulencia, A.; et al. (2006) Measurement of the $t\bar{t}$ Production Cross Section in pp Collisions at $\sqrt{s} = 1.96$ TeV in the All Hadronic Decay Mode *Physical Review D: Particles and Fields*, vol. 74, 072005.
- Abulencia, A.; et al. (2006) Measurement of the Ratio of Branching Fractions $B(D^0 \rightarrow K^+\pi^-) / B(D^0 \rightarrow K^-\pi^+)$ Using the CDF II Detector *Physical Review D: Particles and Fields*, vol. 74, 031109.
- Abulencia, A.; et al. (2006) Observation of $B^0_s$-$\bar{B}^0_s$ Oscillations *Physical Review Letters*, vol. 97, 242003.
- Abulencia, A.; et al. (2006) Observation of $B^0 \rightarrow K^+K^-$ and Measurements of Branching Fractions of Charmless Two-body Decays of $B^0$ and $B^0_s$ Mesons in pp Collisions at $\sqrt{s}$
Abulencia, A.; et al. (2006) Search for Excited and Exotic Muons in the $\mu\gamma$ Decay Channel in $pp$ Collisions at $\sqrt{s} = 1.96$ TeV *Physical Review Letters*, vol. 97, 211802.

Abulencia, A.; et al. (2006) Search for Higgs Bosons From Top Quark Decays in $pp$ Collisions at $\sqrt{s} = 1.96$ TeV *Physical Review Letters*, vol. 96, 042003.


Acosta, D.; et al. (2006) A Search for $t \to \tau \nu$ q in $tt$ Production *Physics Letters B*, vol. 639, 172.

= 1.96 TeV *Physical Review Letters*, vol. 97, 211802.
\[ \sqrt{s} = 1.8 \, \text{TeV} \] Physical Review D: Particles and Fields, vol. 73, 052002.

- Acosta, D.; et al. (2006) Search for W and Z Bosons in the Reaction \( p\bar{p} \to 2\text{jets} + \gamma + \sqrt{s} = 1.8 \, \text{TeV} \) Physical Review D: Particles and Fields, vol. 73, 012001.


  \[ B(B_{s}^{0} \to D_{s}^{-}\pi^{+}) / B(B^{0} \to D^{-}\pi^{+}) \] 
  and 
  \[ B(B^{+} \to D^{0}\pi^{+}) / B(B^{0} \to D^{-}\pi^{+}) \] 

- Acosta, D.; et al. (2006) Evidence for the Exclusive Decay \( B_{c}^{\pm} \to J/\psi\pi^{\pm} \) and Measurement of the Mass of the \( B_{c} \) Meson Physical Review Letters, vol. 96, 082002.


• SERVICE DURING 2006

National
▷ Service Position: Naval Research Lab (Consultant)

University
▷ Committee/Panel: University Distinguished Lecture Committee (Member)

College
▷ Committee/Panel: Campus Community Campaign Committee (Chair)

Department
▷ Event: Chemistry Open House (Presenter), Physics Open House (Presenter)
▷ Committee/Panel: AMO Search Committee (Member), Astronomy Committee (Member), Computer Committee (Member), Graduate Student Admissions and Appointments Committee (Chair), Long Range Planning Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 208.201-202(H) — Electricity and Optics (total enrollment: 31)
▷ PHYS 691. — Research (total enrollment: 4)

Summer
▷ PHYS 691. — Research (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 3)

Fall
▷ PHYS 218.201-203(H) — Mechanics (total enrollment: 56)
▷ PHYS 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006

Federal
▷ 3D-Time Dependent Vector Radiative Transfer in an Atmosphere-Ocean System, Office of Naval Research, coworkers: P. Zhai (P), S. Gunturk (G), J. Slanker (G), Y. You (G), Y. You (G)
Theoretical Studies of Radiative Transfer with Inelastic Time-Dependent/Independent Scattering including Both Active and Passive Sources in Realistic Atmosphere-Ocean Systems, *Office of Naval Research*, coworkers: C. Li (G), C. Li (G), P. Zha (G), P. Zhai (G)

Industrial

**PRESENTATIONS DURING 2006**

- “Sky Archaeology,” Texas Junior Science & Humanities Symposium, TAMU, College Station, TX, January, 2006. (Invited)
- “Scattering in Forward Infrared Radiative Transfer Models,” 3rd Advanced High Spectral Resolution Infrared Observations Workshop, Madison, WI, April, 2006. (Poster Contributed)
- “Methods to Calculated Raman and Fluorescent Radiation Emitted From Irregular Particles,” 12th Conference on Cloud Physics/12th Conference on Atmospheric Radiation, Madison, WI, July, 2006. (Contributed)
- “Polarization and Mueller Matrix for Multiple Scattering by Hexagonal Ice Crystals,” 12th Conference on Cloud Physics/12th Conference on Atmospheric Radiation, Madison, WI, July, 2006. (Contributed)
- “3D Monte Carlo Method for Obtaining the Complete Polarized Radiance Field for a Coupled Atmosphere-Ocean,” Ocean Optics XVIII Conference, Montreal, Canada, October, 2006. (Contributed)
- “The Radiance in a Dynamic Ocean (RaDyO) Program,” Ocean Optics XVIII Conference, Montreal, Canada, October, 2006. (Poster Contributed)
• PUBLICATIONS DURING 2006


• **AWARDS DURING 2006**
  
  *International*
  
  - S.I. Vavilov Gold Medal, Russian Academy of Sciences

• **SERVICE DURING 2006**
  
  *International*
  
  - Editorial/Board: Solid State Communications (Editor)

• **TEACHING ASSIGNMENTS DURING 2006**
  
  *Spring*
  
  - PHYS 689.608 — **Special Topics** in (total enrollment: 5)

• **PUBLICATIONS DURING 2006**
  
  
  
ROBERT A. KENEFICK

PROFESSOR
PHYS

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kenefick@physics.tamu.edu

• SERVICE DURING 2006

College
▷ Committee/Panel: Technology-Mediated Instruction Committee (Member)

Department
▷ Committee/Panel: Graduate Credentials and Records Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 327. — Experimental Physics (total enrollment: 21)
▷ PHYS 485. — Directed Studies (total enrollment: 1)
CHE-MING KO

PROFESSOR
PHYS-Nuclear Theory
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• SERVICE DURING 2006

  National
  ▶ Committee/Panel: Civilian Research and Development Foundation (Panelist)

  Department
  ▶ Committee/Panel: Graduate Student Admissions and Appointments Committee (Member), Promotions, Tenure, and Awards (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ PHYS 625.600 — Nuclear Physics (total enrollment: 11)

  Fall
  ▶ PHYS 414.500 — Quantum Mechanics II (total enrollment: 15)

• RESEARCH PROJECTS DURING 2006

  Federal
  ▶ (REN) Theoretical Nuclear Physics, National Science Foundation, coworkers: W. Liu (P), W. Liu (P)

  Private
  ▶ Theoretical Studies of Heavy Ion Collisions, The Robert A. Welch Foundation, coworkers: W. Liu (P), W. Liu (P), B. Zhang (P), W. Liu (G)

• PRESENTATIONS DURING 2006

Heavy Ion Collisions at LHC in a Multiphase Transport Model,” International Workshop on Particle Correlations and Femtoscopy, Sao Paulo, Brazil, September, 2006. (Invited)

Jet Conversions in the Quark-Gluon Plasma,” International Symposium on Multiparticle Dynamics, Paraty, Brazil, September, 2006. (Invited)

Heavy Quark Three-Body Scattering in QGP,” International Workshop on Selected Topics in Heavy Flavor Production in High-Energy Collisions, Beijing, China, November, 2006. (Invited)

Partonic Transport Description of Heavy Ion Collisions,” The 19th International Conference on Ultra-Relativistic Nucleus-Nucleus Collisions, Shanghai, China, November, 2006. (Invited)

- PUBLICATIONS DURING 2006

Chen, L.W.; Ko, C.M. (May 2006) A Dynamical Quark Coalescence Model for $\phi$ and $\Omega$ Production in Heavy-Ion Collisions at RHIC, A Dynamical Quark Coalescence Model for $\phi$ and $\Omega$ Production in Heavy-Ion Collisions at RHIC, Nuclear Physics Trend: 6th China-Japan Joint Nuclear Physics Symposium American Institute of Physics Conference Proceedings, ed. Ma, Y.G.; Ozawa, A. Shanghai, China.


Chen, L.W.; Ko, C.M. (2006) $\phi$ and $\Omega$ Production in Relativistic Heavy Ion Collisions in a Dynamical Quark Coalescence Model Physical Review C: Nuclear Physics, vol. 73, 044903.


• SERVICE DURING 2006

International
▷ Event: International Conference Coherent Control of the Fundamental Processes in Optics and X-ray Optics (Chair)
▷ Editorial/Board: Israel Science Foundation and Research Corporation (Review: Proposals)

National

Department
▷ Event: Session on X-ray Optics at the 36th Winter Colloquium Physics of Quantum Electronics (Organizer)
▷ Committee/Panel: Advisory Committee for the Institute of Quantum Studies (Member), Search Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 485. — Directed Studies (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 1)

Summer
▷ PHYS 691. — Research (total enrollment: 1)

Fall
▷ PHYS 208. — Electricity and Optics (total enrollment: 114)
▷ PHYS 208. — Electricity and Optics (total enrollment: 95)
▷ PHYS 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006

Federal
▷ Instrumentation for Laser Manipulation of Nuclear Transitions, Air Force Office of Scientific Research, coworkers: F. Vagizov (Associate Research Scientist), S. Olariu (Assistant Research Scientist), R. Kolesov (P), E. Kuznetsova (P), P. Anisimov (G), C. O’Brien (U)
▷ Laser Manipulation of Nuclear Transitions, Air Force Office of Scientific Research
▷ Laser Manipulations of Nuclear Transitions, Air Force Office of Scientific Research
▷ Spin-Based Lattice-Gas Quantum Optics in Solids Using Optical Addressing, Air Force Office of Scientific Research
Atomic and Nuclear Interference Phenomena in Solids, National Science Foundation

Coherent Control of Nuclear Transitions, National Science Foundation, coworkers: Y. Rostovtsev (Associate Research Scientist), F. Vagizov (Associate Research Scientist), S. Olariu (Assistant Research Scientist), R. Kolesov (P), E. Kuznetsova (P), P. Anisimov (G), C. O’Brien (U)

Private

Quantum Interference Phenomena with Gamma-Photons in Solids Doped by Mossbauer Nuclei, Civilian Research & Development Foundation (CRDF), coworkers: P. Anisimov (G)

• PRESENTATIONS DURING 2006


“Coherent Population Trapping With a Train of Pulses and it’s Application to Excited-state Absorption Suppression of Pumping Radiation in Laser Crystals,” APS Meeting, Dallas, TX, April, 2006. (Poster Contributed)


“Coherent Control of the Atomic and Nuclear Transitions in Solids,” Coherent Control of the Fundamental Processes in Optics and X-ray Optics, Russia, June, 2006. (Contributed)

“Coherent Population Trapping via a Continuum With a Train of Pulses,” Coherent Control of the Fundamental Processes in Optics and X-ray Optics, Russia, June, 2006. (Invited)

“Experimental Search for Laser Induced Effects in Mossbauer Spectra of 151Eu and 57Fe Dropped Crystals,” Coherent Control of the Fundamental Processes in Optics and X-ray Optics, Russia, June, 2006. (Invited)

“Generation of Coherent Terahertz Pulses in Optycal Crystals at Room Temperature,” Coherent Control of the Fundamental Processes in Optics and X-ray Optics, Russia, June, 2006. (Poster Contributed)

“Induced Optical Transparency via Frequency Modulation of Two-level Atomic System,” Coherent Control of the Fundamental Processes in Optics and X-ray Optics, Russia, June, 2006. (Invited)

“Optical Effects of Zeeman Coherence in Room Temperature Solids,” Coherent Control of the Fundamental Processes in Optics and X-ray Optics, Russia, June, 2006. (Invited)

• PUBLICATIONS DURING 2006

A: Atomic Molecular and Optical Physics, vol. 74, 053820.


• SERVICE DURING 2006

International
▷ Event: Symposium “Bose-Einstein Condensation” (Organizer), Symposium “Semiconductor Optics” (Organizer)

National

Department
▷ Committee/Panel: Astronomy/Cosmology Faculty Search Committee (Member), Doctoral Student’s Advisory Committee (Graduate Council Representative), Institute for Quantum Studies Advisory Committee (Member), Nanoscience Faculty Search Committee (Member), Undergraduate Curriculum Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 201. — College Physics (total enrollment: 94)
▷ PHYS 201. — College Physics (total enrollment: 95)

Fall
▷ PHYS 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006

Federal
▷ New Mid/Far-Infrared CW Room-Temperature Semiconductor Lasers Based on Intralaser Wave-Mixing Technique, Air Force Office of Scientific Research, coworkers: K. Dorfman (G)
▷ New Types of Mid/Far-Infrared Semiconductor Lasers for CW Room-Temperature Operations, National Science Foundation, coworkers: K. Dorfman (G)
▷ Real-Time Detection of Anthrax via FAST CARS and Gain-Swept Super-Radiance, Sandia National Laboratories, coworkers: A. Biryukov (G)
▷ Mid/Infrared Lasers Based on Difference Frequency Generation in GaAs/InGaAs/InGaP Nanostructures, U.S. Civilian Research and Development Foundation, coworkers: A. Biryukov (G)

Private
▷ Semiconductor Transistor Laser for Multitwavelength Operation, Research Corporation, coworkers: A. Biryukov (G), D. Pestov (G)
Unfunded Research

- Nonequilibrium Bose-Einstein Condensation, *UNFUNDED*, coworkers: K. Dorfman (G)

**PRESENTATIONS DURING 2006**

- "Experimental Study of Nonlinear Mode Mixing in Dual-wavelength Semiconductor Lasers," Coherent Control of the Fundamental Processes in Optics and X-ray-Optics, Russia, June, 2006. (Poster Contributed)
- "Intracavity Nonlinear Mixing in Dual-wavelength Laser Diodes for Mid/far-infrared Generation," Coherent Control of the Fundamental Processes in Optics and X-ray-Optics, Russia, June, 2006. (Invited)
- "Mode-locking Regimes of Difference-frequency Generation in Nonlinear Mixing Heterolasers," Coherent Control of the Fundamental Processes in Optics and X-ray-Optics, Russia, June, 2006. (Poster Contributed)
- "The Structure of Self-consistent Magnetic Field and Current Configurations in Relativistic Collisionless Jets," Challenges of Relativistic Jets, Cracow, Poland, June, 2006. (Poster Contributed)
- "The Theorem on the Non-polynomial Averages in Statistical Physics and Nonequilibrium BEC," Coherent Control of the Fundamental Processes in Optics and X-ray-Optics, Russia, June, 2006. (Invited)
- "The Converter Acceleration Mechanism and Accompanying Radiation in Relativistic Shocks or Shear Flows," 6th INTEGRAL Workshop The Obscured Universe, Space Research Institute RAS, Moscow, Russia, July, 2006. (Invited)
- "The Self-consistent Current Sheets and Filaments in Relativistic Astrophysical Jet," 6th INTEGRAL Workshop The Obscured Universe, Space Research Institute RAS, Moscow,
Russia, July, 2006. (Invited)

- “New Class of Self-consistent Current Sheets and Filaments in Collisionless Plasma,” XXVIth General Assembly of the International Astronomical Union, Prague, Czech Republic, August, 2006. (Poster Contributed)

- “Particle Acceleration via Converter Mechanism,” XXVIth General Assembly of the International Astronomical Union, Prague, Czech Republic, August, 2006. (Contributed)


- **PUBLICATIONS DURING 2006**


  - Derishev, E.V.; Kocharovsky, V.V.; Kocharovsky, V.I.V.; Martianov, V.Y. (August 2006) New Class of Self-consistent Current Sheets and Filaments in Collisionless Plasma, XXVIth General Assembly of the International Astronomical Union Prague, Czech Republic.


  - Kocharovsky, V.V.; Kocharovsky, V.I.V.; Holthaus, M.; Raymond, C.H.; Ooi, R.; Svidzinsky, A.; Ketterle, W.; Scully, M.O. (2006) Fluctuations in Ideal and Interacting Bose-Einstein Condensates: From the Laser Phase Transition Analogy to Squeezed States and
Bogoliubov Quasiparticles. **Advances in Atomic Molecular and Optical Physics** (pp. 291-442). Amsterdam: Academic Press.

• PRESENTATIONS DURING 2006
  ▶ “Type Ia Supernovae in the Infrared,” Supernova 1006: One Millennium Later, Hangzhou, China, May, 2006. (Individual)
  ▶ “Cosmology with Type Ia Supernova,” University of Notre Dame, Notre Dame, IN, October, 2006. (Individual)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

  Department
  ▶ Event: Spring and Fall Physics Show (Participant)
  ▶ Committee/Panel: Nanoscience Search Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ PHYS 218. — Mechanics (total enrollment: 25)
  ▶ PHYS 218. — Mechanics (total enrollment: 80)

  Summer
  ▶ PHYS 691. — Research (total enrollment: 1)

  Fall
  ▶ PHYS 218. — Mechanics (total enrollment: 81)
  ▶ PHYS 689. — Special Topics in (total enrollment: 6)
  ▶ PHYS 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006

  Federal
  ▶ Acquisition of a Scanning Hall Probe Microscope for Nanomagnetics Research and Student Training, National Science Foundation

  State
  ▶ Producing Ultracold Molecules via Magnetic Traps-on-a-Chip, Texas A&M University, coworkers: D. Rathnayaka (P), M. Hickey (G), B. Savoie (U)

  Unfunded Research
  ▶ Magnetic Deceleration of Molecular Beams, UNFUNDED, coworkers: D. Rathnayaka (P), M. Hickey (G), B. Savoie (U)
  ▶ Magnetic Nanowires/Superconductor Systems, UNFUNDED, coworkers: D. Rathnayaka (P)
  ▶ Topology, Percolation, Vortex Pinning, and Superconductivity, UNFUNDED

• PRESENTATIONS DURING 2006

  ▶ “Magnetic Nanowires/Superconductor Systems,” Mesoscopic Superconductivity and Magnetism, Chicago, IL, August, 2006. (Invited)
• CHAIRS/PROFESSORSHIPS
  - Mitchell/Heep Chair in Experimental High Energy Physics [2004]

• SERVICE DURING 2006
  National
  - Editorial/Board: Department of Energy (Review: Proposals)
  University
  - Committee/Panel: Academic Affairs Committee (Senate) (Member), Core Curriculum Committee (Member), Faculty Senate (Faculty Senator - 02)
  College
  - Committee/Panel: International Programs Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  - PHYS 603. — Electromagnetic Theory (total enrollment: 27)
  - PHYS 691. — Research (total enrollment: 3)
  Summer
  - PHYS 485. — Directed Studies (total enrollment: 1)
  - PHYS 485. — Directed Studies (total enrollment: 1)
  - PHYS 691. — Research (total enrollment: 2)
  Fall
  - PHYS 302. — Advanced Mechanics (total enrollment: 24)
  - PHYS 485. — Directed Studies (total enrollment: 3)
  - PHYS 691. — Research (total enrollment: 3)

• RESEARCH PROJECTS DURING 2006
  Federal
  - (REN) High Energy Physics at Texas A&M University, Department of Energy
  - High Energy Physics at Texas A&M University, Department of Energy
  - New Technology for Future Colliders, Department of Energy, coworkers: A. McInturff (Research Scientist), A. Sattarov (Research Scientist), J. Byeon (G), P. Noyes (G), N. Pogue (G), A. Collier (U), C. English (U)
  - Superconducting Dipoles for Future Hadron Colliders, Department of Energy
  - Acquisition of a State-of-the-Art X-Ray Diffraction System for Magneto-Thermo-Mechanical Materials Characterization Research and Education, National Science Foundation

SEC. 6.1 PROFESSIONAL ACTIVITIES
• PRESENTATIONS DURING 2006
  ▶ “Structured-cable Superconducting Quadrupole for High-heat-load Applications,” 2006. (Invited)
  ▶ “Elementary Particles and Accelerators: Discovery at the High Energy Frontier,” Department of Physics, Trinity University, Washington, DC, March, 2006. (Contributed)
  ▶ “Block-coil NbTi Dipoles for 6 Tesla Rapid-cycling Super-SPS,” 2nd CARE-HHH-APD Workshop on Scenarios for the LHC Luminosity Upgrade, Arcidosso, Italy, August, 2006. (Invited)
  ▶ “Recent Developments on Nb$_3$Sn Dipole Technology at Texas A&M,” 2nd CARE-HHH-APD Workshop on Scenarios for the LHC Luminosity Upgrade, Arcidosso, Italy, August, 2006. (Invited)

• PUBLICATIONS DURING 2006
  ▶ Abulencia, A. (2006) Measurement of the Ratios of Branching Fractions $B(B^0_s \rightarrow D^-\pi^+)/B(B^0 \rightarrow D^-\pi^+)$ and $B(B^+ \rightarrow D^0\pi^+)/B(B^0 \rightarrow D^-\pi^+)$ Physical Review Letters, vol. 96, 191801.
  ▶ Abulencia, A.; et al. (2006) Measurement of the $t\bar{t}$ Production Cross Section in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV Using Leptons + Jets Events With Jet Probability b-tagging Physical Review D: Particles and Fields, vol. 74, 072006.
  ▶ Abulencia, A.; et al. (2006) Measurement of the $t\bar{t}$ Production Cross Section in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV in the all-Hadronic Decay Mode Physical Review D: Particles and Fields, vol. 74, 072005.
Abulencia, A.; et al. (2006) Measurement of the Ration of Branching Fractions $B(D^0 \to K^+\pi^-) / B(D^0 \to K^-\pi^+)$ Using the CDF II Detector Physical Review D: Particles and Fields, vol. 74, 031109.

Abulencia, A.; et al. (2006) Measurement of the $t\bar{t}$ Production Cross Section in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV Physical Review D: Particles and Fields, vol. 84, 082004.


