



**SCIENTIFIC  
DISCOVERY  
REPRESENTS THE  
GREAT FRONTIER OF  
THE 21ST CENTURY.**

*A fundamental approach to solving today's complex problems is the foundation of the College of Science's discoveries and research to benefit mankind.*

**COLLEGE OF SCIENCE**  
<http://www.science.tamu.edu>

3257 TAMU  
College Station, Texas 77843-3257  
PH: 979-845-7361  
FX: 979-845-6077

Through five departments and many interdisciplinary centers and institutes, the College of Science advances discovery and solves real-world problems while producing the next generation of scientific leaders and providing technical innovation and service to the world.

## DOORWAYS TO DISCOVERY

Texas A&M faculty and students are driven by the spirit of discovery and committed to pushing back the boundaries of knowledge. Research conducted at Texas A&M represents an annual investment of more than \$820 million, ranking the university among the National Science Foundation's Top 30 Academic Research Performers.<sup>1</sup> The College of Science alone is responsible for more than \$41 million<sup>2</sup> of that research, including nearly \$6 million in indirect cost return<sup>2</sup> that is reinvested in new and continuing projects.

## DEPARTMENTS OF DISTINCTION

In Calendar Year 2014, the College's total research funding amounted to more than \$41 million.<sup>2</sup> Our departments are leaders in generating funding and proven results that enhance our international reputation for excellence.

- Biology earned one of the campus' first PO1 NIH grant for biological clocks research, an area where we are world renowned.
- Chemistry is ranked 8th among public graduate programs and 19th overall (inorganic 5th overall) in the 2015 *U.S. News & World Report*.
- Two-thirds of Mathematics faculty have NSF grants, fueling our rise to 13th nationally among public university departments in research funding.
- Physics & Astronomy is a partner in the Giant Magellan Telescope.
- Ranks 15th overall and 7th among public graduate programs in statistics and biostatistics in the 2015 *U.S. News & World Report*.

## PHENOMENAL FACULTY

The College of Science boasts Texas A&M's only two Nobel laureates, three National Academy of Sciences members, nearly half of the university's distinguished professors, 6 of A&M's 7 members of the American Academy of Arts and Sciences, and its only Searle Scholars. In addition to numerous National Science Foundation CAREER Award winners, we have two National Institutes of Health Method to Extend Research in Time (MERIT) Award winners.

## EXCEPTIONAL FACILITIES

The college features vast opportunities and resources to help faculty and students excel in their academic and research efforts. The college and its departments are