Abulencia, A.; et al. (2006) Measurement of Mass and Width of the Excited Charmed Meson States $D_{0}^{*1}$ and $D_{0}^{*2}$ at CDF Physical Review D: Particles and Fields, vol. 73, 051104.

Abulencia, A.; et al. (2006) Search for Second-generation Scalar Leptoquarks in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV Physical Review D: Particles and Fields, vol. 73, 051102.


Abulencia, A.; et al. (2006) Observation of $B_s^0 \to \bar{B}_s^0$ Oscillations Physical Review Letters, vol. 97, 242003.

Abulencia, A.; et al. (2006) Observation of $B_s^0 \to K^+K^-$ and Measurements of Branching Fractions of Charmless 2-body Decays of $B^0$ and $B_s^0$ Mesons in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV Physical Review Letters, vol. 97, 211802.

Abulencia, A.; et al. (2006) Search for Excited and Exotic Muons in the $\mu\gamma$ Decay Channel in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV Physical Review Letters, vol. 97, 211802.


Abulencia, A.; et al. (2006) Search for a Netutral Higgs Boson Decaying to a W Boson Pair in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV Physical Review Letters, vol. 97, 081802.


Abulencia, A.; et al. (2006) Search for new Physics in Lepton + Photon + X Events With 305 $pb^{-1}$ of $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV Physical Review Letters, vol. 97, 031801.

Abulencia, A.; et al. (2006) Measurement of the $B_{c}^{+}$ Meson Lifetime Using $B_{c}^{+} \to (\Psi)e^+\nu_e$ Physical Review Letters, vol. 97, 012002.

Abulencia, A.; et al. (2006) Search for High-mass Resonances Decaying to $e\mu$ in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV Physical Review Letters, vol. 96, 211802.


Abulencia, A.; et al. (2006) Search for H \rightarrow b\bar{b} Produced in Association With W Bosons in p\bar{p} Collisions at \sqrt{s} = 1.96 TeV Physical Review Letters, vol. 96, 081803.

Abulencia, A.; et al. (2006) Search for Charged Higgs Bosons From top Quark Decays in p\bar{p} Collisions at \sqrt{s} = 1.96 TeV Physical Review Letters, vol. 96, 042003.

Abulencia, A.; et al. (2006) Search for Neutral MSSM Higgs Bosons Decaying to \tau Pairs in p\bar{p} collisions at \sqrt{s} = 1.96 TeV Physical Review Letters, vol. 96, 011802.

Acosta, D.; et al. (2006) Search for W and Z Bosons in the Reaction p\bar{p} \rightarrow 2jets + \gamma at \sqrt{s} = 1.96 TeV Physical Review D: Particles and Fields, vol. 73, 012001.


McInturff, A.; et al. (August2006)Test Results of a N\textsubscript{3}Sn Wind/React Block Dipole, Proceedings of the Applied Superconductivity Conference Seattle, WA.


• AWARDS DURING 2006

National
▷ Alfred P. Sloan Fellowship, Alfred P. Sloan Foundation

• SERVICE DURING 2006

International
▷ Research Group: High Transverse Momentum Working Group for the Future of RHIC (Co-Chair)

National
▷ Committee/Panel: God-Parent Committee for a STAR Paper of Forward-rapidity Production of Neutral Pions (Chair), God-Parent Committee for a STAR Paper on the Scaling of Strangeness Production in Au+Au Collisions (Chair), Writing Committee for Co-authoring ‘White Paper’ on Future Plans of the RHIC Facility (Member)

Department
▷ Committee/Panel: Advisory Committee (Member), Textbook Selection Committee for PHYS 201 (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 201. — College Physics (total enrollment: 93)

Summer
▷ PHYS 685. — Directed Studies (total enrollment: 1)

Fall
▷ PHYS 201. — College Physics (total enrollment: 217)
▷ PHYS 685. — Directed Studies (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006

Private
▷ Alfred P. Sloan Fellowship, Alfred P. Sloan Foundation, coworkers: M. Codrington (G)

• PRESENTATIONS DURING 2006

▷ “Quantum Fireworks at RHIC,” Ralf Rapp’s Saturday Morning Physics Program, Colleg Station, TX, 2006. (Individual)
“Results from RHIC and a Look to the Future,” Conference on the Application of Accelerators in Research and Industry, Fort Worth, TX, August, 2006. (Invited)

- PUBLICATIONS DURING 2006


  - Adler, S.S.; et al. (2006) Improved Measurement of Double Helicity Asymmetry in Inclusive Midrapidity $\pi^0\pi^0$ Production for Polarized p+p Collisions at $s(\sqrt{s})^{1/2}=200$-GeV Physical Review D: Particles and Fields, vol. 73, 091102.


  - Adler, S.S.; et al. (2006) Common Suppression Pattern of eta and $\pi^0\pi^0$ Mesons at High Transverse Momentum in Au+Au Collisions at $S(\sqrt{s})^{1/2}=200$-GeV Physical Review Letters, vol. 96, 202301.


  - Adler, S.S.; et al. (2006) Single Electrons From Heavy Flavor Decays in p+p Collisions at
\( s^{(1/2)} = 200\text{-GeV} \) *Physical Review Letters*, vol. 96, 032001.

- Adler, S.S.; et al. (2006) Measurement of Identified \( \pi^0 \) and Inclusive Photon \( \gamma(2) \) and Implication to the Direct Photon Production in \( s_{NN}^{(1/2)} = 200\text{-GeV} \) \( \text{Au+Au} \) Collisions *Physical Review Letters*, vol. 96, 032302.

- Adler, S.S.; et al. (2006) Modifications to Di-jet Hadron Pair Correlations in \( \text{Au+Au} \) Collisions at \( s_{NN}^{(1/2)} = 200\text{-GeV} \) *Physical Review Letters*, vol. 97, 052301.

- Adler, S.S.; et al. (2006) \( J/\psi \) Production and Nuclear Effects for \( \text{d+Au} \) and \( \text{p+p} \) Collisions at \( s_{NN}^{(1/2)} = 200\text{-GeV} \) *Physical Review Letters*, vol. 96, 012304.

• CHAIRS/PROFESSORSHIPS
  ▷ Mitchell-Heep Chair in High Energy Physics [2002]

• AWARDS DURING 2006
  International
  ▷ Golden Medal and Honorary Citizen, Salonica, Greece
  ▷ Honorary Citizen, Zografou, Athens
  ▷ Honorary Citizen, Nauplion, Greece
  ▷ National Award, Advanced Technical University of Crete, Greece
  ▷ Onassis International Prize, Alexander S. Onassis Public Benefit Foundation

• SERVICE DURING 2006
  International
  ▷ Editorial/Board: European Union, Institute of Physics (Review: Proposals)
  ▷ Committee/Panel: CERN Council European Space Agency (Member)
  National
  Department
  ▷ Committee/Panel: Astronomy Search Committee (Member), High Energy Phenomenology Search Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ PHYS 689.600 — Special Topics in (total enrollment: 9)
  ▷ PHYS 691. — Research (total enrollment: 5)
  Summer
  ▷ PHYS 691. — Research (total enrollment: 1)
  ▷ PHYS 691. — Research (total enrollment: 1)
  ▷ PHYS 691. — Research (total enrollment: 3)
  Fall
  ▷ PHYS 689.601 — Special Topics in (total enrollment: 7)
  ▷ PHYS 691. — Research (total enrollment: 5)

• RESEARCH PROJECTS DURING 2006
Federal

▷ (REN) High Energy Physics at Texas A&M University, Department of Energy, coworkers: C. Chen (G), G. Kraniotis (G), E. Mayes (G), J. Walker (G)
▷ High Energy Physics at Texas A&M University, Department of Energy, coworkers: G. Kraniotis (P), C. Chen (G), J. Maxin (G), E. Mayes (G)
▷ Electromagnetic and Informational Processes in Biomolecular Polymers, National Science Foundation

• PRESENTATIONS DURING 2006

▷ “D-brane Model Building and Flipped SU(5),” Rutgers University, New Jersey, February, 2006. (Individual)
▷ “Modern Cosmogony,” Advanced Technical University, Lamia, Greece, March, 2006. (Contributed)
▷ “Modern Research,” National Technical University, Athens, Greece, March, 2006. (Individual)
▷ “Brain and Mind,” Filoctetes Center Conference, New York City, NY, April, 2006. (Invited)
▷ “The Strong Coupling Accelerates the Expansion of the Universe,” 2nd Mitchell Symposium on Cosmology, Astronomy and Fundamental Physics, College Station, TX, April, 2006. (Invited)
▷ “Modern Cosmogony,” Advanced Technical University, Iraklion, Greece, May, 2006. (Contributed)
▷ “Modern Cosmogony,” Society of the American Universities Graduates, Salonica, Greece, June, 2006. (Contributed)
▷ “On the Brain’s Microcosmos,” 44th International Conference of the National Pediatric Society, Rodos, Greece, June, 2006. (Individual)
▷ “Brain Neuronics,” European Society of Cardiology Conference, Athens, Greece, October, 2006. (Contributed)
▷ “Brain’s Microcosmos,” 25th International Medical Conference, Athens, Greece, November, 2006. (Contributed)
• PUBLICATIONS DURING 2006
• **SERVICE DURING 2006**

  **International**
  - Editorial/Board: New Zealand Science Foundation (Marsden Foundation), and US-Israeli Cooperative Grants (Review: Proposals)

  **National**

  **University**
  - Committee/Panel: Executive Committee of Materials Science & Engineering (Member)

  **College**
  - Committee/Panel: Research Advisory Committee (Member)

  **Department**
  - Committee/Panel: Condensed Matter Experiment Search Committee (Chair), Condensed Matter Theory Search Committee (Member), Long Range Planning Committee (Member), Nanoscience Search Committee (Chair), Promotions, Tenure, and Appointments Committee (Member)

• **TEACHING ASSIGNMENTS DURING 2006**

  **Spring**
  - PHYS 208. — *Electricity and Optics* (total enrollment: 71)
  - PHYS 485. — *Directed Studies* (total enrollment: 1)
  - PHYS 685 — *Directed Studies* (total enrollment: 1)
  - PHYS 691. — *Research* (total enrollment: 5)

  **Summer**
  - PHYS 485. — *Directed Studies* (total enrollment: 2)
  - PHYS 691. — *Research* (total enrollment: 1)
  - PHYS 691. — *Research* (total enrollment: 3)

  **Fall**
  - PHYS 485. — *Directed Studies* (total enrollment: 1)
  - PHYS 691. — *Research* (total enrollment: 5)

• **RESEARCH PROJECTS DURING 2006**
Federal
▷ Acquisition of a Scanning Hall Probe Microscope for Nanomagnetics Research and Student Training, National Science Foundation
▷ (REN) Intrinsic Interactions Between Superconductivity and Magnetism in Quaternary and Pseudoquaternary Borocarbides, National Science Foundation
▷ NIRT: Molecular Nanomagnets: Magnetic and Electronic Properties of Novel Magnetic Nanostructures and Nanostructured Materials, National Science Foundation

University
▷ Nanomagnets for Mobile Computing and Telecommunications, Telecommunications and Informatics Task Force

Private
▷ The Influence of Surfaces, Reduced Dimensionally and Disorder on the Properties of Solids, The Robert A. Welch Foundation

Unfunded Research
▷ Magnetic Nanowires/Superconductor Systems, UNFUNDED, coworkers: E. Ozmetin (G)
▷ Topology, Percolation, Vortex Pinning, and Superconductivity, UNFUNDED

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International
▷ Editorial/Board: Optics Communications (Member), Various Scientific Journals (Referee: Journals)
▷ Committee/Panel: CLEO/QES (Co-Chair), The Conference on Lasers and Electro-Optics (Member)

Department
▷ Event: Physics Festival (Organizer)
▷ Committee/Panel: AMO Physics/Quantum Optics Search Committee (Member), Building Committee (Member), Nano Science Search Committee I (Member), Nano Science Search Committee II (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 685. — Directed Studies (total enrollment: 1)

Summer
▷ PHYS 201. — College Physics (total enrollment: 74)
▷ PHYS 485. — Directed Studies (total enrollment: 1)
▷ PHYS 685. — Directed Studies (total enrollment: 1)
▷ PHYS 685. — Directed Studies (total enrollment: 1)
▷ PHYS 685. — Directed Studies (total enrollment: 1)
▷ PHYS 685. — Directed Studies (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 2)

Fall
▷ PHYS 485. — Directed Studies (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006

Federal
▷ Quantum Optics with Single Optical Cycles, National Science Foundation

Private
▷ Attosecond Dynamics of Strong-Field Dissociation of the Molecular Hydrogen Ion, The Robert A. Welch Foundation, coworkers: F. Pham (G)
▷ Few-Cycle Femtosecond Laser System with Stabilized ”Absolute” Phase, The Robert A. Welch Foundation, coworkers: X. Liu (P), Y. Li (G), X. Xu (G)
**PRESENTATIONS DURING 2006**

- Friedrich-Schiller-Universität, Jena, Germany, October, 2006. (Individual)
- Kansas State University, Manhattan, KS, October, 2006. (Individual)
- Stevens Institute of Technology, Castle Point on Hudson, NJ, November, 2006. (Individual)

**PUBLICATIONS DURING 2006**

- Merkel, W; Averbukh, IS; Girard, B; Paulns, GG; Schleich, WP. (2006) Factorization of numbers with physical systems *Fortschritte Der Physik-Progress of Physics*, vol. 54, 856-865.
• SERVICE DURING 2006

International
▷ Committee/Panel: Advisory Committee of International Conference on the Ferromagnet-Superconductor Hybrids (Member), Program Committee of International Congress on Statistical Physics STATPHY 23 (Member)

National
▷ Committee/Panel: Scientific Council of Landau Institute for Theoretical Physics (Member)

Department
▷ Committee/Panel: Colloquium Committee (Member), Promotion, Tenure, and Appointments Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 624. — Quantum Mechanics (total enrollment: 28)
▷ PHYS 689. — Special Topics in (total enrollment: 9)
▷ PHYS 691. — Research (total enrollment: 2)

Summer
▷ PHYS 685. — Directed Studies (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 1)

Fall
▷ PHYS 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006

Federal
▷ (REN) Theory of Magnetic Heterostructures on the Submicron Scale, Department of Energy, coworkers: K. Romanov (Research Scientist), K. Ryvkin (P), B. Dobrescu (G), D. Sun (G)
▷ NIRT: Molecular Nanomagnets: Magnetic and Electronic Properties of Novel Magnetic Nanostructures and Nanostructured Materials, National Science Foundation, coworkers: B. Dobrescu (G), H. Wei (G)
▷ (REN) Physical Phenomena in Low-Dimensional Systems, National Science Foundation, coworkers: K. Romanov (Research Scientist), B. Dobrescu (G), A. Glatz (G), H. Wei (G)
University
▷ Nanomagnets for Mobile Computing and Telecommunications, *Telecommunications and Informatics Task Force*, coworkers: B. Dobrescu (G), H. Wei (G)

**PRESENTATIONS DURING 2006**
▷ “Molecular Magnets,” Colloquium at Department of Physics, University of Texas, Austin, TX, May, 2006. (Individual)

**PUBLICATIONS DURING 2006**
Christopher N. Pope
Distinguished Professor (979) 845-7793
Phys-High Energy Physics pope@physics.tamu.edu

- Chairs/Professorships
  - Stephen Hawking Chair in Fundamental Physics [2002]

- Awards During 2006
  - International
    - Honorary Professor, Theoretical Physics, Cambridge University, UK

- Service During 2006
  - International
    - Event: First Cambridge-Mitchell Texas Conference, ”Time-dependent backgrounds and the cosmic singularity in string and M-theory” (Organizer)
    - Editorial/Board: Oxford and Cambridge College Research Fellowships (Referee)
  - National
  - College
    - Committee/Panel: Tenure and Promotion Advisory Committee (Member)
  - Department
    - Event: Mitchell Symposium (Organizer)
    - Committee/Panel: Computer Committee (Member), Graduate Advisory Committee (Member), New Buildings Committee (Member), Performance Evaluation Committee (Member), Promotions, Tenure, and Appointments Committee (Chair), Tenure and Promotion Advisory Committee (Member)

- Teaching Assignments During 2006
  - Spring
    - PHYS 616. — Methods of Theoretical Physics II (total enrollment: 6)
    - PHYS 685. — Directed Studies (total enrollment: 2)
    - PHYS 691. — Research (total enrollment: 2)
  - Summer
    - PHYS 691. — Research (total enrollment: 1)
    - PHYS 691. — Research (total enrollment: 1)
    - PHYS 691. — Research (total enrollment: 1)
  - Fall
- PHYS 611. — **Electromagnetic Theory** (total enrollment: 32)
- PHYS 691. — **Research** (total enrollment: 3)

**RESEARCH PROJECTS DURING 2006**

Federal

- (REN) High Energy Physics at Texas A&M University, *Department of Energy*, coworkers: W. Chen (G), Z. Chong (G)
- High Energy Physics at Texas A&M University, *Department of Energy*, coworkers: J. Vazquez-Poritz (P), W. Chen (G), Z. Chong (G)
- International Collaboration on Gravitational Physics and Implications for M-Theory, *National Science Foundation*, coworkers: H. Lu (Visiting Scientist)

**PRESENTATIONS DURING 2006**

- “The Cambridge-Mitchell Cosmology Collaboration,” First Texas Cosmology Network Meeting, University of Texas, Austin, TX, September, 2006. (Invited)

**PUBLICATIONS DURING 2006**


RALF RAPP
ASSOCIATE PROFESSOR (979) 845-1411
PHYS-Quantum Chromodynamics, Nuclear Theory rapp@comp.tamu.edu

• SERVICE DURING 2006

International
▷ Event: Electromagnetic Probes at RHIC-II (Co-convener), Working group on “In-Medium Excitation” for the physics of compressed baryonic matter (CBM) at the future Facility for Antiproton and Ion Research (FAIR) (Co-convener), XXXVI International Symposium of Multiparticle Dynamics (ISMD06) (Co-convener)
▷ Editorial/Board: CBM Physics Handbook (Member)

National
▷ Service Position: State University of New York at Stony Brook (Adjunct Professor)
▷ Event: Saturday Morning Physis (Organizer)

Department
▷ Event: Nuclear Theory Seminar Series at the Cyclotron Institute (Organizer)
▷ Committee/Panel: Nuclear Experimented Search Committee (Member), Nuclear Theory Search Committee (Chair), PHYS-201 Textbook Selection Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 201.513-516 — College Physics (total enrollment: 96)
▷ PHYS 685.635 — Directed Studies (total enrollment: 1)

Summer
▷ PHYS 691.335 — Research (total enrollment: 1)

Fall
▷ PHYS 401.500 — Computational Physics (total enrollment: 24)
▷ PHYS 485.535 — Directed Studies (total enrollment: 2)
▷ PHYS 691.635 — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006

Federal
▷ CAREER: Spectral Properties of Hot and Dense QCD Matter, National Science Foundation, coworkers: L. Ravagli (P), H. van Hees (P), D. Sun (G), X. Zhao (G)

International

SEC. 6.1 PROFESSIONAL ACTIVITIES 673
Spanish Government Postdoctoral Fellowship: Mesons at Finite Nuclear Denisty and Temperature and Application to the Study of Heavy-Ion Collisions, *Spanish Government*, coworkers: D. Cabrera (P)

- **PRESENTATIONS DURING 2006**
  - “SMP 2006 at the Texas A&M University Cyclotron: Program Summary and Perspectives,” 2006 Saturday Morning Physics Program, College Station, TX, 2006. (Individual)
  - “The Early Universe: A Journey into the Past,” 2006 Saturday Morning Physics Program, College Station, TX, 2006. (Individual)
  - “The Origin of Mass and the Vacuum: Why is Lead so Heavy?,” 2006 Saturday Morning Physics Program, College Station, TX, 2006. (Individual)
  - “Charm and Charmonium in the Quark-Gluon Plasma,” International Workshop on Continuous Advances in QCD, University of Minnesota, Minneapolis, MN, May, 2006. (Invited)
  - “Dileptons and Medium Effects in Heavy-Ion Collisions,” 5th International Conference on Perspectives in Hadronic Physics, Trieste, Italy, May, 2006. (Invited)
  - “Medium Modifications of Hadrons and the NA60 Dimuon Data,” Frankfurt University, Frankfurt, Germany, June, 2006. (Invited)
  - “Q-Qbar Modes in the Quark-Gluon Plasma,” IVth International Conference on Quarks and Nuclear Physics, Madrid, Spain, June, 2006. (Contributed)
  - “The Kaon Optical Potential Modified by Theta + Pentaquark Excitation,” IVth International Conference on Quarks and Nuclear Physics, Madrid, Spain, June, 2006. (Contributed)
  - “Sonden des Quark-Gluon Plasmas: Schwere Quarks and Thermische Strahlung,”
Tübingen University, Germany, July, 2006.( Invited)
▷ “Hot and Dense QCD Matter and Heavy-Ion Collisions,” 19th International Conference on the Application of Accelerators in Research and Industry, Fort Worth, TX, August, 2006.( Invited)
▷ “Finite-Size Effects on Dilepton Properties in Relativistic Heavy-Ion Collisions Trenton Strong,” APS-DNP Meeting, Nashville, TN, October, 2006.(Poster Individual)
▷ “In-Medium Modifications of Hadrons and the NA60 Dimuon Measurements,” APS-DNP Meeting, Nashville, TN, October, 2006.( Contributed)
▷ “Theoretical Interpretation of Recent SPS Dilepton Data,” 19. International Conference on Ultrarelativistic Nucleus-Nucleus Collisions, Shanghai, China, November, 2006.( Contributed)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International
▷ Editorial/Board: *Physics Review A*, *Physics Review Letters*, *Reviews of Modern Physics* (Referee: Journals)

National
▷ Event: Recent Advances in Atomic Physics, Session in CAARI (Conference on Applications of Accelerators in Research and Industry) (Chairman), Recent Advances in Atomic Physics, Session in CAARI (Conference on Applications of Accelerators in Research and Industry) (Organizer)
▷ Editorial/Board: Computer Physics Communications (Editor)

College
▷ Committee/Panel: Grievance Committee (Elected Member)

Department
▷ Committee/Panel: Advisory Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Summer
▷ PHYS 202. — College Physics (total enrollment: 47)

Fall
▷ PHYS 615. — Methods of Theoretical Physics I (total enrollment: 29)
▷ PHYS 685. — Directed Studies (total enrollment: 2)

• PUBLICATIONS DURING 2006

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Chair, Interdisciplinary Faculty, Computational Nanoscience and Materials - IGERT, [2006]
  ▶ Chair, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• SERVICE DURING 2006
  National
  ▶ Event: American Physical Society Meeting Focused Session (Organizer)

  University
  ▶ Committee/Panel: Interdepartmental Program Chairs Committee (Member), Materials Science and Engineering Executive Committee (Chair)

  Department
  ▶ Committee/Panel: Colloquium Committee (Member), Graduate Admissions Committee (Member), Nanoscience Search Committees (Member), Performance Evaluation Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ PHYS 208. — Electricity and Optics (total enrollment: 97)
  ▶ PHYS 485. — Directed Studies (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 2)

  Summer
  ▶ PHYS 222. — Modern Physics for Engineers (total enrollment: 17)
  ▶ PHYS 691. — Research (total enrollment: 2)

  Fall
  ▶ PHYS 617. — Physics of the Solid State (total enrollment: 9)
  ▶ PHYS 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▶ Acquisition of a Scanning Hall Probe Microscope for Nanomagnetics Research and Student Training, National Science Foundation
Acquisition of a State-of-the-Art X-Ray Diffraction System for Magneto-Thermo-Mechanical Materials Characterization Research and Education, National Science Foundation

IGERT: New Mathematical Tools for Next Generation Materials, National Science Foundation, coworkers: A. Nandyala (G), T. Wellington (G)

NIRT: Molecular Nanomagnets: Magnetic and Electronic Properties of Novel Magnetic Nanostructures and Nanostructured Materials, National Science Foundation

University

Nanomagnets for Mobile Computing and Telecommunications, Telecommunications and Informatics Task Force

Private

Phase Transitions, Pairing Mechanism, Electron-Quasiparticle Interaction and Flux Lattices in Rare-Earth Nickel Borocarbides, Civilian Research & Development Foundation (CRDF)

(REN) Magnetism in Silicon Clathrates: New Nanostructured Magnetic Materials, The Robert A. Welch Foundation, coworkers: J. Chi (G), V. Goruganti (G), W. Gou (G)

International

Manufacture of Templates for Self-Assembly of Magnetic Nano-Structures, Materials and Manufacturing Ontario

- PRESENTATIONS DURING 2006

  “Magnetism in Fe_{4}Al_{13} and Related FeAl Intermetallics,” March Meeting of the American Physical Society, Baltimore, MD, 2006. (Contributed)

  “Magnetization Controlled Superconductivity in a Pb Film on a Perpendicular Array of Ferromagnetic Co Nanowires,” March Meeting of the American Physical Society, Baltimore, MD, 2006. (Contributed)

  “Transport and Magnetic Properties of Nd_{2}Ni_{2}Pb and NdNiPb,” March Meeting of the American Physical Society, Baltimore, MD, 2006. (Contributed)

  “Transport and Magnetic Properties of Nd_{2}Ni_{2}Pb and NdNiPb,” Texas A&M Student Research Week, College Station, TX, March, 2006. (Graduate, V. Goruganti)

- PUBLICATIONS DURING 2006


• SERVICE DURING 2006

International
▷ Event: Tau Reconstruction Group at the US CMS LHC Physics Center (Convener), Very Exotic Phenomena Physics Group at Collider Detector Facility (CDF) Experiment (Convener)
▷ Committee/Panel: Particle Physics and Cosmology Conference (Member)

National
▷ Editorial/Board: Institutional Board on the US CMS EMU Project (Member)

Department
▷ Committee/Panel: High Energy Search Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ PHYS 218. — Mechanics (total enrollment: 110)
▷ PHYS 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006

Federal
▷ CMS Endcap Muon M&O, Department of Energy

• PRESENTATIONS DURING 2006

▷ “Searches for Beyond SM Higgs at the Tevatron,” XXXXIst Recontres de Moriond, La Thuile, Italy, March, 2006. (Invited)
▷ “Starting the CMS Tau Reconstruction Effort at the LPC,” All US CMS Meeting, Batavia, IL, June, 2006. (Individual)

• PUBLICATIONS DURING 2006


Abulencia, A.; et al. (2006) Observation of B0 (s)→ K+K- and Measurements of Branching Fractions of Charmless Two-body Decays of B0 and B0(s) Mesons in anti-p p Collisions at s**(1/2)=1.96-TeV Physical Review Letters, vol. 97, 211802.


Abulencia, A.; et al. (2006) Observation of B0(s)→psi(2S)phi and Measurement of Ratio of Branching Fractions B(B0(s)→psi(2S)phi)/B(B0(s)→ J/psi phi) Physical Review Letters, vol. 96, 231801.

Safonov, A. (March2006)Searches for Beyond SM Higgs Boson at the Tevatron, 41st Rencontres de Moriond: QCD and Hadronic Interactions La Tuile, Italy.
• **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  ▷ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• **SERVICE DURING 2006**
  
  National

  College
  ▷ Editorial/Board: Texas High School Science Olympiad (Volunteer)
  ▷ Committee/Panel: Grievance Committee (Elected Member)

  Department
  ▷ Event: Chemistry Open House (Presenter), Physics Open House (Presenter)

• **TEACHING ASSIGNMENTS DURING 2006**
  
  Spring
  ▷ PHYS 305. — *Advanced Electricity and Magnetism II* (total enrollment: 17)

  Summer
  ▷ PHYS 208. — *Electricity and Optics* (total enrollment: 86)

  Fall
  ▷ PHYS 101. — *Topics in Contemporary Physics* (total enrollment: 37)
  ▷ PHYS 601. — *Analytical Mechanics* (total enrollment: 20)

• **RESEARCH PROJECTS DURING 2006**
  
  Federal
  ▷ (REN) Theory of Magnetic Heterostructures on the Submicron Scale, *Department of Energy*

• **PRESENTATIONS DURING 2006**
  
  ▷ “Looking Twice at Simple Matters,” Northwestern University SPS, Chicago, IL, January, 2006.( Individual)
  ▷ “Supersolid 4He: A Review of Theory and Experiment,” Northwestern University, Chicago, IL, January, 2006.( Individual)


“Landau-Lifshitz or Gilbert Damping of Ferromagnetic Magnetization,” Texas Section of the APS, University of Texas, Arlington, TX, October, 2006. (Contributed)

“Multi-Carrier Transport: Batteries, Bathtubs, and Biology,” Arfken Symposium, Miami University, Miami, FL, October, 2006. (Invited)

**PUBLICATIONS DURING 2006**


• CHAIRS/PROFESSORSHIPS
  ▷ Schuessler/Mitchell/Heep Chair in Experimental Optical and Biomedical Physics [2004]

• SERVICE DURING 2006
  National
  ▷ Event: Physics of Quantum Electronics Conference (PQE2006) (Organizer)
  ▷ Editorial/Board: National Science Foundation (Review Panel), Physical Review, Nuclear Instruments and Methods, Department of Energy (Review: Proposals)
  
  Department
  ▷ Committee/Panel: AMO Search Committee (Chair), Awards Committee (Member), Search Committee for Experimental Condensed Matter Group (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ PHYS 218. — Mechanics (total enrollment: 242)
  ▷ PHYS 691. — Research (total enrollment: 3)
  
  Summer
  ▷ PHYS 218. — Mechanics (total enrollment: 41)
  ▷ PHYS 485. — Directed Studies (total enrollment: 1)
  ▷ PHYS 685. — Directed Studies (total enrollment: 1)
  ▷ PHYS 691. — Research (total enrollment: 1)
  
  Fall
  ▷ PHYS 691. — Research (total enrollment: 4)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▷ Development of Submillimeter/Terahertz Instrumentation for Spectroscopy and Dynamics, National Science Foundation
  ▷ Electromagnetic and Informational Processes in Biomolecular Polymers, National Science Foundation, coworkers: A. Kolmenski (Research Scientist)
  ▷ REU: Electromagnetic and Informational Processes in Biomolecular Polymers, National Science Foundation, coworkers: T. Ewers (U), A. Kolomenski (U), F. McDaniel (U), A. Stalker (U)
  
  Private
  ▷ Preparation of Ultracold Molecular ions and Their Optical Studies Using Femtosecond Laser Pulses, The Robert A. Welch Foundation, coworkers: F. Zhu (G)
• PRESENTATIONS DURING 2006
  <> “Linear and Nonlinear Laser Opto-acoustic Measurements of Solids: From the Macro to the Nano-scale,” University of Hokkaido, Sapporo, Japan, 2006.( Individual)
  <> “Precision Measurements and the Possible Variation of the Fundamental Constants,” Mitchell Symposium, College Station, TX, April, 2006.( Invited)
  <> “Sympathetic Cooling of Fullerence Ions by Laser Cooled Mg+ Ions in a Linear rf Trap,” Satellite Conference to International Conference on Atomic Physics, July, 2006.( Invited)
  <> “Coherent Control for Spectroscopy and Ultra Short Laser Light,” MPQ Ringberg Conference, Castle Ringberg, Germany, September, 2006.( Invited)
  <> “Adaptive Quantum control of Two-photon Fluorescence of Comarin-30 With an Evolutionary Algorithm,” American Physical Society Texas Section Meeting, Arlington, TX, October, 2006.( Contributed)
  <> “Lasers in the Biosciences,” Okinawa Institute of Science and Technology, Uruma, Japan, December, 2006.( Individual)
  <> “Nuclei at Extreme Deformation,” Tandem Nuclear Physics Institute University of Osaka, Osaka, Japan, December, 2006.( Individual)
  <> “Nuclei at Extreme Deformations,” RIKEN Workshop for Lasers at the Next Generation Accelerator Facilities, Tokyo, Japan, December, 2006.( Invited)
• PUBLICATIONS DURING 2006
  ▶ Mershin, A; Sanabria, H; Miller, JH; Nawaranthna, D; Skoulakis, EMC; Mavromatos, NE; Kolomenskii, AA; Schuessler, HA; Luduena, RF; Nanopoulos, DV. (2006) Quantum Effects in Cytoskeletal Proteins. The Emerging Physics of Consciousness Series: The Frontiers Collection (pp. 510). Heidelberg: Springer.


• CHAIRS/PROFESSORSHIPS
  ▶ Hershel E. Burgess Chair in Physics (Non-High Energy Physics) [1997]

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Associate Dean for External Relations, Office of External Relations, [2005]
  ▶ Professor (J), Mechanical Engineering, [2004]
  ▶ Director, Institute for Quantum Studies (IQS), [2001]
  ▶ Director, Center for Theoretical Physics, [1995]

• SERVICE DURING 2006
  International
  ▶ Service Position: Auswärtiges Wissenschaftliches Mitglied at Max-Planck-Institut für Quantenoptik (Member)

  National
  ▶ Professional Affiliation: American Association for the Advancement of Science (Fellow), National Academy of Sciences (Member)

  College
  ▶ Committee/Panel: Executive Committee (Member)

  Department
  ▶ Committee/Panel: Colloquium Committee (Member), Distinguished Professor Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ PHYS 691. — Research (total enrollment: 6)

  Summer
  ▶ PHYS 691. — Research (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 2)
  ▶ PHYS 691. — Research (total enrollment: 6)

  Fall
  ▶ PHYS 691. — Research (total enrollment: 6)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▶ Quantum Optical Implementations of Quantum Computing and Quantum Informatics Protocols, Air Force Office of Scientific Research
Quantum Optical Implementations of Quantum Computing and Quantum Informatics Protocols, *Air Force Office of Scientific Research*

Spin-Based Lattice-Gas Quantum Optics in Solids Using Optical Addressing, *Air Force Office of Scientific Research*


Quantum Chemistry Component of Quantum Optics Initiative-Molecular Calculations with Two-Center Correlated Orbitals and Dimensional Scaling, *Office of Naval Research*, coworkers: A. Svidzinsky (P)

Quantum Optics Initiative, *Office of Naval Research*, coworkers: A. Hill (Research Scientist), R. Xie (Research Scientist), N. Kalouguine (Research Staff), Y. Dou (P), N. Erez (P), A. Muthukrishnan (P), C. Ooi (P), A. Patnaik (P), V. Sautenkov (P), S. Hanna (G), K. Urtekin (G)

Real-Time Detection of Anthrax via FAST CARS and Gain-Swept Super-Radiance, *Sandia National Laboratories*

**PUBLICATIONS DURING 2006**


No report received from faculty member.
• SERVICE DURING 2006

National

Department
▷ Committee/Panel: High Energy Search Committee (Chair), Promotions, Tenure, and Appointments Committee (Member), PTA (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 691. — Research (total enrollment: 2)

Summer
▷ PHYS 691. — Research (total enrollment: 1)

Fall
▷ PHYS 304. — Advanced Electricity and Magnetism I (total enrollment: 27)
▷ PHYS 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006

Federal
▷ Elementary Particle Theory, National Science Foundation, coworkers: D. Jong (P), J. Kumar (P)
▷ Strings, Branes, and the Search for Unification, National Science Foundation, coworkers: J. Kumar (P), D. Jong (G)

• PRESENTATIONS DURING 2006

▷ “Geometric Approach to Superbrane Dynamics,” Bilgi University, Istanbul, Turkey, March, 2006. (Individual)
➢ “Teardrops and Dyonic Strings,” Texas A&M University Seminar, College Station, TX, October, 2006. (Individual)

- PUBLICATIONS DURING 2006
• AWARDS DURING 2006

National
▷ Cottrell Scholar, Research Corporation
▷ Faculty Early Career Development (CAREER), National Science Foundation

University
▷ Montague-Center for Teaching Excellence Scholar, Center for Teaching Excellence

• SERVICE DURING 2006

International
▷ Editorial/Board: Various International Journals (Referee: Journals)
▷ Committee/Panel: International Conference of Strongly Correlated Electron Systems (Member), National Science Foundation Panels (Review Panel)

National

University
▷ Committee/Panel: Faculty Senate (Faculty Senator - 08)

Department
▷ Event: Chemistry Open House (Volunteer), Condensed Matter Seminar (Organizer), Physics Open House (Volunteer)
▷ Committee/Panel: Building Committee (Member), Nano-Science Search Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 685. — Directed Studies (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 2)

Summer
▷ PHYS 691. — Research (total enrollment: 2)

Fall
▷ PHYS 218. — Mechanics (total enrollment: 84)
▷ PHYS 218. — Mechanics (total enrollment: 84)
▷ PHYS 691. — Research (total enrollment: 4)
• RESEARCH PROJECTS DURING 2006

Federal
▷ CAREER: Spin Dependent Phenomena in Semiconductors, National Science Foundation, coworkers: A. Kovalev (P), M. Borunda (G), X. Liu (G)

State
▷ Paradigm of Physics Education Program, Texas A&M University

Private
▷ Spin-Hall Effect in Semiconductors and Related Phenomena in Nano-Spintronics, Research Corporation, coworkers: A. Kovalev (P)

• PRESENTATIONS DURING 2006

▷ “Prospects for High Temperature Ferromagnetism in (Ga, Mn)As Semiconductors,” American Physical Society March Meeting, Baltimore, MD, March, 2006. (Individual)
▷ “Do We Understand (Ga, Mn)As? Prospects of High Temperature Magnetism in DMS’s,” Kavli Institute for Theoretical Physics, Santa Barbara, CA, May, 2006. (Individual)
▷ “Spin Hall Effect: Where we Were, Where we are, and Where we are Going, Spin and Charge Effects,” Nanoscale, Scuola Normale Superiore, Pisa, Italy, July, 2006. (Individual)
▷ “Spin-Hall Effect: A New Twist on an old hat and Other Spintronics Stories,” Colloquium, Texas A&M University, College Station, TX, October, 2006. (Individual)

• PUBLICATIONS DURING 2006


• CHAIRS/PROFESSORSHIPS
  ▶ Stephen E. Harris Professorship in Quantum Optics [2006]

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• SERVICE DURING 2006
  International
  ▶ Event: Attosecond Science Mini-Symposium at the Conference on Coherent Control of Fundamental Processes (Co-Organizer)
  ▶ Committee/Panel: Nonlinear Optics and Novel Phenomena Program Sub-committee for the (CLEO/IQEC) (Member)

  National
  ▶ Event: Attosecond Science at the 37th Winter Colloquium on the Physics of Quantum Electronics (Organizer)
  ▶ Editorial/Board: Optics Letters, and Physical Review A (Referee: Journals)

  Department
  ▶ Event: Chemistry Open House & Science Exploratorium (Coordinator)
  ▶ Committee/Panel: Nanoscience Faculty Search Committee (Member), Quantum Optics Faculty Search Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ PHYS 485. — Directed Studies (total enrollment: 2)
  ▶ PHYS 691. — Research (total enrollment: 4)

  Summer
  ▶ PHYS 685. — Directed Studies (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 4)

  Fall
  ▶ PHYS 218. — Mechanics (total enrollment: 103)
  ▶ PHYS 485. — Directed Studies (total enrollment: 2)
  ▶ PHYS 685. — Directed Studies (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 4)

• RESEARCH PROJECTS DURING 2006
  Federal
Sub-Cycle Optical Pulse Shaping by Parametric Beating with Adiabatically Prepared Raman Coherence, *National Science Foundation*, coworkers: A. Chugreev (P), A. Burzo (G), J. Peng (G), M. Zhi (G), J. Krause (U), J. Trevino (U)

Private

Sub-cycle Optical Pulse Shaping for Precise Control of Electronic and Nuclear Motion, *Research Corporation*, coworkers: D. Pestov (G), M. Zhi (G)

Generation and Control of Femtosecond Pulses by Molecular Modulation, *The Robert A. Welch Foundation*, coworkers: A. Burzo (P), A. Chugreev (P), J. Peng (G), M. Zhi (G)

- **PRESENTATIONS DURING 2006**
  - “UV-probe Coherent Raman Spectroscopy of DPA and it’s Salts,” 36th Winter Colloquium on the Physics of Quantum Electronics, Snowbird, UT, January, 2006. (Invited)
  - “Applications of Molecular Coherence I: Ultrashort Pulse Generation by Molecular Modulation,” East China Normal University, Shanghai, China, March, 2006. (Invited)
  - “Applications of Molecular Coherence II: Rapid Identification of Chemical and Biological Unknowns,” East China Normal University, Shanghai, China, March, 2006. (Invited)
  - “Using Quantum Mechanics to Detect Anthrax,” Bugs, Drugs, and Vaccines Conference, Galveston, TX, April, 2006. (Poster Individual)
  - “Broadband Coherent Light Generation in Raman-Active Gasses and Solids, With Po-
potential for Subfemtosecond Pulse Synthesis,” Coherent Control of Fundamental Processes, Nizhnii Novgorod, Russia, July, 2006.( Invited)


▷ “Subfemtosecond Pulse Generation by Molecular Modulation,” Harris Fest, Stanford, CA, September, 2006.( Invited)

• PUBLICATIONS DURING 2006


NICHOLAS B. SUNTZEFF

CHAIRS/PROFESSORSHIPS

Mitchell-Heep-Munnerlyn Endowed Chair in Observational Astronomy [2006]

AWARDS DURING 2006

International

Most Cited Scientist, Information Sciences Institute (ISI)

SERVICE DURING 2006

International

Editorial/Board: CONDICYT Astronomy, Chile (Review: Proposals), HIA Grant, Canada (Review: Proposals)

Committee/Panel: Telescope Time Assignment Committee, FONDICYT, Chile (Member)

National

Service Position: LSST Telescope Project (Advisor)

Editorial/Board: Director’s Review, Physics Division, Lawrence Livermore National Laboratory, Department of Energy (Member)

Committee/Panel: Dark Energy Task Force - DOE, NASA, NSF (Member)

University

Service Position: Evans Library Astronomy Collection (Advisor)

Committee/Panel: Giant Magellan Telescope Board (Member)

Department

Committee/Panel: Astronomy Search Committee (Chair)

TEACHING ASSIGNMENTS DURING 2006

Fall

PHYS 314.200(H) — Survey of Astronomy (total enrollment: 16)

PHYS 691. — Research (total enrollment: 2)

RESEARCH PROJECTS DURING 2006

Federal

Resolving the LMC Microlensing Puzzle: Where are the Lensing Objects, Space Telescope Science Institute

SAINTS: Supernova 1987A Intensive Survey (Cycle 13), Space Telescope Science Institute

Unfunded Research
The Outer Limits Survey: Stellar Populations at the Extremities of the Magellanic Clouds, *UNFUNDED*

**PRESENTATIONS DURING 2006**

- “Follow-up Photometry and Spectroscopy of Space Interferometry Mission Planet Quest Grid Giant Star Candidates,” 2006. (Contributed)
- “Light Echoes of Supernovae in the Large Magellanic Cloud,” 2006. (Invited)
- “IR Photometry of Type Ia Supernovae,” Carnegie Supernova Project Workshop, Pasadena, CA, August, 2006. (Individual)
- “Light Echoes of Ancient Supernovae in the Large Magellanic Cloud,” International Astronomical Union, Prague, Czech Republic, August, 2006. (Contributed)
- “SN1987A After 18 Years: Gemini and Spitzer Observations of the Remnant the Blast Wave Interaction With the Circumstellar Ring,” International Astronomical Union, Prague, Czech Republic, August, 2006. (Contributed)
- “The Dark Universe and the Dark Energy Task Force,” University of Texas, Cosmology Conference, September, 2006. (Invited)

**PUBLICATIONS DURING 2006**

Astrometric Grid Giant Star Survey. I. Stellar Parameters and Radial Velocity Variability

Astronomical Journal, vol. 131, 1784B.


SEC. 6.1  PROFESSIONAL ACTIVITIES  701
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Computational Nanoscience and Materials - IGERT, [2006]
  ▶ Member, Interdisciplinary Faculty, Materials Science and Engineering, [2006]

• SERVICE DURING 2006

  International
  ▶ Editorial/Board: Various International Journals (Referee: Journals)

  National
  ▶ Editorial/Board: American Physical Society (Review: Proposals), National Science Foundation (Review: Proposals)

  University
  ▶ Committee/Panel: Advisory Panel for Incoming Faculty (Member), Materials Science and Engineering Graduate (Member)

  Department
  ▶ Research Group: Center for Nanoscale Science and Technology (Director)
  ▶ Committee/Panel: Faculty Search Committee (Member), Physics Building Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ PHYS 218. — Mechanics (total enrollment: 39)
  ▶ PHYS 218. — Mechanics (total enrollment: 48)
  ▶ PHYS 425. — Physics Laboratory (total enrollment: 14)
  ▶ PHYS 685. — Directed Studies (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 10)

  Summer
  ▶ PHYS 685. — Directed Studies (total enrollment: 1)
  ▶ PHYS 685. — Directed Studies (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 7)

  Fall
  ▶ PHYS 685. — Directed Studies (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 7)
• RESEARCH PROJECTS DURING 2006

Federal
▷ A Systematic Study of the Structural Magnetic and Spectroscopic Properties of Clusters and Extended Arrays Based on Cyanide Ligands, National Science Foundation
▷ Acquisition of a Scanning Hall Probe Microscope for Nanomagnetics Research and Student Training, National Science Foundation
▷ NUE: Infusing Nanomaterials into Undergraduate Science and Engineering Curricula, National Science Foundation
▷ Sandia/Texas A&M University Doctoral Fellowship in Science Excellence in Science Fellowship, Sandia National Laboratories, coworkers: J. Means (G)

University
▷ Montague-Center for Teaching Excellence Scholarship: Strengthening the Texas A&M Curriculum in Nanotechnology, Center for Teaching Excellence
▷ Center for Nanoscale Science and Technology, College of Science, coworkers: A. Ford (G), K. Kim (G)
▷ International Research Travel Grant: Conductance of Molecular Magnets in Mechanical Break Junctions, Texas A&M University, International Center
▷ Purchase of a Laser-Interferometer State for Electron Beam Lithography, Texas Engineering Experiment Station

Private
▷ Enhanced Anisotropy of Molecular Nanomagnets, The Robert A. Welch Foundation, coworkers: K. Kim (G), D. Seo (G)

• PRESENTATIONS DURING 2006

▷ “Alignment of Mn$_2$12-acetate in Suspension,” March Meeting of the American Physical Society, Baltimore, MD, 2006.( Individual)
▷ “Magnetization Measurements of Mn12-acetate Thin Films,” Texas Section Meeting of the American Physical Society, 2006.(Individual)
▷ “Magnetization Measurements on Mn$_1$2-acetate Thin Films,” JSPS Summer Program Poster Presentation, Hayama, Japan, 2006.(Poster Individual)
▷ “Molecular Magnets in Reduced Dimensions,” Common Seminar on Solid State Physics of the Forschungszentrum Karlsruhe and the Universität Karlsruhe, Karlsruhe, Germany, 2006.( Individual)
▷ “Molecular Magnets in Reduced Dimensions,” National Insitutes of Natural Sciences Institute of Molecular Sciences, Okazaki, Japan, 2006.( Individual)
▷ “Molecular Magnets in Reduced Dimensions,” National Research Institute Seibersdorf, Seibersdorf, Austria, 2006.( Individual)
▷ “The Metal-Insulator Transition in Amorphous Gd$_x$Si$_{1-x}$,” Johannes Kepler Universität Linz, Linz, Austria, 2006.(Individual)
“Thin Film Fabrication and Alignment of Single Molecular Magnets,” Condensed Matter Seminar, Physics Department, Texas A&M University, College Station, TX, 2006.(Individual)

- PUBLICATIONS DURING 2006
• SERVICE DURING 2006

International
➤ Committee/Panel: International Workshop on the Interface of Particle Physics and Cosmology (Member)

National
➤ Editorial/Board: Search for New Physics in the WH → WWW* final state (Member), U.S. Civilian Research and Development Foundations (Reviewer)
➤ Committee/Panel: MIT Undergraduate Admissions Committee, Education Council (Member)

Department
➤ Service Position: Physics 218 Mechanics Scholar Program (Administrator), WebCT Courses for Physics 201, 202, 208, 208 Honors, 218 and 218 Honors (Course Coordinator)
➤ Event: High Energy Physics Section of the Mitchell Symposium on Astronomy, Cosmology and Fundamental Physics (Chair), High Energy Representative for 2006 Mitchell Symposium (Advisory Committee)
➤ Committee/Panel: High Energy Experiment Faculty Search (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
➤ PHYS 218. — Mechanics (total enrollment: 122)
➤ PHYS 685. — Directed Studies (total enrollment: 2)
➤ PHYS 691. — Research (total enrollment: 1)
➤ PHYS 691. — Research (total enrollment: 1)

Summer
➤ PHYS 685. — Directed Studies (total enrollment: 1)
➤ PHYS 685. — Directed Studies (total enrollment: 1)
➤ PHYS 691. — Research (total enrollment: 1)
➤ PHYS 691. — Research (total enrollment: 1)

Fall
➤ PHYS 218. — Mechanics (total enrollment: 99)
➤ PHYS 685. — Directed Studies (total enrollment: 1)
➤ PHYS 685. — Directed Studies (total enrollment: 1)
➤ PHYS 691. — Research (total enrollment: 1)
➤ PHYS 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006
Federal
▷ (REN) High Energy Physics at Texas A&M University, Department of Energy
▷ High Energy Physics at Texas A&M University, Department of Energy

• PRESENTATIONS DURING 2006
  ▷ “Calorimeter Timing System at CDF,” The 12th International Conference on Calorimetry in High Energy Physics, 2006.( Graduate, M. Goncharov)
  ▷ “Cosmology and Colliders,” The 33rd International Conference on High Energy Physics, Moscow, 2006.( Contributed)
  ▷ “Cosmology at the LHC,” Joint Meeting of Pacific Region Particle Physics Communities, Honolulu, Hawaii, 2006.( Contributed)
  ▷ “Detection of SUSY Signals in Stau-Neutralino Coannihilation Region at the LHC,” The 14th International Conference on Supersymmetry and Unification of Fundamental Interactions, Irvine, California, 2006.( Contributed)
  ▷ “Search for Delayed Photons,” Joint Meeting of Pacific Region Particle Physics Communities, Honolulu, Hawaii, 2006.( Graduate, M. Goncharov)
  ▷ “Search for Exotic New Phenomena at CDF,” The 14th International Conference on Supersymmetry and Unification of Fundamental Interactions, Irvine, California, 2006.( Graduate, M. Goncharov)
  ▷ “Signals in the Co-Annihilation Region Of Supersymmetry at the LHC,” April Meeting of the American Physical Society, 2006.( Contributed)
  ▷ “Integrating Web-Based Teaching Tools into Large University Physics Courses,” Teaching With Technology, College Station, TX, February, 2006.( Individual)
  ▷ “Searching for New Particles at Colliders,” High Energy Theory Seminar, Texas A&M University, College Station, TX, February, 2006.( Individual)
  ▷ “Photon Time Shapes,” Very Exotics Group Meeting, May, 2006.( Graduate, M. Goncharov)
  ▷ “Resolution and Simulation of the EMTiming System,” Photon Working Group Meeting, May, 2006.( Graduate, P. Wagner)
  ▷ “Resolution and Simulation of the EMTiming System,” Very Exotic Group Meeting, May, 2006.( Graduate, P. Wagner)
  ▷ “Search for Neutral, Long-Lived Particles That Decay to Photons,” CDF Exotics Preblessing, May, 2006.( Graduate, P. Wagner)
“Space-Time Vertexing,” Very Exotic Group Meeting, May, 2006. (Graduate, M. Goncharov)
“Search for Delayed Photons,” CDF Weekly Meeting, June, 2006. (Graduate, B. Heinemann)
“Search for Neutral, Long-Lived Particles That Decay to Photons,” CDF Exotics, June, 2006. (Graduate, P. Wagner)
“Search for Neutral, Long-Lived Particles That Decay to Photons,” SUSY Meeting, June, 2006. (Graduate, P. Wagner)
“Simulation of HCAL Trigger Primitives,” LPC-Trigger Meeting, August, 2006. (Graduate, M. Weinberger)
“Search for Neutral, Long-Lived Particles That Decay to Photons,” CDF-Very Exotics Group Meeting, September, 2006. (Graduate, P. Wagner)
“HCAL Simulation Updated,” LPC-Trigger Meeting, October, 2006. (Graduate, M. Weinberger)
“HCAL TPG Emulation,” LPC-Trigger Meeting, October, 2006. (Graduate, A. Aurisano)
“Search for Neutral, Long-Lived Particles That Decay to Photons - Reblessing,” CDF Exotics, October, 2006. (Graduate, P. Wagner)

PUBLICATIONS DURING 2006
Abulencia, A.; et al. (2006) A Search for $t \rightarrow \tau \nu q$ in $t\bar{t}$ Production Physics Letters B, vol. 639, 172.
Abulencia, A.; et al. (2006) Measurement of the Ratio of Branching Fractions $B(D0\rightarrow K+pi-)/B(D0\rightarrow K-pi+)$ Using the CDF II Detector Physical Review D: Particles and

Abulencia, A.; et al. (2006) Measurement of the Top Quark Mass With the Dynamical Likelihood Method Using Lepton Plus Jets Events With b-tags in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$-TeV *Physical Review D: Particles and Fields*, vol. 73, 092002.


Abulencia, A.; et al. (2006) Measurement of the t anti-t Production Cross Section in p anti-p Collisions at $s^{*}(1/2)=1.96$-TeV Using Missing E(t) + Jets Events With Secondary...


Abulencia, A.; et al. (2006) Observation of $B_0^s \to J/\psi (2S) \phi$ and Measurement of Ratio of Branching Fractions $B(B_0^s \to J/\psi \phi) / B(B_0^s \to J/\psi \phi)$ Physical Review Letters , vol. 96, 231801.


Abulencia, A.; et al. (2006) Measurement of the Ratios of Branching Fractions $B(B_s^0 \to D^\pm \pi^\mp) / B(B^0 \to D^\mp \pi^\pm)$ and $B(B^+ \to D^0 \pi^+) / B(B^0 \to D^- \pi^+) Physical Review Letters , vol. 96, 191801.


Acosta, D.; et al. (2006) Search for W and Z Bosons in the Reaction pp $\to 2jets + \gamma at \sqrt{s} = 1.8$ TeV Physical Review D: Particles and Fields , vol. 73, 012001.

Arnowitt, R.; et al. (2006) Cosmology and Dark Matter at the LHC.

• SERVICE DURING 2006

International
▷ Committee/Panel: Experiments Evaluation Committee, TRIUMF, Vancouver, British Columbia (Member), International Union of Pure and Applied Physics (IUPAP) (Member), Office of Economic Cooperation and Development Global Science Forum Working Group on Nuclear Physics (Member)

National
▷ Advisory Board: Department of Energy/National Science Foundation Nuclear Science Advisory Committee (Chair)
▷ Committee/Panel: Neutrino Science Assessment Group (Member), Nuclear Science Advisory Committee (Chair), Program Advisory Committee, Los Alamos National Laboratory (Member), Program Advisory Committee, National Superconducting Cyclotron Laboratory, Michigan State University (Member), Program Review and Advisory Committee for Fundamental Neutron Physics Beamline at the SNS (Chair), Radioactive Ion Beam (RIB) Task Force (Member), Visitors for the Office of Nuclear Physics, Department of Energy (Member)

University
▷ Committee/Panel: IPECC Subcommittee on Undergraduate Research (Chair), Study Abroad Program Policy Committee (Member)

College
▷ Committee/Panel: Executive Committee (Member), International Programs Committee (Chair), Research Advisory Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 691. — Research (total enrollment: 5)

Summer
▷ PHYS 485. — Directed Studies (total enrollment: 8)
▷ PHYS 691. — Research (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 2)

Fall
▷ PHYS 691. — Research (total enrollment: 5)

• RESEARCH PROJECTS DURING 2006
Federal
▷ (REN) Cyclotron-Based Nuclear Science, Department of Energy, coworkers: V. Goldberg (Visiting Scientist), L. Trache (Research Scientist), A. Zhanov (Research Scientist), C. Fu (G), Y. Zhai (G), M. McClesky (U)
▷ Extending the Capabilities of the Texas A&M University, Cyclotron Institute to Include Reaccelerated Radioactive Beams, Department of Energy
▷ Fundamental Studies in Nuclear Science, Department of Energy, coworkers: M. Sarsour (P)
▷ (REN) QCD and Standard Model Studies, Department of Energy
▷ Development of New Techniques to Determine Neutron and Charged-Particle Induced Reaction Rates, National Nuclear Security Administration
▷ Cooperative Agreement-Czech Republic, National Science Foundation
▷ International: Asymptotic Normalization Co-Efficients in Nuclear Astrophysics, National Science Foundation

Private
▷ Extending the Capabilities of the Texas A&M University, Cyclotron Institute to Include Reaccelerated Radioactive Beams, The Robert A. Welch Foundation

• PRESENTATIONS DURING 2006
▷ “How Does Nuclear Physics Apply to Astrophysics?,” North Houston Astronomy Club, Kingswood, TX, April, 2006.( Individual)
▷ “Asymptotic Normalization Coefficients as an Indirect Technique for Nuclear Astrophysics Past, Present and Future Prospects,” International Summer School on Subatomic Physics, Beijing, China, August, 2006.( Invited)
▷ “New Approaches to Old Problems With Asymptotic Normalization Coefficients,” Shanghai Institute of Applied Physics, Shanghai, China, August, 2006.( Individual)
▷ “Understanding the Evolution of the Universe: A Nuclear Physics Perspective,” University of Missouri - Columbia, Columbia, MO, September, 2006.( Individual)
▷ “Towards the 2007 Long Range Plan,” APS Division of Nuclear Physics, Nashville, TN, October, 2006.( Invited)
▷ “Radioactive Ion Beams at TAMU,” Nuclear Science Advisory Committee Task Force on Rare Ion Beams, College Station, TX, December, 2006.( Invited)

**PUBLICATIONS DURING 2006**

- Adams, J.; et al. (2006) Minijet Deformation and Charge-independent Angular Correlations on Momentum Subspace $(h, \phi)$ in Au-Au Collisions at $\sqrt{s} = 130$ GeV Physical Review C: Nuclear Physics, vol. 73, 064907.
for the Superallowed $\beta^+$ Emitters $^{34}$Ar and $^{34}$Cl Physical Review C: Nuclear Physics, vol. 74, 055502.


of Loosely Bound Nuclei as Indirect Method in Nuclear Astrophysics: $^8B$, $^9C$ and $^{23}Al$

*European Physical Journal A*, vol. 27.


• CHAIRS/PROFESSORSHIPS

• SERVICE DURING 2006

  International
  ▶ Service Position: Chinese Center for Antarctic Astronomy (Director)
  ▶ Editorial/Board: Chinese Astronomy and Astrophysics (Member)

  National
  ▶ Editorial/Board: Astrophysical Journal (Referee: Journals)

  Department
  ▶ Committee/Panel: Mitchell Symposium (Member)
ROBERT C. WEBB

PROFESSOR

PHYS-Ex. High Energy Phys., Undergraduate Research

(979) 845-4012

webb@heprb.physics.tamu.edu

- CHAIRS/PROFESSORSHIPS
  - Ed Rachal Chair in High Energy Physics [2006]

- ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  - Associate Dean for Undergraduate Research, Vice President for Research, [2005]

- SERVICE DURING 2006
  
  National
  - Editorial/Board: Department of Energy (Review: Proposals)

  University
  - Committee/Panel: Faculty Senate Research Committee (Chair), Quality Enhancement Plan and Executive Committee (Member)

  College
  - Committee/Panel: Diversity Committee (Member)

  Department
  - Committee/Panel: Astronomy Search Committee (Member), Experimental HEP Search Committee (Member), Long Range Planning Committee (Chair), Nuclear Physics Search Committee (Member)

- TEACHING ASSIGNMENTS DURING 2006

  Spring
  - PHYS 485. — Directed Studies (total enrollment: 1)
  - PHYS 691. — Research (total enrollment: 3)

  Summer
  - PHYS 685. — Directed Studies (total enrollment: 2)
  - PHYS 691. — Research (total enrollment: 1)

  Fall
  - PHYS 685. — Directed Studies (total enrollment: 2)
  - PHYS 691. — Research (total enrollment: 2)

- RESEARCH PROJECTS DURING 2006

  Federal
  - (REN) High Energy Physics at Texas A&M University, Department of Energy, coworkers: E. Tetteh-Lartey (P), M. Watabe (G), N. Diaczenko (Staff)
  - High Energy Physics at Texas A&M University, Department of Energy

SEC. 6.1 PROFESSIONAL ACTIVITIES 717
• PRESENTATIONS DURING 2006

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006
  
  University
  ▶ Committee/Panel: Council of Principal Investigators Advisory Committee (Member), Executive Committee (Member), Texas A&M Research Foundation (Member)
  
  Department
  ▶ Committee/Panel: Advisory Committee (Member), Graduate Curriculum Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  ▶ PHYS 306. — Basic Astronomy (total enrollment: 45)
  ▶ PHYS 306. — Basic Astronomy (total enrollment: 83)
  ▶ PHYS 691. — Research (total enrollment: 2)

  Summer
  ▶ PHYS 306. — Basic Astronomy (total enrollment: 37)
  ▶ PHYS 691. — Research (total enrollment: 2)

  Fall
  ▶ PHYS 306. — Basic Astronomy (total enrollment: 57)
  ▶ PHYS 691. — Research (total enrollment: 3)

• RESEARCH PROJECTS DURING 2006
  
  Federal
  ▶ Mid-Infrared Technologies for Health and the Environment, National Science Foundation, coworkers: H. Yang (Research Scientist), K. Kanedy (G), F. Lopez (G)

  Industrial
  ▶ Atomic Scale Analysis of Type II Superlattice Detector Structures, Rockwell Scientific Company, LLC, coworkers: H. Yang (Research Scientist), K. Kanedy (G), F. Lopez (G)

• PRESENTATIONS DURING 2006
  
GEORGE R. WELCH
PROFESSOR  (979) 845-1571
PHYS-Quantum Optics, Appl. Phys., At. Phys.  grw@tamu.edu

• SERVICE DURING 2006

International
▷ Advisory Board: International Council of the Optical Society of America (Member)

National
▷ Event: 36th Winter Colloquium on Quantum Electronics (Organizer), Slow Light and Applications at "Frontiers in Optics," the Annual Meeting of the Optical Society of America (Organizer)
▷ Editorial/Board: Journal of Modern Optics (Member), NSF Proposals (Review: Proposals), Physics Review A, Journal of Modern Optics, and Journal of Molecular Spectroscopy (Referee: Journals), Special Issue of Journal of Modern Optics (Co-Editor)

College
▷ Committee/Panel: Faculty Advisory Council (Elected Member), Faculty Advisory Council (Elected Member), Tenure and Promotion Advisory Committee (Member)

Department
▷ Event: Chemistry Festival (Participant), Physics Festival (Participant)
▷ Committee/Panel: AMO Faculty Search Committee (Chair), Computer Committee (Chair), Evaluation Committee (Member), Long Range Planning Committee (Member), Promotions, Tenure, and Appointments Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 208. — Electricity and Optics (total enrollment: 119)
▷ PHYS 691. — Research (total enrollment: 2)

Summer
▷ PHYS 691. — Research (total enrollment: 1)

Fall
▷ PHYS 218. — Mechanics (total enrollment: 84)
▷ PHYS 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006

Federal
▷ Spin-Based Lattice-Gas Quantum Optics in Solids Using Optical Addressing, Air Force Office of Scientific Research
▷ Studies in Quantum Optics, Air Force Office of Scientific Research
▷ Coherent Control of Nuclear Transitions, National Science Foundation
Real-Time Detection of Anthrax via FAST CARS and Gain-Swept Super-Radiance, *Sandia National Laboratories*

**Unfunded Research**

- Nonlinear Magneto-Optic Rotation and Coherent Control with Intense Laser Fields, *UN-FUNDED*

**PRESENTATIONS DURING 2006**

- “From Slow Light to FAST CARS,” Annual Meeting of the Academy Medicine, Engineering and Science of Texas, Houston, TX, January, 2006. (Invited)
- “Nonlinear Magneto-Optic Rotation at High Intensity,” 36th Winter Colloquium on the Physics of Quantum Electronics, Snowbird, UT, January, 2006. (Poster Graduate, P. Hsu)

**PUBLICATIONS DURING 2006**

• SERVICE DURING 2006

Department
▷ Committee/Panel: Astronomy Committee (Member), Awards Committee (Member), Computer Committee (Member), Graduate Admissions Committee (Member), High Energy Experiment Search Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 666. — Scientific Instrument Making (total enrollment: 8)
▷ PHYS 691. — Research (total enrollment: 1)

Summer
▷ PHYS 666. — Scientific Instrument Making (total enrollment: 15)
▷ PHYS 691. — Research (total enrollment: 1)
▷ PHYS 691. — Research (total enrollment: 1)

Fall
▷ PHYS 218. — Mechanics (total enrollment: 222)
▷ PHYS 666. — Scientific Instrument Making (total enrollment: 9)
▷ PHYS 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006

Federal
▷ A High-Pressure Neon-Based Detector for Underground Physics, Department of Energy, coworkers: J. Maxin (G), J. Miller (U), G. Salinas (U)
▷ (REN) High Energy Physics at Texas A&M University, Department of Energy, coworkers: J. Gao (G), J. Maxin (G), J. Miller (U), G. Salinas (U)
▷ High Energy Physics at Texas A&M University, Department of Energy
▷ Request for Operating Funds for Zeplin II and R&D Support for Zepling IV- A New Liquid Xenon Detector, National Science Foundation, coworkers: J. Gao (G)

• PRESENTATIONS DURING 2006
▷ “SIGN - A Dark Matter/Neutrino Detector Based on Gaseous Neon,” Homestake LOI, Lead, SD, February, 2006. (Individual)
▷ “SIGN - A Dark Matter/Neutrino Detector Based on Gaseous Neon,” Homestake Workshop, Lead, SD, February, 2006. (Invited)
- “The Search for Dark Matter, Status, ZEPLIN II, SIGN, Future,” HEP Physics Department Lunch Seminar, College Station, TX, February, 2006. (Individual)
- “SIGN - A High-Pressure, Room-Temperature, Gaseous-Neon-Based Underground Physics Detector,” Snowlab Workshop V, Sudbury, Ontario, Canada, August, 2006. (Invited)

**PUBLICATIONS DURING 2006**
• SERVICE DURING 2006

International
▷ Editorial/Board: Israel Science Foundation, United States-Israel Binational Science Foundation (Review: Proposals), Journal of Modern Physics, Modern Physics Letter, Europhysics (Referee: Journals)

National

Department
▷ Committee/Panel: Graduate Admissions Committee (University of Rochester) (Member), Nano Experimental Search Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ PHYS 201. — College Physics (total enrollment: 88)
▷ PHYS 691. — Research (total enrollment: 2)

Summer
▷ PHYS 685. — Directed Studies (total enrollment: 2)

Fall
▷ PHYS 201. — College Physics (total enrollment: 179)
▷ PHYS 691. — Research (total enrollment: 4)

• RESEARCH PROJECTS DURING 2006

Federal
▷ Electron Correlations in Strongly Disordered Low Dimensional Systems, National Science Foundation, coworkers: Z. Ye (P), H. Liu (G), M. Sears (G), H. Zhang (G), H. Zhang (G)
▷ Probing Superconducting Fluctuations on Mesoscopic Scales: Conductance Fluctuations and Oscillations, and Electron Tunneling, National Science Foundation, coworkers: H. Liu (G), I. Schultz (G), M. Sears (G), Z. Ye (G)

Unfunded Research
▷ Nanostructured Organic-Inorganic Interfaces and Photovoltaic Cells, UNFUNDED, coworkers: I. Schultz (G)
▷ Topology, Percolation, Vortex Pinning, and Superconductivity, UNFUNDED, coworkers: Z. Ye (P)
▷ Vortex Dynamics Studies Using a Tunable Washboard Potential, UNFUNDED, coworkers: Z. Ye (P)
• PRESENTATIONS DURING 2006
  ▶ “Magnetization Controlled Superconductivity in a Pb Film on a Perpendicular Array of Ferromagnetic Co Nanowires,” 2006 APS March Meeting, Baltimore, MD, 2006. (Contributed)

• PUBLICATIONS DURING 2006
**SERVICE DURING 2006**

National


**TEACHING ASSIGNMENTS DURING 2006**

**Spring**

▷ PHYS 208. — Electricity and Optics (total enrollment: 116)

▷ PHYS 691. — Research (total enrollment: 1)

**Summer**

▷ PHYS 691. — Research (total enrollment: 1)

**Fall**

▷ PHYS 208. — Electricity and Optics (total enrollment: 108)

▷ PHYS 691. — Research (total enrollment: 1)

**RESEARCH PROJECTS DURING 2006**

Federal

▷ (REN) Cyclotron-Based Nuclear Science, *Department of Energy*

Private

▷ (REN) Study of Nuclei at High Excitations, *The Robert A. Welch Foundation*

**PRESENTATIONS DURING 2006**

▷ “Inelastic $^6\text{Li}$ Scattering Studies of the ISGMR - Prospects With Radioactive Beams,” NSCL User Workshop, East Landsing, MI, June, 2006. (Invited)

▷ “Systematics of Giant Monopole Resonance and it’s Isotopic Dependence,” In Heaven and on Earth 2006-the Nuclear Equation of State in Astrophysics, Montreal, Canada, July, 2006. (Invited)

**PUBLICATIONS DURING 2006**


• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Associate Director, Institute for Quantum Studies (IQS), [2001]

• SERVICE DURING 2006

  International
  ▶ Event: 35th Winter Colloquium on The Physics of Quantum Electronics (Co-Organizer)
  ▶ Editorial/Board: European Journal of Physics D (Referee: Journals)

  National
  ▶ Event: SPIE Conference on Fluctuations and Noise in Photonics and Quantum Optics
        III (Co-Chair), SPIE Conference on Noise and Information in Nanoelectronics (Program
        Committee Member)
  ▶ Editorial/Board: Fluctuations and Noise Letters (Executive Editor), John Wiley (Book
        of Modern Optics (Referee: Journals)

  Department
  ▶ Committee/Panel: Graduate Student Admissions and Appointments Committee (Member),
    Search Committee for Quantum Optics (Chair)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ PHYS 221. — Optics and Thermal Physics (total enrollment: 41)
  ▶ PHYS 685. — Directed Studies (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 3)

  Summer
  ▶ PHYS 691. — Research (total enrollment: 1)
  ▶ PHYS 691. — Research (total enrollment: 1)

  Fall
  ▶ PHYS 648. — Quantum Optics and Laser Physics (total enrollment: 9)
  ▶ PHYS 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006

  Federal
  ▶ Quantum Optical Implementations of Quantum Computing and Quantum Informatics
    Protocols, Air Force Office of Scientific Research
  ▶ Quantum Optical Implementations of Quantum Computing and Quantum Informatics
    Protocols, Air Force Office of Scientific Research
Spin-Based Lattice-Gas Quantum Optics in Solids Using Optical Addressing, *Air Force Office of Scientific Research*


**PRESENTATIONS DURING 2006**

- “All Optical Controlled Steering of Light,” Conference on Advanced Optical and Quantum Memories and Computing III, San Jose, CA, January, 2006. (Invited)
- “Quantum Lithography and Microscopy,” International Conference on Coherent Control of the Fundamental Processes in Optics and X-ray Optics, Nizhny Novgorod, Russia, June, 2006. (Invited)
- “Quantum Interferometry: From Quantum Eraser to Quantum Lithography,” University of Ulm, Ulm, Germany, July, 2006. (Individual)
- “Quantum Interferometry: From Quantum Eraser to Quantum Lithography,” Max-Planck Institute for Nuclear Physics, Heidelberg, Germany, August, 2006. (Individual)
- “Quantum Lithography With Classical Light,” Third Feynman Festival, University of Maryland, College Park, MD, August, 2006. (Invited)
- “Quantum Interferometry: From Quantum Eraser to Quantum Lithography,” Northwestern University, Evanston, IL, September, 2006. (Individual)
- “Quantum Interferometry: From Quantum Eraser to Quantum Lithography,” Joint Complex Quantum Systems/Nonlinear Dynamics Seminar, University of Texas, Austin, TX, October, 2006. (Individual)

**PUBLICATIONS DURING 2006**

- Belyanin, A; Kocharovsky, VV; Capasso, F; Fry, E; Zubairy, MS; Scully, MO. (2006) Quantum electrodynamics of accelerated atoms in free space and in cavities *Physical Review A: Atomic Molecular and Optical Physics*, vol. 74, .
Optical Physics, vol. 73, 031803.


Mikhailov, EE; Sautenkov, VA; Rostovtsev, YV; Zhang, A; Zubairy, MS; Scully, MO; Welch, GR. (2006) Spectral narrowing via quantum coherence Physical Review A: Atomic Molecular and Optical Physics, vol. 74.


7. Research Activity, 2006

This section contains information on all funded research activity for the calendar year 2006. Information was initially reported by faculty and verified whenever possible through the granting agency. Because of calculations and rounding there is a small margin of error.

Information reported by faculty:

▶ Title
▶ Granting Agency
▶ PIs, Co-PIs, and co-workers (internal/external)
▶ Total Funding
▶ Indirect Costs
▶ Start & End Dates

Calendar year calculations:

▶ Total - Indirect = Direct
▶ # Days Total Grant = End Date - Start Date
▶ Daily Grant Award = Total Funding Reported / # Days Total Grant
▶ Grant Award for 2006 = # Days 2006 × Daily Grant Award
7.1 Summary of Research Support, 2006

<table>
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<tr>
<th>Grantee</th>
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<td>Federal Agencies</td>
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<tr>
<td><strong>Air Force Office of Scientific Research</strong></td>
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</tr>
<tr>
<td>Belyanin, A.</td>
<td>New Mid/Far-Infrared CW Room-Temperature Semiconductor Lasers Based on Intralaser Wave-Mixing Technique, (with: A. Belyanin, V. Kocharovsky)</td>
<td>5/15/2005</td>
<td>12/31/2007</td>
<td>33,648</td>
<td>4,373</td>
<td>38,021</td>
</tr>
<tr>
<td>Belyanin, A.</td>
<td>New Widely Tunable Room Temperature Terahertz Coherent Sources</td>
<td>7/1/2005</td>
<td>9/30/2008</td>
<td>30,702</td>
<td>4,352</td>
<td>35,055</td>
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<tr>
<td>Kocharovskaya, O.</td>
<td>Laser Manipulation of Nuclear Transitions</td>
<td>2/15/2005</td>
<td>2/14/2006</td>
<td>63,697</td>
<td>0</td>
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<tr>
<td>Kocharovskaya, O.</td>
<td>Laser Manipulations of Nuclear Transitions</td>
<td>2/1/2005</td>
<td>2/28/2008</td>
<td>171,422</td>
<td>0</td>
<td>171,422</td>
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<tr>
<td>Kocharovsky, V.</td>
<td>New Mid/Far-Infrared CW Room-Temperature Semiconductor Lasers Based on Intralaser Wave-Mixing Technique, (with: A. Belyanin, V. Kocharovsky)</td>
<td>5/15/2005</td>
<td>12/31/2007</td>
<td>33,648</td>
<td>4,373</td>
<td>38,021</td>
</tr>
<tr>
<td>Scully, M.O.</td>
<td>Studies in Quantum Optics, (with: M. Scully, G. Welch, M. Zubairy)</td>
<td>1/1/2003</td>
<td>1/31/2006</td>
<td>4,788</td>
<td>1,429</td>
<td>6,217</td>
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</table>

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2006 PHYSICS ANNUAL REPORT
<table>
<thead>
<tr>
<th>Grantee</th>
<th>Title</th>
<th>Start</th>
<th>End</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
</table>

* Subtotal: Air Force Office of Scientific Research 699,203 71,994 771,286

• Department of Defense


* Subtotal: Department of Defense 42,417 18,694 61,112

• Department of Energy

| Gagliardi, C.A. | Fundamental Studies in Nuclear Science, (with: C. Gagliardi, R. Tribble) | 12/1/2005 | 11/30/2008 | 0  | 0   | 0   |
| Hardy, J.C. | Nuclear Structure Evaluations for ENSDF | 10/1/2006 | 9/30/2007 | 7,800  | 0   | 7,800  |

SEC. 7. RESEARCH ACTIVITY 733
<table>
<thead>
<tr>
<th>Grantee</th>
<th>Title</th>
<th>Start</th>
<th>End</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>McIntyre, P.M.</td>
<td>New Technology for Future Hadron Colliders</td>
<td>1/1/2006</td>
<td>12/31/2008</td>
<td>608,329</td>
<td>0</td>
<td>608,329</td>
</tr>
<tr>
<td>McIntyre, P.M.</td>
<td>Superconducting Dipoles for Future Hadron Colliders</td>
<td>12/1/2003</td>
<td>11/30/2006</td>
<td>128,073</td>
<td>57,434</td>
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* U.S. Army

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**STATE AGENCIES**

- **Texas A&M University**
- **Texas Higher Education Coordinating Board**
- **University of Texas**

**UNIVERSITY AGENCIES**

- **Center for Teaching Excellence**

SEC. 7. RESEARCH ACTIVITY 745
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SEC. 7. RESEARCH ACTIVITY 747
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750  
2006 PHYSICS ANNUAL REPORT
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- Hardy, J.C.

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<td>Nuclear Structure Evaluations for ENSDF</td>
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- Subtotal Hardy, J.C. 441,696 0 441,696

- Herschbach, D.


- Subtotal Herschbach, D. 13,464 0 13,464

- Kamon, T.

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SEC. 7. RESEARCH ACTIVITY 751
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- Subtotal Kamon, T. | 106,690 | 9,102 | 115,692 |
- Subtotal Kattawar, G.V. | 242,364 | 88,480 | 330,844 |
- Subtotal Ko, C. | 91,052 | 31,456 | 122,508 |
- Kocherovskaya, S. | 48,558 | 0 | 48,558 |
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| McIntyre, P.M.          |                                                                                                            |               |             |         |          |         |
|                         | **Subtotal McIntyre, P.M.**                                                                               |               |             |         |          | 853,410 |

| Kieduszevski, S.        |                                                                                                            |               |             |         |          |         |
| Alfred P. Sloan         | Alfred P. Sloan Fellowship                                                                               | 10/1/2006     | 9/30/2008   | 5,610   | 0        | 5,610   |
| Foundation              |                                                                                                            |               |             |         |          |         |
|                         | **Subtotal Kieduszevski, S.**                                                                             |               |             |         |          | 5,610   |

| Nanopoulos, D.V.        |                                                                                                            |               |             |         |          |         |

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2006 PHYSICS ANNUAL REPORT
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* Subtotal Scully, M. O. 567,076 96,562 664,538

* Sezgin, E.*

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* Subtotal Sezgin, E. 66,006 17,762 82,768

* Simova, J.*

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* Subtotal Veimer, M.B.       | 130,021                  | 53,236     | 183,257    |

* Welch, G.B.                  |                          |            |            |          |           |          |
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* Subtotal Welch, G.B.        | 336,023                  | 25,670     | 362,293    |

* White, J.T.                  |                          |            |            |          |           |          |
| Department of Energy          | A High-Pressure Neon-Based Detector for Underground Physics            | 5/1/2004    | 4/30/2006   | 14,752   | 2,999     | 17,751    |
| National Science Foundation   | Request for Operating Funds for Zeplin II and R&D Support for Zepling IV- A New Liquid Xenon Detector | 8/1/2002    | 7/31/2006   | 10,859   | 3,882     | 14,742    |

* Subtotal White, J.T.         | 110,066                  | 17,934     | 128,003    |

SEC. 7. RESEARCH ACTIVITY 763
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<th>End</th>
<th>Direct</th>
<th>Indirect</th>
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<td>National Science Foundation</td>
<td>Probing Superconducting Fluctuations on Mesoscopic Scales: Conductance Fluctuations and Oscillations</td>
<td>7/1/2006</td>
<td>6/30/2009</td>
<td>13,557</td>
<td>5,663</td>
<td>19,219</td>
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<td>The Robert A. Welch Foundation</td>
<td>(REN) Study of Nuclei at High Excitations</td>
<td>6/1/2005</td>
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**Subtotal Wu, W.**

89,014 10,599 99,613

**Subtotal Yngblood, D.H.**

433,851 0 433,851

**Subtotal Zubairy, M.**

94,041 19,051 113,093

***Total: All Faculty***

9,188,070 891,989 10,065,391
Contents

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1. Foreword from the Department Head

This annual report summarizes the activities during 2006 of the Statistics faculty in their teaching, research, and service.

Research Grants Awarded in 2006

- The department is currently home to an NCI funded training grant in bioinformatics. The grant was extended for a further 5 year period. Dr. Raymond Carroll is the Director of the program, which accepts two new post docs every year in a two-year training program. Post docs are assigned both a statistical and biological advisor and devote a majority of their time in laboratories learning biology and laboratory techniques.

- Dr. Willa Chen received funding from the National Institute of Health for her research grant titled; *Long Memory Time Series Modeling; Computational and Statistical Efficiency*.

- Dr. Jeffrey Hart received funding from the National Science Foundation for his grant titled; *Cluster-Based Bootstrapping in Multiple Hypothesis Testing*.

- Dr. Jianhua Huang received funding from the National Science Foundation for his grant titled; *Collaborative Research: Statistical Learning and Object Oriented Data Analysis*.

- Dr. Clifford Spiegelman received funding from 2006-2008 for leading a project on the Proteomic Technology Initiative with the National Cancer Institute.

Honors and Awards

*The faculty of the Department of Statistics was recognized with numerous honors and awards.*

- Raymond Carroll was a Bohrer Lecturer for the University of Illinois, Bradley Lecturer, University of Georgia, Challis Lectures, University of Florida, Sobel Lecturer, University of California-Santa Barbara, Statistical Science Awards Lecture, Centers for Disease Control

- Daren Cline was awarded the Distinguished Achievement Award in Teaching from The Association of Former Students.

- Bani Mallick was awarded the Distinguished Achievement Award in Research from The Association of Former Students.

- H. Joseph Newton was appointed to the George P. Mitchell Chair in Statistics.

- Emanuel Parzen was named Distinguished Lecturer by the American Statistical Association, University of Connecticut.

- F. Michael Speed was named Elected Fellow, American Statistical Association.

- Marina Vannucci was named Elected Fellow, American Statistical Association.

- Naisyin Wang was named Fellow, Institute of Mathematical Statistics.

Several of the department’s graduate students received awards.

- Arnab Maity, Ganggang Xu and Junbum Lee received the Eli Lilly Fellowship.

- A total of nine students received the Eva and Lee Smith Fellowship. Those students were Soutir Bandyopadhyay, Lianfu Chen, Nai-Wei Chen, Maurice Hasson, Ick Hoon Jin, Bledar Konomi, Youjin Lee, Jie Lie and Kandice Raymond.

- Kristin Lennox received and Honorable Mention for the Gertrude Cox Scholarship Award.
 Arnab Maity was named 2006 Parzen Graduate Research Fellows.

 Arnab Maity was selected to receive one of the International Biometric Society’s Eastern North American Region (ENAR) Distinguished Student Paper Awards for the 2006 ENAR spring meetings in Tampa, FL.

 John Wagaman was selected to receive a Distinguished Graduate Student Teaching Award by the Association of Former Students.

**Departmental Events**

 Arnab Maity was selected to receive one of the International Biometric Society’s Eastern North American Region (ENAR) Distinguished Student Paper Awards for the 2006 ENAR spring meetings in Tampa, FL.

 John Wagaman was selected to receive a Distinguished Graduate Student Teaching Award by the Association of Former Students.

**Departmental Events**

− The 11th annual Advanced Placement Summer Institute for high school teachers was held in June. Chris Olsen from Cedar Rapids, Iowa, was the lead presenter. Special faculty lectures were presented by Simon Sheather, Jim Matis, Thomas Wehrly, and Michael Speed, Jessica Wickersham and Suojin Wang, who discussed their statistical teaching and research.

− The department hosted the Aggie Reunion at the Joint Statistical meetings in Seattle, Washington. At the reception, Essam K. Al-Hussaini of the University of Assiut, Egypt was recognized as being named the 2006 Hartley Award recipient and Yehua Li received the Conner Award.

− In August, the department held its second annual New Graduate Student Conference. Our current supported students mentored our new incoming graduate students. Faculty members involved were Fred Dahm, Michael Longnecker, Jeff Hart, Simon Sheather, Henrik Schmiediche, Raymond Carroll, H. Joseph Newton, Bani Mallick, Suojin Wang, Ruzong Fan, David Dahl and Naisyin Wang.

− The Department celebrated its second Annual Faculty Retreat in August. The retreat was designed for the faculty to have more direct interaction with one another. The retreat focused on strategic planning, junior faculty teaching presentations, and hiring.

**Faculty Updates**

− Dr. Ruzong Fan has been promoted to the rank of Associate Professor of Statistics.

− Dr. Faming Liang has been promoted to the rank of Associate Professor of Statistics.

− Soumendra Lahiri joined our department in August 2006 at the rank of Professor. Dr. Lahiri came to us from Iowa State University. He received his PhD in Statistics from Michigan State University in 1989. His research interests are asymptotic expansions, environmental statistics, resampling methods, spatial statistics, sample survey, sensor network, time series and wavelets.

− The department welcomed three new Assistant Professors in September 2006. Alan Dabney, Ursula Muller Harknett and Suhasini Subba Rao to the faculty. Alan Dabney comes to us from the University of Washington. His research interests include high-dimensional data, classification; Biology; Microarrays and Bioinformatics. Ursula Muller Harknett comes to us from University of Bremen, Germany. Her areas of research interests include Non- and semi-parametrics, constructing optimal and efficient estimators for various functionals of regression and autoregression models. Suhasini Subba Rao comes to us from the University of Bristol in the UK. Her research interests are time series, spatio temporal models, nonparametric estimation and financial data.

− Webster West joined the faculty as Associate Professor during the summer of 2006. Dr. West comes to us from the Department of Statistics, Department of Statistics, University of North Carolina. He received his Ph.D. in statistics from Rice University in 1994 and has been on the faculty at the University of North Carolina since then. Dr. West has numerous research
areas of interest with an emphasis on computational statistics. Those areas include toxicological risk assessment, nonparametric statistics, stochastic modeling, changepoint problems, mathematical statistics and statistical education.
## 2. Statistical Abstract

### I. Personnel

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<td>b. Non-Tenure-Track Faculty</td>
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<td>c. Postdoctoral Fellows</td>
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<tr>
<td>Postdoc Research Associate</td>
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<td>8</td>
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<td>d. Graduate Students</td>
<td>78</td>
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<td>f. Support Staff</td>
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### II. Instructional Activities

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<td>b. Undergraduate Semester Credit Hours</td>
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<td>c. PhD Degrees</td>
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<tr>
<td>d. Masters Degrees</td>
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<td>e. Undergraduate Degrees</td>
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### III. Research Activities

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<td>b. Research Presentations</td>
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<td>i. Other Govt</td>
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<tr>
<td>Total</td>
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<td>2,688,819</td>
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3. Honors & Awards, 2006

By Faculty
▷ This section contains all honors and awards, as reported by individual faculty members, during the calendar year 2006.

By Students
▷ This section contains all honors and awards, as reported by the department, during the calendar year 2006.
### 3.1 Honors & Awards Received by Faculty, 2006

<table>
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<tr>
<th>Name</th>
<th>Award</th>
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<tbody>
<tr>
<td>R. Carroll</td>
<td>Bohrer Lecturer, University of Illinois</td>
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<tr>
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<td>Bradley Lecturer, University of Georgia</td>
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<tr>
<td></td>
<td>Challis Lectures, University of Florida</td>
</tr>
<tr>
<td></td>
<td>Sobel Lecturer, University of California - Santa Barbara</td>
</tr>
<tr>
<td></td>
<td>Statistical Science Awards Lecture, Centers for Disease Control</td>
</tr>
<tr>
<td>D. Cline</td>
<td>Distinguished Achievement Award - Teaching, The Association of Former Students</td>
</tr>
<tr>
<td>B. Mallick</td>
<td>Distinguished Achievement Award - Research, The Association of Former Students</td>
</tr>
<tr>
<td>E. Parzen</td>
<td>Distinguished Lecturer, American Statistical Association, University of Connecticut</td>
</tr>
<tr>
<td>F. Speed</td>
<td>Elected Fellow, American Statistical Association</td>
</tr>
<tr>
<td>M. Vannucci</td>
<td>Elected Fellow, American Statistical Association</td>
</tr>
<tr>
<td>N. Wang</td>
<td>Fellow, Institute of Mathematical Statistics</td>
</tr>
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3.2 Honors & Awards Received by Students, 2006

Graduate

▷ Distinguished Graduate Student Teaching Award
  John Wagaman

▷ Eli Lily Fellowship
  Junbum Lee
  Arnab Maity
  Ganggang Xu

▷ Eva and Lee Smith Fellowship
  Soutir Bandyopadhyay
  Lianfu Chen
  Nai-Wei Chen
  Maurice Hasson
  Ick Hoon Jin
  Bledar Konomi
  Youjin Lee
  Jie Lie
  Kandice Raymond

▷ Gertrude Cox Scholarship Award
  Kristin Lennox

▷ International Biometric Society’s Eastern North American Region Distinguished Student Paper Award
  Arnab Maity

▷ Parzen Graduate Research Fellows
  Arnab Maity
4. Students, 2006

This section contains all degrees awarded, as reported by the department, during the calendar year 2006.
4.1 Graduate Degrees Awarded, 2006

Fall

▷ M.S.
Matthew Dexter Bates  Advisor(s): C. Spiegelman
Penglin Huang  Advisor(s): J. Huang
Hyun Chung Kim  Advisor(s): J. Huang
Lan Liang  Advisor(s): M. Longnecker
Rongjun Shen  Advisor(s): T. Wehrly

▷ Ph.D.
Xiaohui Wang  Bayesian Classification And Survival Analysis
With Curve Predictors  Advisor(s): B. Mallick

Spring

▷ M.S.
Billy Conrad Goodner  Advisor(s): F. Liang
Olga Savchuk  Advisor(s): J. Hart
Christina Renee Scott  Advisor(s): F. Speed
Cynthia Lea Simmons  Advisor(s): P. Dahm
Wen Tan  Advisor(s): L. Zhu
Jessica Lee Wickersham  Advisor(s): D. Cline
Dongling Zhan  Advisor(s): S. Wang

▷ Ph.D.
Kyong Ryun Kim  Second Order Accurate Variance Estimation In
Poststratified Two-Stage Sampling
Sinae Kim  Bayesian Variable Selection In Clustering Via
Dirichlet Process Mixture Models  Advisor(s): S. Wang
Hyejin Shin  Infinite Dimensional Discrimination And Classification  
**Advisor(s):** R. Eubank

**Summer**

▷ M.S.

Adarsh Joshi  
**Advisor(s):** M. Vannucci

Nini Zang  
**Advisor(s):** P. Dahm

▷ Ph.D.

Bo Li  An Analysis Of Texas Rainfall Data And Asymptotic Properties Of Space-Time Covariance Estimators  
**Advisor(s):** M. Sherman

Yehua Li  Topics In Functional Data Analysis With Biological Applications  
**Advisor(s):** M. Sherman

Iryna Victorovna Lobach  Case-Control Studies Of Genetic And Environmental Factors With Error In Measurement Of Environmental Factors  
**Advisor(s):** R. Carroll

Shubhankar Ray  Nonparametric Bayesian Analysis Of Some Clustering Problems  
**Advisor(s):** B. Mallick

Weimin Zhang  Topics In Living Cell Microphoton Laser Scanning Microscopy (Mplsm) Image Analysis  
**Advisor(s):** S. Wang
## Colloquium and Seminar Speakers, 2006

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<th>Date</th>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1/17/2006</td>
<td>Suhasini Subba Rao</td>
<td>University of Bristol, UK</td>
<td>Nonparametric Prediction of Spatio-Temporal Processes</td>
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<tr>
<td>1/18/2006</td>
<td>Kyongryun Kim</td>
<td>Texas A&amp;M University</td>
<td>Second-Order Accurate Variance Estimation in Post-Stratified Two-Stage Sampling</td>
</tr>
<tr>
<td>1/19/2006</td>
<td>Yongho Jeon</td>
<td>University of Wisconsin, Madison</td>
<td>Log-Density Functional ANOVA Model Estimation and Nonparametric Graphical Model Building</td>
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<tr>
<td>1/23/2006</td>
<td>Shuangge (Steven) Ma</td>
<td>University of Washington</td>
<td>Partly Linear Transformation Models with Current Status Data</td>
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<tr>
<td>1/26/2006</td>
<td>Lijian Yang</td>
<td>Michigan State University</td>
<td>Efficient and Fast Spline-Backfitted Kernel Smoothing of Additive Regression Model</td>
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<tr>
<td>1/31/2006</td>
<td>Jayanta Kumar Pal</td>
<td>University of Michigan</td>
<td>Estimation of Link Functions in Monotone Response Models</td>
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<td>2/2/2006</td>
<td>Adrian Dobra</td>
<td>Duke University</td>
<td>High-Dimensional Structural Learning with Mixed Variables</td>
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<td>2/6/2006</td>
<td>Sounak Chakraborty</td>
<td>University of Missouri, Columbia</td>
<td>Gene Expression Based Glioma Classification Using Hierarchical Bayesian Vector Models</td>
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<td>2/9/2006</td>
<td>Alan Dabney</td>
<td>University of Washington</td>
<td>Functional ANOVA Models for the Normalization of Two-Channel Microarrays</td>
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<td>2/13/2006</td>
<td>Ke-Hai Yuan</td>
<td>University of Notre Dame</td>
<td>Normal Theory ML for Missing Data with Violation of Distribution Assumptions</td>
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<td>2/16/2006</td>
<td>Ursula Müller</td>
<td>University of Bremen, Germany</td>
<td>Asymptotically Optimal Estimations in Nonlinear Regression and Autoregression</td>
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<tr>
<td>2/21/2006</td>
<td>Soumendra Lahiri</td>
<td>Iowa State University</td>
<td>Block Bootstrap for Irregularly Spaces Spatial Data</td>
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<tr>
<td>2/23/2006</td>
<td>Subharup Guha</td>
<td>Harvard University</td>
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Bayesian Hidden Markov Modeling of Array CGH Data

2/28/2006 Mevin Hooten  
*University of Missouri*
Non-Linear Process Specifications in Hierarchical Spatio-Temporal Models

3/2/2006 Jason (Jun) Duan  
*Duke University*
Generalized Spatial Dirichlet Process Models

3/7/2006 Xiaofeng Shao  
*University of Chicago*
Fourier Analysis in Time Series: Some Theory and an Application to Space-Time Modeling

3/8/2006 Bo Li  
*Texas A&M University*
A Geostatistical Method for Texas NEXRAD Data Calibration

3/9/2006 Gopika (Gopi) Goswami  
*Harvard University*
On Population Based Markov Chain Monte Carlo Methods

3/22/2006 Weimin Zhang  
*Texas A&M University*
Topics in Living Cell MPLSM Image Analysis

3/29/2006 Sinae Kim  
*Texas A&M University*
Variable Selection in Clustering Via Dirichlet Process Mixture Models

3/30/2006 Wei Pan  
*University of Minnesota*
A Nonparametric Empirical Bayes Approach to Joint Modeling of Multiple Sources of Genomic Data

4/6/2006 Florentina Bunea  
*Florida State University*
Aggregation Via L1 Penalized Least Squares and On-Line Algorithms

4/10/2006 Alan Gelfand  
*Duke University*
Stationary Process Approximation for the Analysis of Large Spatial Datasets

4/10/2006 Alan Gelfand  
*Duke University*
Looking Back on 15 Years of MCMC: Its Impact in the Statistical (and Broader) Research Community

4/13/2006 Emanuel Parzen  
*Texas A&M University*
United Statistics: Parameter Confidence Quantiles, Duality Bayesian Frequentist Inference

4/20/2006 Valen Johnson  
*MD Anderson Cancer Center*
Bayesian Model Assessment Using Pivotal Quantities

5/4/2006  Yuedong Wang  
University of California, Santa Barbara  
Optimal Shrinkage Estimation of Variances with Applications to Microarray Data Analysis

9/21/2006  Dan Cooley  
National Center for Atmospheric Research  
Bayesian Modeling of Extreme Precipitation Return Levels

9/21/2006  Mikyoung Jun  
Texas A&M University  
Non-Stationary Spatial Covariance Models to Quantify Global Climate Model Bias and Dependence

9/21/2006  Anders Malmberg  
National Center for Atmospheric Research  
A Stochastic Transport Model for Atmospheric Carbon Monoxide

9/21/2006  Doug Nychka  
National Center for Atmospheric Research  
Fitting a Climate Model to Data

10/5/2006  Li Wang  
Michigan State University  
Spline Single-Index Prediction Model

10/12/2006  Ying Wei  
Columbia University  
Time-Dependent Bivariate Growth Charts

10/19/2006  Ryan Elmore  
Colorado State University  
Nonparametric Density Estimation From Covariate Information

10/26/2006  Haipeng Shen  
University of North Carolina, Chapel Hill  
Interday Forecasting and Intraday Updating of Call Center Arrivals

11/2/2006  Clifford Spiegelman  
Texas A&M University  
Another Look at the Kennedy Assassination

11/9/2006  Wendy Meiring  
University of California, Santa Barbara  
A Functional Data Analysis Study of Stratospheric Ozone Trends, and Estimation of Ozonesonde Measurement Biases

11/16/2006  Thomas Lee  
Colorado State University  
Generalized Fiducial Confidence Intervals for Wavelet Regression

11/28/2006  Sooyoung Cheon  
Texas A&M University
6. Faculty*, 2006

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Derya Akleman</td>
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<td>May Boggess</td>
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<td>James A. Calvin</td>
<td>Professor</td>
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<td>Julie H. Carroll</td>
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<td>Raymond J. Carroll</td>
<td>Distinguished Professor</td>
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<td>Willa W. Chen</td>
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<td>Daren B.H Cline</td>
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<td>David B. Dahl</td>
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<td>Marc Genton</td>
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<td>Jeffrey D. Hart</td>
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<td>Mikyoung Jun</td>
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</tr>
<tr>
<td>Marina Vannucci</td>
<td>Professor</td>
</tr>
<tr>
<td>Naisyin Wang</td>
<td>Professor</td>
</tr>
<tr>
<td>Suojin Wang</td>
<td>Professor</td>
</tr>
<tr>
<td>Thomas E. Wehrly</td>
<td>Professor</td>
</tr>
<tr>
<td>Webster West</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Jessica Wickersham</td>
<td>Assistant Lecturer</td>
</tr>
<tr>
<td>Li Zhu</td>
<td>Assistant Professor (J)</td>
</tr>
</tbody>
</table>

*For the Annual Report, Faculty are defined as tenure and non-tenure track employees who were employed at any time during 2006 (01/01/2006-12/31/2006).
6.1 Professional Activities, 2006

This section contains information, as reported by individual faculty members, encompassing each faculty member’s professional activities for the calendar year 2006.

Subsections of professional activities are defined as follows:

Honors and Awards
▷ All professional honors and awards, both internal and external.

Service Activities
▷ All professional service and leadership roles, including: departmental, college, university, state, national and international.

Teaching
▷ Classes taught during the Spring, Summer and Fall sessions of 2006.
▷ Any missing enrollment numbers were gathered from the Student Information Management System (SIMS) at Texas A&M University.

Research Projects
▷ All research projects, funded and unfunded.
▷ Whenever possible, all research-related employees of that faculty member are listed along with the citation. Key for employees: (P)=Postdoc, (G)=Graduate Student, (U)=Undergraduate Student.
▷ Renewals are marked by “(REN)” at the beginning of their title.
▷ Unfunded grants are marked by “(UNFUNDED)” at the end of the citation.
▷ Additional information (including PIs, CoPIs, and funding) on all funded grants are listed in Section 7.

Presentations
▷ All posters, invited and contributed lectures (plenary, conferences, colloquia, seminars, etc.).
▷ Whenever reported, posters, invited and contributed lectures are noted in parentheses following the citation.
▷ Citations are in chronological order.

Publications
▷ All printed materials published during 2006.
▷ Pre-press, in-press and submitted publications were not included.
▷ Citations were formatted in APA Style and are in alphabetical order by lead author.
• SERVICE DURING 2006

  University
  ▷ Committee/Panel: Academic Affairs Committee, Faculty Senate (Member), Faculty Senate (Faculty Senator - 07), Personal and Welfare Committee, Faculty Senate (Member)

  Department
  ▷ Committee/Panel: Caucus, College of Science (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▷ STAT 652. — Statistics in Research II (total enrollment: 20)
  ▷ STAT 652. — Statistics in Research II (total enrollment: 55)

  Summer
  ▷ STAT 651. — Statistics in Research I (total enrollment: 44)
  ▷ STAT 652. — Statistics in Research II (total enrollment: 13)

  Fall
  ▷ STAT 651. — Statistics in Research I (total enrollment: 80)
  ▷ STAT 652. — Statistics in Research II (total enrollment: 68)
MAY BOGGESS

LECTURER (979) 862-4283
STAT mboggess@stat.tamu.edu

• SERVICE DURING 2006

  Department
  ▶ Service Position: Statistics Department Graduate Students (Consultant)
  ▶ Professional Affiliation: STAT211 (Co-Coordinator)
  ▶ Event: Honors Open House (Participant), TAMU Math Club Careers Night (Speaker)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ STAT 211. — Principles of Statistics I (total enrollment: 46)
  ▶ STAT 211. — Principles of Statistics I (total enrollment: 66)

  Fall
  ▶ STAT 211. — Principles of Statistics I (total enrollment: 75)
  ▶ STAT 407. — Principles of Sample Surveys (total enrollment: 10)

• PRESENTATIONS DURING 2006

  ▶ “A Power -of-the -mean Model for Variation of Urine Protein:creatinine Ratio in Female Dogs,” Conference of Texas Statisticians, Austin, TX, March, 2006. (Contributed)

• PUBLICATIONS DURING 2006

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Member, Interdisciplinary Faculty, Bioinformatics, [2006]
  ▷ Member, Interdisciplinary Faculty, Toxicology, [2006]
  ▷ Executive Associate Vice President for Research, Vice President for Research, [2004]

• SERVICE DURING 2006

  National
  ▷ Editorial/Board: National Science Foundation Major Program (Reviewed), NIEHS P01 Proposal (Chair)
  ▷ Committee/Panel: National Research Council-NIST ITL Review Committee (Member), NIEHS Environmental Health Sciences Committee (Chair)

  University
  ▷ Committee/Panel: VTPB Head Search Committee (Member)

  Department
  ▷ Committee/Panel: Promotion and Tenure Committee (Member)

• RESEARCH PROJECTS DURING 2006

  Federal
  ▷ Center for Environmental Rural Health, National Institute for Environmental Health Sciences
  ▷ Development of a High Density, High Performance Beowulf Cluster, National Science Foundation

• PUBLICATIONS DURING 2006

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Bioinformatics, [2006]
  ▶ Member, Interdisciplinary Faculty, Nutrition, [2006]
  ▶ Member, Interdisciplinary Faculty, Toxicology, [2006]

• AWARDS DURING 2006
  National
  ▶ Bohrer Lecturer, University of Illinois
  ▶ Bradley Lecturer, University of Georgia
  ▶ Challis Lectures, University of Florida
  ▶ Sobel Lecturer, University of California - Santa Barbara
  ▶ Statistical Science Awards Lecture, Centers for Disease Control

• SERVICE DURING 2006
  International
  ▶ Editorial/Board: Oxford Statistical Society Series (Co-Editor)

  National
  ▶ Editorial/Board: Department of Statistics, University of Kentucky (Review Panel), Department of Statistics, Virginia Tech (Review Panel), Journal of the American Statistical Association (Associate Editor)
  ▶ Committee/Panel: Life Sciences Committee, International Statistical Institute (Chair)

  Department
  ▶ Committee/Panel: Promotion and Tenure Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ STAT 681. — Seminar (total enrollment: 8)
  ▶ STAT 691. — Research (total enrollment: 5)

  Summer
  ▶ STAT 485. — Directed Studies (total enrollment: 1)
  ▶ STAT 691. — Research (total enrollment: 2)
  ▶ STAT 691. — Research (total enrollment: 3)

  Fall
  ▶ STAT 681. — Seminar (total enrollment: 6)
  ▶ STAT 685. — Directed Studies (total enrollment: 1)
• RESEARCH PROJECTS DURING 2006

Federal
- Nutritional Countermeasures to Radiation Exposure, National Aeronautics and Space Administration
- Nutritional Countermeasures to Radiation Exposure, National Aeronautics and Space Administration
- Center for Environmental Rural Health, National Institute for Environmental Health Sciences
- Bayesian Models for Gene Expression with Microarray Data, National Institutes of Health
- Bayesian Models for Gene Expression with Microarray Data, National Institutes of Health
- (REN) Measurement Error, Nutrition and Breast/Colon Cancer, National Institutes of Health
- (REN) Nutrition, Biostatistics, and Bioinformatics, National Institutes of Health
- Nutrition, Biostatistics, and Bioinformatics, National Institutes of Health
- Development of a High Density, High Performance Beowulf Cluster, National Science Foundation

• PRESENTATIONS DURING 2006
- Birmingham Medical School, University of Alabama, Tuscaloosa, AL, 2006. (Invited)
- Breslow Conference, University of Washington, 2006. (Invited)
- Centers for Disease Control, Atlanta, GA, 2006. (Invited)
- Joint Statistical Meetings, 2006. (Invited)
- Midwest Biopharmaceutical Statistics Workshop, 2006. (Invited)
- National Cancer Institute, 2006. (Invited)
- Oberwolfach Conference on Econometrics, 2006. (Invited)
- Penn State University, University Park, PA, 2006. (Invited)
- St. John’s University, Queens, NY, 2006. (Invited)
- University College Cork, Cork, Ireland, 2006. (Invited)
- University of California, San Diego, CA, 2006. (Invited)
- University of California, Santa Barbara, CA, 2006. (Invited)
- University of Georgia, Athens, GA, 2006. (Invited)
- University of Illinois, Urbana, IL, 2006. (Invited)
- University of Juan Carlos III, 2006. (Invited)
- University of Louisville, Louisville KY, 2006. (Invited)
- University of Mannheim, Germany, 2006. (Invited)
- University of Washington, 2006. (Invited)
- Western North American Region, 2006. (Invited)
• PUBLICATIONS DURING 2006


• SERVICE DURING 2006

National
▷ Service Position: Coast Learning Systems of Coastline Community College (Advisor)

Department
▷ Committee/Panel: Undergraduate Service Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ STAT 303. — Statistical Methods (total enrollment: 148)

Fall
▷ STAT 303. — Statistical Methods (total enrollment: 138)
WILLA W. CHEN
ASSISTANT PROFESSOR (979) 845-3141
STAT-Long Memory Time Series Models wchen@stat.tamu.edu

• SERVICE DURING 2006
  National
  College
    ▶ Committee/Panel: Diversity Committee (Member)
  Department
    ▶ Committee/Panel: Recruiting Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Summer
    ▶ STAT 626. — Methods in Time Series Analysis (total enrollment: 15)
  Fall
    ▶ STAT 673. — Time Series Analysis I (total enrollment: 4)

• RESEARCH PROJECTS DURING 2006
  Federal
    ▶ Fractional Cointegration and Tapering in Long Memory Time Series, National Science Foundation
    ▶ Long Memory Time Series Modelling: Computational and Statistical Efficiency, Nonstationarity/Noninvertibility and Goodness of Fit, National Science Foundation

• PRESENTATIONS DURING 2006

• PUBLICATIONS DURING 2006
• AWARDS DURING 2006
  College
  ▷ Distinguished Achievement Award - Teaching, The Association of Former Students

• SERVICE DURING 2006
  National
        (Referee: Journals), Journal of The American Statistical Association (Reviewed)

  College
  ▷ Committee/Panel: Faculty Advisory Council (Elected Member)

  Department
  ▷ Committee/Panel: Colloquium Committee (Chair), Faculty Advisory Council (Member),
        Graduate Service Committee (Member), Grievance Committee (Member), Promotion and
        Tenure Committee (Member), Theory Qualifying Exam (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ STAT 611. — Theory of Statistics II (total enrollment: 33)
  ▷ STAT 614. — Probability for Statistics (total enrollment: 13)
  ▷ STAT 681. — Seminar (total enrollment: 20)
  ▷ STAT 685. — Directed Studies (total enrollment: 1)

  Summer
  ▷ STAT 601. — Statistical Analysis (total enrollment: 27)

  Fall
  ▷ STAT 212. — Principles of Statistics II (total enrollment: 57)
  ▷ STAT 681. — Seminar (total enrollment: 16)
  ▷ STAT 689. — Special Topics in (total enrollment: 5)

• PRESENTATIONS DURING 2006
  ▷ Department of Statistics, Rice University, Houston, TX, 2006. (Invited)
  ▷ Institute of Mathematical Statistics, Joint Statistical Meetings, Seattle, WA, 2006. (Contributed)
• SERVICE DURING 2006
  National

• TEACHING ASSIGNMENTS DURING 2006
  Fall
  ▶ STAT 211. — *Principles of Statistics I* (total enrollment: 31)

• PRESENTATIONS DURING 2006
  ▶ “Normalization of Two-channel Microarrays Accounting for Experimental Design and Intensity- dependent Relationships,” Department of Biostatistics, MD Anderson, Houston, TX, September, 2006. (Invited)
  ▶ “Normalization of Two-channel Microarrays Accounting for Experimental Design and Intensity- dependent Relationships,” Department of Statistics, Rice University, Houston, TX, September, 2006. (Invited)
  ▶ “Normalization of Two-channel Microarrays Accounting for Experimental Design and Intensity- dependent Relationships,” Department of Statistics, Southern Methodist University, Dallas, TX, September, 2006. (Invited)
  ▶ “Normalization of Two-channel Microarrays Accounting for Experimental Design and Intensity- dependent Relationships,” Department of Mathematics, University of Texas, Arlington, TX, October, 2006. (Invited)
• SERVICE DURING 2006
  
  International
  ▶ Editorial/Board: Statistics and Computing, and Statistical Modelling (Referee: Journals)

  National

  Department
  ▶ Committee/Panel: Bioinformatics Faculty Committee (Member), Computing Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ STAT 651. — Statistics in Research I (total enrollment: 36)

  Summer
  ▶ STAT 685. — Directed Studies (total enrollment: 1)

  Fall
  ▶ STAT 604. — Special Problems in Statistical Computations and Analysis (total enrollment: 41)

• PRESENTATIONS DURING 2006


  ▶ “Simultaneous Inference for Multiple Testing and Clustering via Dirichlet Process Mixture Models,” First Annual Bioinformatics Workshop, College Station, TX, October, 2006. (Invited)

• PUBLICATIONS DURING 2006

  SEC. 6.1
  PROFESSIONAL ACTIVITIES
  797


P. FRED DAHM

PROFESSOR
STAT-Biostatistics, Bioinformatics

P. FRED DAHM

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ⊲ Graduate Advisor, Statistics Graduate Advising Office, [1989]

• SERVICE DURING 2006
  National
    ⊲ Editorial/Board: Various Journals (Referee: Journals)
    ⊲ Committee/Panel: Two Tenure and Promotion Cases (Reviewer)

  University
    ⊲ Committee/Panel: Presidential Award of Excellence for Faculty Service to International Students Selection Committee (Member)

  College
    ⊲ Committee/Panel: Graduate Instruction Committee (Member)

  Department
    ⊲ Professional Affiliation: Graduate Advisor (Advisor)
    ⊲ Committee/Panel: Admissions and Recruiting Committee (Chair), Awards Committee (Member), Methods Qualifying Examination Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
    ⊲ STAT 644. — Biostatistics II (total enrollment: 2)
    ⊲ STAT 685. — Directed Studies (total enrollment: 2)
  Summer
    ⊲ STAT 211. — Principles of Statistics I (total enrollment: 54)
  Fall
    ⊲ STAT 643. — Biostatistics I (total enrollment: 10)
    ⊲ STAT 651. — Statistics in Research I (total enrollment: 44)
    ⊲ STAT 685. — Directed Studies (total enrollment: 1)
    ⊲ STAT 691. — Research (total enrollment: 1)
RUZONG FAN
ASSOCIATE PROFESSOR
STAT-Statistical Genetics, Random Processes
rfan@stat.tamu.edu

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Genetics, [2006]

• SERVICE DURING 2006
  National
  ▶ Editorial/Board: Genetics, Biomedcentral Bioinformatics, Biometrics, Genetics Current Progress in Bioinformatics, Biomedcentral Genetics (Referee: Journals)

  Department
  ▶ Research Group: Bioinformatics (Member)
  ▶ Committee/Panel: Library Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ STAT 651. — Statistics in Research I (total enrollment: 75)

  Summer
  ▶ STAT 651. — Statistics in Research I (total enrollment: 36)

  Fall
  ▶ STAT 651. — Statistics in Research I (total enrollment: 65)
  ▶ STAT 685. — Directed Studies (total enrollment: 1)
  ▶ STAT 689. — Special Topics in (total enrollment: 10)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▶ Haplotype Linkage and Association Mapping of Quantitative Trait Loci, National Science Foundation

• PRESENTATIONS DURING 2006
  ▶ Stanford University, Stanford, CA, March, 2006.( Invited)
  ▶ University of Alabama, Birmingham, AL, May, 2006.( Invited)
  ▶ Bonn University, August, 2006.( Invited)

• PUBLICATIONS DURING 2006
Between SP-B (and Flanking Region) and RDS; SP-B Haplotypes and Alleles From SP-B-linked Loci are Risk Factors for RDS Pediatric Research, vol. 59, 616-621.
• SERVICE DURING 2006
  
  International
  ▶ Editorial/Board: *Chilean Journal of Statistics* (Associate Editor)

  National
  ▶ Editorial/Board: *Journal of Statistical Planning and Inference* (Associate Editor)

  Department
  ▶ Committee/Panel: Examination Committee (Member), Faculty Recruiting Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  
  Spring
  ▶ STAT 616. — Multivariate Analysis (total enrollment: 7)
  ▶ STAT 691. — Research (total enrollment: 2)

  Summer
  ▶ STAT 691. — Research (total enrollment: 1)
  ▶ STAT 691. — Research (total enrollment: 1)

  Fall
  ▶ STAT 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006
  
  Federal
  ▶ A Unified Framework for Statistical Modeling with Multivariate Skewed Distributions and Application to Spatial Selection Models, *National Science Foundation*

  *On leave.*
• SERVICE DURING 2006

National
▷ Committee/Panel: American Statistical Association Section on Nonparametric Statistics (Chairman)

College
▷ Committee/Panel: Tenure and Promotion Advisory Committee (Member)

Department
▷ Committee/Panel: Promotion and Tenure Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ STAT 685. — Directed Studies (total enrollment: 1)

Fall
▷ STAT 632. — Statistical Decision Theory (total enrollment: 18)

• RESEARCH PROJECTS DURING 2006

Federal
▷ Cluster-Based Bootstrapping in Multiple Hypotheses Testing, National Science Foundation
▷ Development of a High Density, High Performance Beowulf Cluster, National Science Foundation

• PRESENTATIONS DURING 2006

▷ “Nonparametric Estimation of and Error Distribution in a Large-\(\rho\), Small-\(\eta\) Settings,” Summer Research Conference, Kerrville, TX, June, 2006. (Invited)
▷ “Nonparametric Estimation of and Error Distribution in a Large-\(\rho\), Small-\(\eta\) Settings,” University of Texas, Dallas, TX, December, 2006. (Invited)

• PUBLICATIONS DURING 2006

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ STAT 211 — Principles of Statistics I (total enrollment: 138)

Fall
▷ STAT 211 — Principles of Statistics I (total enrollment: 142)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Member, Interdisciplinary Faculty, Bioinformatics, [2006]

• SERVICE DURING 2006
  International
  ▷ Editorial/Board: Statistica Sinica (Associate Editor)
  National
  ▷ Committee/Panel: NSF DMS Career Award Panel (Member)
  Department
  ▷ Committee/Panel: Bioinformatics Search Committee (Chair), Bioinformatics Training Program (Associate Director), Curriculum Committee (Member), Faculty Search Committee (Member), Promotion and Tenure Committee (Member), Q2 Committee (Member)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▷ Nutrition, Biostatistics, and Bioinformatics, National Institutes of Health
JIANHUA HUANG
ASSOCIATE PROFESSOR (979) 845-3141
STAT-Nonparametric and Semiparametric Methods jianhua@stat.tamu.edu

• SERVICE DURING 2006

National

Department
▷ Committee/Panel: Graduate Admission Committee (Member), Graduate Program Committee (Member), Hiring Committee (Member), PhD Theory Qualifying Committee (Member), Tenure and Promotion Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ STAT 685. — Directed Studies (total enrollment: 1)
▷ STAT 689. — Special Topics in (total enrollment: 15)
▷ STAT 691. — Research (total enrollment: 2)

Summer
▷ STAT 691. — Research (total enrollment: 2)
▷ STAT 691. — Research (total enrollment: 2)

Fall
▷ STAT 613. — Intermediate Theory of Statistics (total enrollment: 18)
▷ STAT 685. — Directed Studies (total enrollment: 7)
▷ STAT 691. — Research (total enrollment: 3)

• RESEARCH PROJECTS DURING 2006

Federal
▷ Collaborative Research: Statistical Learning and Object Oriented Data Analysis, National Science Foundation

• PRESENTATIONS DURING 2006

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006
  National
  ▷ Editorial/Board: *Journal of the Royal Statistical Society: Series B* (Referee: Journals)
  ▷ Committee/Panel: ASA/ENVR Student Award Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ STAT 211. — *Principles of Statistics I* (total enrollment: 51)
  Fall
  ▷ STAT 211. — *Principles of Statistics I* (total enrollment: 36)

• PRESENTATIONS DURING 2006
  ▷ Statistical Research Center for Complex System, Seoul National University, Seoul, South Korea, January, 2006.( Invited)
  ▷ Eastern North American Region, Tampa, FL, March, 2006.( Invited)
  ▷ NCAR Advisory Board Meeting, April, 2006.( Invited)
  ▷ IMS New Researcher’s Conference, Seattle, WA, August, 2006.(Poster Contributed)
  ▷ Joint Statistical Meetings, August, 2006.( Contributed)
  ▷ Department of Statistics, Texas A&M University, College Station, TX, September, 2006.( Invited)
  ▷ Department of Statistics, University of Georgia, Athens, GA, October, 2006.( Invited)
  ▷ Multivariate Methods in Envirometrics, Chicago, IL, October, 2006.(Poster Contributed)
  ▷ Institute For Operations Research and The Management Sciences, Pittsburgh, PA, November, 2006.( Invited)
SOUMENDRA N. LAHIRI

PROFESSOR
STAT-Resampling Methods; Spatial Statistics

(979) 845-3141  snlahiri@stat.tamu.edu

- SERVICE DURING 2006

National
▷ Committee/Panel: International Indian Statistical Association (Program Chair), Section on Nonparametric Statistics, American Statistical (Program Chair)

State
▷ Editorial/Board: Sankhya (Associate Editor), Statistical Methodology (Associate Editor)

Department
▷ Committee/Panel: Promotion and Tenure Committee (Member)

- TEACHING ASSIGNMENTS DURING 2006

Fall
▷ STAT 620. — Statistical Large Sample Theory (total enrollment: 5)

- RESEARCH PROJECTS DURING 2006

Federal
▷ Higher Order Accuracy of Bootstrap Methods for Temporal and Spatial Processes, National Science Foundation

- PRESENTATIONS DURING 2006

▷ “Asymptotic Expansions for Sums of Block Variables, With Applications,” Department of the Mathematics, University of Southern California, Los Angeles, CA, February, 2006. (Invited)

▷ “Block Bootstrap for Spatial Regression Models Based on Irregularly Spaced Spatial Data,” Department of the Statistics, Texas A&M University, College Station, TX, February, 2006. (Invited)


- PUBLICATIONS DURING 2006


ERNING LI

ASSISTANT PROFESSOR (979) 845-3141
STAT-Function Estimation eli@stat.tamu.edu

• SERVICE DURING 2006

National
▷ Editorial/Board: Biometrical Journal (Referee: Journals), Computational Statistics and Data Analysis, Biometrics (Referee: Journals)

Department
▷ Committee/Panel: Grant Opportunities Committee, EEO Officer (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ STAT 211. — Principles of Statistics I (total enrollment: 60)

Fall
▷ STAT 211. — Principles of Statistics I (total enrollment: 48)
▷ STAT 211. — Principles of Statistics I (total enrollment: 51)

• PRESENTATIONS DURING 2006

▷ Conference of Texas Statisticans, Austin, TX, 2006. (Invited)
▷ Division of Quantitative Sciences, MD Anderson Cancer Center, Houston, TX, 2006. (Invited)
▷ ENAR Spring Meeting, Tampa, FL, 2006. (Contributed)
▷ The Joint Statistical Meetings, Seattle, WA, 2006. (Contributed)
• SERVICE DURING 2006

National

Department
▷ Committee/Panel: Qualifying Examination Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ STAT 611. — Theory of Statistics II (total enrollment: 27)
▷ STAT 685. — Directed Studies (total enrollment: 1)
▷ STAT 689. — Special Topics in (total enrollment: 3)
▷ STAT 691. — Research (total enrollment: 1)

Summer
▷ STAT 691. — Research (total enrollment: 1)

Fall
▷ STAT 414. — Mathematical Statistics I (total enrollment: 14)
▷ STAT 610. — Theory of Statistics I (total enrollment: 46)
▷ STAT 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006

Federal
▷ Bayesian Models for Gene Expression with Microarray Data, National Institutes of Health
▷ Bayesian Models for Gene Expression with Microarray Data, National Institutes of Health
▷ A Contour Based Monte Carlo Algorithm with Applications to Computational Statistics and Bioinformatics, National Science Foundation

• PUBLICATIONS DURING 2006

• SERVICE DURING 2006
  National
  ▶ Event: JSM 2004, Generalized Regression and Linear Models (Chair)

• PUBLICATIONS DURING 2006

*On leave.*
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Associate Department Head, Statistics, [2005/]

• SERVICE DURING 2006

  National
  ▶ Committee/Panel: American Statistical Association Academic Representative (Member)

  College
  ▶ Committee/Panel: College Quality Enhancement Plan Council (Member)

  Department
  ▶ Service Position: Assistantship Duties (Chairman), Departmental Consulting Service (Chairman), Internship Program (Coordinator), Teaching Assignments (Chair)
  ▶ Professional Affiliation: Graduate Program Advisor to Statistics Graduate Students (Advisor)
  ▶ Committee/Panel: Departmental Examinations Committee (Chair), Departmental NRC - Survey Committee (Member), Departmental Outside Review Committee (Member), Graduate Program Committee (Member), Graduate Service Committee (Member), Hartley Award Committee (Member), Tenure and Promotion Committee (Member), Undergraduate Service Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ STAT 642. — The Methods of Statistics II (total enrollment: 37)
  ▶ STAT 684. — Professional Internship (total enrollment: 15)
  ▶ STAT 685. — Directed Studies (total enrollment: 3)

  Summer
  ▶ STAT 684. — Professional Internship (total enrollment: 11)
  ▶ STAT 685. — Directed Studies (total enrollment: 1)
  ▶ STAT 685. — Directed Studies (total enrollment: 3)

  Fall
  ▶ STAT 641. — The Methods of Statistics I (total enrollment: 42)
  ▶ STAT 651. — Statistics in Research I (total enrollment: 62)
  ▶ STAT 684. — Professional Internship (total enrollment: 15)
  ▶ STAT 685. — Directed Studies (total enrollment: 4)
  ▶ STAT 691. — Research (total enrollment: 3)

• PUBLICATIONS DURING 2006

  814  2006 Statistics annual report


• SERVICE DURING 2006

  National

  Department
  ▶ Committee/Panel: Equal Opportunity Committee (Officer)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ STAT 211. — Principles of Statistics I (total enrollment: 15)

• RESEARCH PROJECTS DURING 2006

  Federal
  ▶ Measurement Error, Missing Data, and Semiparametrics, National Cancer Institute

• PUBLICATIONS DURING 2006


  On leave.
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Member, Interdisciplinary Faculty, Bioinformatics, [2006]

• AWARDS DURING 2006
  University
  ▷ Distinguished Achievement Award - Research, The Association of Former Students

• SERVICE DURING 2006
  National
  ▷ Professional Affiliation: Southeast Texas Chapter (President)
  ▷ Editorial/Board: Biometrics (Associate Editor), Biostatistics (Associate Editor), Journal of Computational and Graphical Statistics (Associate Editor)
  Department
  ▷ Research Group: Bioinformatics Committee (Chair)
  ▷ Committee/Panel: Promotion and Tenure Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ STAT 652. — Statistics in Research II (total enrollment: 28)
  ▷ STAT 689. — Special Topics in (total enrollment: 14)
  ▷ STAT 691. — Research (total enrollment: 4)
  Summer
  ▷ STAT 685. — Directed Studies (total enrollment: 1)
  ▷ STAT 691. — Research (total enrollment: 1)
  ▷ STAT 691. — Research (total enrollment: 1)
  Fall
  ▷ STAT 685. — Directed Studies (total enrollment: 1)
  ▷ STAT 691. — Research (total enrollment: 4)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▷ Bayesian Models for Gene Expression with Microarray Data, National Institutes of Health
  ▷ Bayesian Models for Gene Expression with Microarray Data, National Institutes of Health
  ▷ (REN) Measurement Error, Nutrition and Breast/Colon Cancer, National Institutes of Health
Nutrition, Biostatistics, and Bioinformatics, National Institutes of Health
Bayesian Nonlinear Regression with Multivariate Linear Spines, National Science Foundation
CMG Research on Multiscale Spatial Models for Petroleum Mapping Using Static and Dynamic Data, National Science Foundation
CMG Research: Statistical Analysis of Large Non-Gaussian Datasets in Climate Science, National Science Foundation
Development of a High Density, High Performance Beowulf Cluster, National Science Foundation

• PRESENTATIONS DURING 2006
  “Bayesian Inference in Complex Stochastic Systems,” University of Warwick, UK, 2006. (Invited)
  Bayesian Conference, Valencia, Orlando, FL, 2006. (Invited)
  Calcutta Triennial Conference, Calcutta, IN, 2006. (Invited)
  Indian Statistical Institute, Calcutta, IN, 2006. (Invited)
  Industrial Engineering, Texas A&M University, College Station, TX, 2006. (Invited)
  Joint Statistical Meetings, Seattle, WA, 2006. (Invited)
  University of Michigan, Ann Arbor, MI, 2006. (Invited)

• PUBLICATIONS DURING 2006
• TEACHING ASSIGNMENTS DURING 2006
  
  **Spring**
  ▷ STAT 211. — *Principles of Statistics I* (total enrollment: 33)

  **Fall**
  ▷ STAT 211. — *Principles of Statistics I* (total enrollment: 23)
  ▷ STAT 211. — *Principles of Statistics I* (total enrollment: 47)

• PRESENTATIONS DURING 2006
  ▷ Joint Statistical Meetings, Seattle, WA, 2006. (Contributed)
  ▷ Intel Corporation, Folsom, CA, May, 2006. (Invited)
URSULA MUELLER-HARKNETT
ASSISTANT PROFESSOR (979) 845-3141
STAT-Semiparametric Regression uschi@stat.tamu.edu

- SERVICE DURING 2006
  Department
  ▶ Committee/Panel: Graduate Student Qualifying Exam Committee (Member)

- TEACHING ASSIGNMENTS DURING 2006
  Fall
  ▶ STAT 610 — Theory of Statistics I (total enrollment: 39)

- PUBLICATIONS DURING 2006

2006 Statistics annual report
H. JOSEPH NEWTON

PROFESSOR  (979) 845-8817
STAT-Computational Statistics, Time Series Analysis  jnewton@stat.tamu.edu

- CHAIRS/PROFESSORSHIPS
  - George P. Mitchell ’40 Chair in Statistics [2006]
  - Richard H. Harrison III/External Advisory and Development Council Endowed Dean’s Chair in Science [2000]

- ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  - Dean, Main Office, [2002]

- SERVICE DURING 2006
  - University
    - Committee/Panel: Council on the Research Environment (Chair)
  - College
    - Committee/Panel: Campus Community Campaign Committee (Member), Executive Committee (Chair)

- RESEARCH PROJECTS DURING 2006
  - Federal
    - Noyce Scholarship (Supplement to ITS Center Grant), National Science Foundation
• AWARDS DURING 2006
  National
  ▷ Distinguished Lecturer, American Statistical Association, University Connecticut

• SERVICE DURING 2006
  National
  ▷ Committee/Panel: American Statistical Association Archives Committee (Member)

  University
  ▷ Committee/Panel: Executive Committee of Distinguished Professors (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ STAT 685. — Directed Studies (total enrollment: 1)
  ▷ STAT 691. — Research (total enrollment: 1)

  Fall
  ▷ STAT 211. — Principles of Statistics I (total enrollment: 25)
  ▷ STAT 685. — Directed Studies (total enrollment: 1)

• PRESENTATIONS DURING 2006
  ▷ University of Arizona, Tucson AZ, May, 2006. (Invited)

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006
  University
    ▶ Service Position: TAMU Cancer Society (Advisor)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
    ▶ STAT 302. — Statistical Methods (total enrollment: 249)
  Summer
    ▶ STAT 302. — Statistical Methods (total enrollment: 134)
• SERVICE DURING 2006

  College
  ▶ Committee/Panel: Systems Administrators Committee (Chair)

  Department
  ▶ Committee/Panel: Computing Committee (Member)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Department Head, Statistics, /2005/

• SERVICE DURING 2006

  National
  ▶ Professional Affiliation: American Statistical Association (Member)
  ▶ Editorial/Board: Computational Statistics and Data Analysis on Robust and Nonparametric Methods (Co-Editor), American Statistical Association (Referee: Journals)
  ▶ Committee/Panel: Southern Regional Council on Statistics (Member)

  University
  ▶ Committee/Panel: Educational Psychology Hiring Committee (Member), International Faculty and Scholar Network (President), IPECC College Representative (Member)

  College
  ▶ Committee/Panel: Executive Committee (Member)

  Department
  ▶ Committee/Panel: Head Council (Member), State Employee Charitable Campaign (Representative)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▶ STAT 408. — Introduction to Linear Models (total enrollment: 9)
  ▶ STAT 608. — Least Squares and Regression Analysis (total enrollment: 26)

• PRESENTATIONS DURING 2006
  ▶ MD Anderson, Houston, TX, May, 2006.( Invited)
  ▶ Southern Regional Council on Statistics Summer Conference, Kerrville, TX, June, 2006.( Invited)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Toxicology, [2006]

• SERVICE DURING 2006
  National

  Regional
  ▶ Professional Affiliation: Southeast Chapter of the American Statistical Association (President)

  College
  ▶ Committee/Panel: Grievance Committee (Elected Member)

  Department
  ▶ Committee/Panel: Awards Committee (Member), Tenure and Promotion Advisory Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ STAT 601. — *Statistical Analysis* (total enrollment: 30)
  ▶ STAT 691. — *Research* (total enrollment: 2)

  Summer
  ▶ STAT 691. — *Research* (total enrollment: 1)

  Fall
  ▶ STAT 607. — *Sampling* (total enrollment: 7)
  ▶ STAT 647. — *Spatial Statistics* (total enrollment: 11)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▶ Fetal Alcohol Exposure and Neurodevelopment, *National Institutes of Health*
  ▶ Risk of Childhood Cancers Associated with Agricultural Pesticide Use, *National Institutes of Health*

• PRESENTATIONS DURING 2006
  ▶ Sam Houston State University, Huntsville, TX, 2006. (Invited)
  ▶ Statistics Seminar, University of Miami, Miami, FL, 2006. (Invited)
• PUBLICATIONS DURING 2006
    *The American Statistician*, vol. 60, 163-166.
• SERVICE DURING 2006

State
△ Editorial/Board: *Statistics in Medicine, Journal of the American Statistical Association* (Reviewed)

Department
△ Committee/Panel: Bioinformatics Group and Departmental Examination Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Fall
△ STAT 211. — *Principles of Statistics I* (total enrollment: 43)

• PRESENTATIONS DURING 2006


△ “Analysis of Matched Case-control Data in Presence of Nonignorable Missing Exposure,” Department of Biostatistics, MD Anderson Cancer Center, Houston, TX, April, 2006. (Invited)

△ “Analysis of Matched Case-control Data in Presence of Nonignorable Missing Exposure,” Division of Epidemiology and Biostatistics, Memorial Sloan Kettering Cancer Center, New York, NY, October, 2006. (Invited)

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Associate Dean for Technology Mediated Instruction and Distance Education, Technology Office, [2006]

• AWARDS DURING 2006
  National
  ▶ Elected Fellow, American Statistical Association

• SERVICE DURING 2006
  National
  ▶ Event: Joint Statistical Meetings Roundtable (Chair), Joint Statistical Meetings Roundtable (Organizer), Joint Statistical Meetings Topic Contributed Session (Organizer)
  ▶ Committee/Panel: Statistics in Mathematics Education Research Committee (Member)
  University
  ▶ Service Position: Technology-Mediated Instruction (Speaker)
  College
  ▶ Committee/Panel: College Quality Enhancement Plan Council (Member), Executive Committee (Member), Information Technology Committee (Member), Qatar Advisory Committee (Member), Technology-Mediated Instruction Committee (Chair)
  Department
  ▶ Event: Hocking Lecture Series for Spring 2007 (Organizer)
  ▶ Committee/Panel: Curriculum Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ STAT 685. — Directed Studies (total enrollment: 3)
  Summer
  ▶ STAT 485. — Directed Studies (total enrollment: 1)
  ▶ STAT 685. — Directed Studies (total enrollment: 1)
  ▶ STAT 685. — Directed Studies (total enrollment: 2)
  Fall
  ▶ STAT 653. — Statistics In Research III (total enrollment: 38)

• RESEARCH PROJECTS DURING 2006
  State
Assuring Excellence in Pre-Calculus Instruction, *Texas Higher Education Teacher Quality Grant*

- **PRESENTATIONS DURING 2006**
  - Emory University, Atlanta, GA, 2006. (Invited)
  - Kansas State University - Medical Center, Manhattan, KS, 2006. (Invited)
• **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  ▶ Member, Interdisciplinary Faculty, Toxicology, [2006]

• **SERVICE DURING 2006**
  National
  ▶ Editorial/Board: *Chemometrics and Intelligent Laboratory Systems* (Editor), *Journal of Environmetrics* (Member), *Journal of Proteome Research* (Advisory Board), *Journal of Transportation and Statistics* (Member)
  ▶ Committee/Panel: National Institute of Statistical Sciences (Member), National Research Council Panel on Bullet Evidence (Member), TRB (NAS) Committee on Transportation Statistics (Member)

Department
  ▶ Committee/Panel: Promotion and Tenure Committee (Member)

• **TEACHING ASSIGNMENTS DURING 2006**
  Spring
  ▶ STAT 685. — **Directed Studies** (total enrollment: 3)

• **PRESENTATIONS DURING 2006**
  ▶ “Bullet Lead Talk,” University of Southern California, Los Angeles, CA, 2006.( Invited)
  ▶ “Classification,” Joint Statistical Meeting, 2006.( Invited)
  ▶ “Discussant at Metabolomics Session,” Joint Statistical Meeting, 2006.( Invited)
  ▶ “JFK Talk,” Joint Statistical Meeting, 2006.( Invited)
  ▶ “JFK Talk,” Nanotechnology Colloquium, 2006.( Invited)
  ▶ “Proteomics Project Overview,” 1st Annual Bioinformatics Workshop, 2006.( Invited)
  ▶ “Receptor Modelling,” Summit on Environmental Modelling, 2006.( Invited)

• **PUBLICATIONS DURING 2006**
• TEACHING ASSIGNMENTS DURING 2006
  
  Fall
  ▷ STAT 651 — Statistics in Research I (total enrollment: 61)

• PRESENTATIONS DURING 2006

• PUBLICATIONS DURING 2006
• SERVICE DURING 2006
  
  University
  ▷ Committee/Panel: Faculty Senate (Faculty Senator - 04)

  Department
  ▷ Service Position: Undergraduate Advisor (Advisor)

• TEACHING ASSIGNMENTS DURING 2006

  Spring
  ▷ STAT 302. — Statistical Methods (total enrollment: 249)

  Fall
  ▷ STAT 302. — Statistical Methods (total enrollment: 246)
• **ADDITIONAL UNIVERSITY TITLES HELD DURING 2006**
  ▶ Member, Interdisciplinary Faculty, Bioinformatics, [2006]

• **AWARDS DURING 2006**

  National
  ▶ Elected Fellow, American Statistical Association

• **SERVICE DURING 2006**

  National
  ▶ Professional Affiliation: American Statistical Association, Section of Nonparametric Statistics (Treasurer)
  ▶ Editorial/Board: National Science Foundation Statistics and Probability (Panelist), *Chemometrics and Intelligent Laboratory Systems* (Associate Editor), *Bayesian Analysis* (Associate Editor), *International Society for Bayesian Analysis Bulletin* (Associate Editor), *Journal of American Statistical Association*, *Bioinformatics*, *Biometrika*, *Bayesian Analysis* (Referee: Journals), *Journal of the American Statistical Association* (Associate Editor), *National Institutes of Health Study Sessions* (Reviewer), *Technometrics* (Associate Editor)
  ▶ Committee/Panel: IMS Travel Awards Committee (Member), International Society for Bayesian Analysis, Mitchell Price Committee (Member), ISBA Savage Fund Trust Committee (Member), Travel Award Committee, IMS (Member)

  Department
  ▶ Committee/Panel: Faculty Recruiting Committee (Member), Methods Qualifying Exam Committee (Member)

• **TEACHING ASSIGNMENTS DURING 2006**

  Spring
  ▶ STAT 689. — Special Topics in (total enrollment: 15)
  ▶ STAT 691. — Research (total enrollment: 2)

  Summer
  ▶ STAT 691. — Research (total enrollment: 1)
  ▶ STAT 691. — Research (total enrollment: 1)

  Fall
  ▶ STAT 691. — Research (total enrollment: 2)

• **RESEARCH PROJECTS DURING 2006**

  Federal
Adaptive Methodology for Functional Biomedical Data, *National Institutes of Health*

Bayesian Methods for Genomics with Variable Selection, *National Institutes of Health*

Development of a High Density, High Performance Beowulf Cluster, *National Science Foundation*

Wavelet-Based Statistical Modeling and Applications, *National Science Foundation*

**PRESENTATIONS DURING 2006**

- “Statistical Analysis of Genetic and Gene Expression Data,” MOLPAGE Program, Pavia, Italy, 2006. (Invited)
- ANNET - ADHD Neuroscience Network - Workshop, NYU Child Study Center, New York, NY, 2006. (Invited)
- Brown Bag Seminar Series, Department of Statistics, Texas A&M University, College Station, TX, 2006. (Invited)
- Consiglio Nationale Ricerche - IMARI, Milano, Italy, 2006. (Invited)
- Department of Biostatistics, University of North Carolina, Chapel Hill, NC, 2006. (Invited)
- Department of Statistics, North Carolina State University, Raleigh, NC, 2006. (Invited)
- Department of Statistics, Rice University, Houston, TX, 2006. (Invited)
- Graybill Conference, Colorado State University, Fort Collins, CO, 2006. (Invited)
- Joint Statistical Meetings, Seattle, WA, 2006. (Invited)

**PUBLICATIONS DURING 2006**

• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Member, Interdisciplinary Faculty, Bioinformatics, [2006]

• SERVICE DURING 2006
  National
  ▷ Professional Affiliation: International Chinese Statistical Association (Board of Directors)
  ▷ Editorial/Board: Grant Propsals, External Tenure and Promotion Cases (Reviewed), National Science Foundation (Review Panel), Various Articles for Journals (Referee: Journals)
  State
  ▷ Editorial/Board: InterStat (Editor), Journal of Nonparametric Statistics (Associate Editor)
  University
  ▷ Professional Affiliation: Faculty Fellow (Fellow)
  ▷ Committee/Panel: University Awards Selection Committee (Member)
  Department
  ▷ Editorial/Board: Biostatistics and Bioinformatics Facilities Core of CERH (Co-Director)
  ▷ Committee/Panel: Awards Committee (Chair), College of Science Strategic Planning Committee (Member), Graduate Student Qualifying Exams Committee (Member), Graduate Student Recruiting (Member), Parzen Prize Committee (Chair)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ STAT 212. — Principles of Statistics II (total enrollment: 48)
  ▷ STAT 685. — Directed Studies (total enrollment: 1)
  ▷ STAT 691. — Research (total enrollment: 2)
  Summer
  ▷ STAT 691. — Research (total enrollment: 1)
  Fall
  ▷ STAT 685. — Directed Studies (total enrollment: 1)
  ▷ STAT 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▷ Health Maintenance Consortium Resource Center Grant, National Institutes of Health
Development of a High Density, High Performance Beowulf Cluster, *National Science Foundation*

Other
- The Long-Term Care Needs of People with Multiple Sclerosis, *University of North Carolina - Charlotte*

**PRESENTATIONS DURING 2006**
- Department of Epidemiology, Michigan State University, East Lansing MI, 2006. (Invited)
- Department of Statistics and Applied Probability, Michigan State University, East Lansing MI, 2006. (Invited)
- Inaugural Centre for Statistical and Survey Methodology Fellows Meeting, Goulburn, Australia, 2006. (Invited)
- University of Sydney, Australia, 2006. (Invited)
- University of Wollongong, Australia, 2006. (Invited)
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▶ Member, Interdisciplinary Faculty, Bioinformatics, [2006]
  ▶ Member, Interdisciplinary Faculty, Toxicology, [2006]

• AWARDS DURING 2006
  National
  ▶ Fellow, Institute of Mathematical Statistics

• SERVICE DURING 2006
  International
  ▶ Professional Affiliation: International Chinese Statistical Association (Board of Directors)
  ▶ Committee/Panel: International Biometrics Society, ENAR (Member)
  National
  ▶ Editorial/Board: National Institutes of Health MBRD Study Section (Member), NIH Special Study Section on Assessment of Physical Activity and Nutritional Health Effects (Member), Biometrics (Editor), Statistical Science (Co-Editor)
  ▶ Committee/Panel: Biometrics Editor Selection Committee (Member), Committee of Presidents of Statistical Societies, Fisher Lecture Committee (Chair), JABES Editor Selection Committee (Member)
  Department
  ▶ Committee/Panel: External Review Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▶ STAT 691. — Research (total enrollment: 2)
  Summer
  ▶ STAT 691. — Research (total enrollment: 2)
  Fall
  ▶ STAT 691. — Research (total enrollment: 2)

• RESEARCH PROJECTS DURING 2006
  Federal
  ▶ Measurement Error, Missing Data, and Semiparametrics, National Cancer Institute
  ▶ Melanoma Detection by Oblique-Incidence Optical SpectrsCOPYTE, National Institutes of Health
  ▶ Non-invasive Optical Detection of Skin Cancer, National Institutes of Health
Development of a High Density, High Performance Beowulf Cluster, *National Science Foundation*

**PRESENTATIONS DURING 2006**
- Department of Biostat, Harvard School of Public Health, Boston, MA, 2006. (Invited)
- Department of Statistics, University of Michigan, Ann Arbor, MI, 2006. (Invited)
- Department of Statistics, University of Virginia, Charlottesville, VA, 2006. (Invited)
- ENAR Meeting, Tampa, FL, 2006. (Invited)
- IMS Annual Meeting and Brazilian School of Probability, Rio de Janeiro, Brazil, 2006. (Invited)
- International Biometrics Society Conference, Montreal, Canada, 2006. (Invited)
- International Conference on Frontiers of Statistics-Biostatistics and Bioinformatics, Changchun, China, 2006. (Invited)
- Joint Statistical Meeting, 2006. (Invited)

**PUBLICATIONS DURING 2006**
THOMAS E. WEHRLY

PROFESSOR  (979) 845-1359
STAT-Stochastic Models, Directional Data  twehrly@stat.tamu.edu

• SERVICE DURING 2006

National
▷ Editorial/Board: Statistics and Probability Letters (Associate Editor), Various Journals (Referee)
▷ Committee/Panel: Search Committee for the Editor of JASA Reviews (Member)

University
▷ Committee/Panel: University Athletic Council (Chair)

College
▷ Committee/Panel: College Quality Enhancement Plan Council (Member), Research Advisory Committee (Member), Undergraduate Curriculum Committee (Member)

Department
▷ Committee/Panel: Academic Integrity Subcommittee, NCAA Certification Self-Study (Chair), Examination Committee - Theory Qualifying (Member), Faculty Recruiting Committee (Chair), Graduate Program Committee (Member), Graduate Service Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ STAT 659. — Applied Categorical Data Analysis (total enrollment: 18)
▷ STAT 685. — Directed Studies (total enrollment: 1)

Summer
▷ STAT 211. — Principles of Statistics I (total enrollment: 71)
▷ STAT 685. — Directed Studies (total enrollment: 1)
▷ STAT 691. — Research (total enrollment: 1)

Fall
▷ STAT 414. — Mathematical Statistics I (total enrollment: 15)
▷ STAT 601. — Statistical Analysis (total enrollment: 66)
▷ STAT 685. — Directed Studies (total enrollment: 1)
▷ STAT 691. — Research (total enrollment: 1)

• RESEARCH PROJECTS DURING 2006

Federal
▷ Integrated Undergraduate Research Experiences in Biological and Mathematical Sciences, National Science Foundation
• SERVICE DURING 2006

National
▷ Committee/Panel: ENAR Technology Oversight Committee (Member)

Department
▷ Committee/Panel: Curriculum Committee (Member), Hiring Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006

Fall
▷ STAT 211. — Principles of Statistics I (total enrollment: 12)

• RESEARCH PROJECTS DURING 2006

Federal
▷ Model Selection and Multiplicity Adjustment for Benchmark Analysis in Quantitative Risk Assessment, Environmental Protection Agency
▷ Low Dose Risk Bounds via Simultaneous Confidence Bands, National Institutes of Health

• PUBLICATIONS DURING 2006

• TEACHING ASSIGNMENTS DURING 2006

Spring
▷ STAT 303. — Statistical Methods (total enrollment: 50)

Fall
▷ STAT 302. — Statistical Methods (total enrollment: 199)
▷ STAT 302. — Statistical Methods (total enrollment: 31)
LI ZHU

ASSISTANT PROFESSOR (J) (979) 845-3160
STAT-Spatial Modeling
lizhu@srph.tamushsc.edu

§ SERVICE DURING 2006

National
▷ Research Group: Health Care Quality and Effectiveness Research Study Section, Agency for Healthcare Research and Quality (Member)
▷ Editorial/Board: Geographic Analysis (Referee: Journals), Health and Place (Referee: Journals), Journal of Quality Technology (Referee: Journals), Substance Use and Misuse (Referee: Journals)

§ PRESENTATIONS DURING 2006

§ PUBLICATIONS DURING 2006
• ADDITIONAL UNIVERSITY TITLES HELD DURING 2006
  ▷ Professor (J), Statistics, [1988]

• SERVICE DURING 2006
  National
  ▷ Event: Probability Inequalities With Applications to High Dimensional Phenomena (Co-Organizer)

  College
  ▷ Committee/Panel: Grievance Committee (Elected Member)

  Department
  ▷ Event: Workshop in Linear Analysis and Probability (Co-Organizer)
  ▷ Committee/Panel: Awards Committee (Chair), Executive Committee (Member)

• TEACHING ASSIGNMENTS DURING 2006
  Spring
  ▷ MATH 220. — *Fundamentals of Discrete Mathematics* (total enrollment: 22)
  ▷ MATH 646. — *A Survey of Mathematical Problems II* (total enrollment: 19)

  Fall
  ▷ MATH 606. — *Theory of Probability I* (total enrollment: 8)

• PRESENTATIONS DURING 2006

• PUBLICATIONS DURING 2006
7. Research Activity, 2006

This section contains information on all funded research activity for the calendar year 2006. Information was initially reported by faculty and verified whenever possible through the granting agency. Because of calculations and rounding there is a small margin of error.

Information reported by faculty:

- Title
- Granting Agency
- PIs, Co-PIs, and co-workers (internal/external)
- Total Funding
- Indirect Costs
- Start & End Dates

Calendar year calculations:

- Total - Indirect = Direct
- # Days Total Grant = End Date - Start Date
- Daily Grant Award = Total Funding Reported / # Days Total Grant
- Grant Award for 2006 = # Days 2006 × Daily Grant Award
### 7.1 Summary of Research Support, 2006

<table>
<thead>
<tr>
<th>Grantee</th>
<th>Title</th>
<th>Start</th>
<th>End</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
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<td><strong>Federal Agencies</strong></td>
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<tr>
<td><strong>National Aeronautics and Space Administration</strong></td>
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<tr>
<td>Carroll, R.J.</td>
<td>Nutritional Countermeasures to Radiation Exposure</td>
<td>10/1/2005</td>
<td>9/30/2006</td>
<td>175,838</td>
<td>0</td>
<td>175,838</td>
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<tr>
<td>Carroll, R.J.</td>
<td>Nutritional Countermeasures to Radiation Exposure</td>
<td>10/1/2006</td>
<td>9/30/2007</td>
<td>58,828</td>
<td>0</td>
<td>58,828</td>
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<td><strong>Subtotal: National Aeronautics and Space Administration</strong></td>
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<td><strong>National Cancer Institute</strong></td>
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<td><strong>Subtotal: National Cancer Institute</strong></td>
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<td><strong>National Institute for Environmental Health Sciences</strong></td>
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<tr>
<td><strong>Subtotal: National Institute for Environmental Health Sciences</strong></td>
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<td><strong>National Institutes of Health</strong></td>
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<tr>
<td>Carroll, R.J.</td>
<td>Bayesian Models for Gene Expression with Microarray Data, (with: R. Carroll, F. Liang, B. Mallick)</td>
<td>6/1/2005</td>
<td>5/31/2006</td>
<td>13,187</td>
<td>6,000</td>
<td>19,187</td>
</tr>
<tr>
<td>Carroll, R.J.</td>
<td>Bayesian Models for Gene Expression with Microarray Data, (with: R. Carroll, F. Liang, B. Mallick)</td>
<td>6/1/2006</td>
<td>5/31/2007</td>
<td>18,725</td>
<td>8,520</td>
<td>27,245</td>
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<td>Grantee</td>
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<tr>
<td>Mallick, B.K.</td>
<td>Nutrition, Biostatistics, and Bioinformatics, (with: R. Carroll, T. Hsing, B. Mallick)</td>
<td>7/1/2001</td>
<td>6/30/2006</td>
<td>18,490</td>
<td>1,470</td>
<td>19,960</td>
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<tr>
<td>Sherman, M.</td>
<td>Fetal Alcohol Exposure and Neurodevelopment</td>
<td>3/1/2002</td>
<td>2/28/2006</td>
<td>20,185</td>
<td>0</td>
<td>20,185</td>
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<tr>
<td>Wang, N.</td>
<td>Melanoma Detection by Oblique-Incidence Optical Spectroscopy</td>
<td>4/1/2004</td>
<td>3/31/2009</td>
<td>344,979</td>
<td>97,000</td>
<td>441,979</td>
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<td>Wang, N.</td>
<td>Non-invasive Optical Detection of Skin Cancer</td>
<td>4/1/2004</td>
<td>3/31/2009</td>
<td>360,000</td>
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Subtotal: National Institutes of Health 1,587,713 284,257 1,871,970

National Science Foundation

SEC. 7. RESEARCH ACTIVITY
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<thead>
<tr>
<th>Grantee</th>
<th>Title</th>
<th>Start</th>
<th>End</th>
<th>Direct</th>
<th>Indirect</th>
<th>Total</th>
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<tr>
<td>Hart, J.D.</td>
<td>Cluster-Based Bootstrapping in Multiple Hypothesis Testing</td>
<td>6/1/2006</td>
<td>5/31/2009</td>
<td>13,270</td>
<td>5,598</td>
<td>18,868</td>
</tr>
<tr>
<td>Huang, J.</td>
<td>Collaborative Research: Statistical Learning and Object Oriented Data Analysis</td>
<td>6/1/2006</td>
<td>5/31/2009</td>
<td>13,560</td>
<td>5,730</td>
<td>19,290</td>
</tr>
<tr>
<td>Grantee</td>
<td>Title</td>
<td>Start</td>
<td>End</td>
<td>Direct</td>
<td>Indirect</td>
<td>Total</td>
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* Subtotal: National Science Foundation

** 360,396 59,151 419,547

* Subtotal: Federal Agencies

** 2,254,765 397,899 2,652,663

Other Government

- University of North Carolina-Charlotte

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* Subtotal: University of North Carolina-Charlotte

** 33,811 884 34,695

* Subtotal: Other Government

** 33,811 884 34,695

State Agencies

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850 2006 Statistics Annual Report
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SEC. 7. RESEARCH ACTIVITY 851
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* Subtotal Vannucci, M. 150,866 54,600 205,466

* Wang, N.  

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* Wang, S.  

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<td>* Wehrly, T.E.</td>
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<td>* Subtotal Wehrly, T.E.</td>
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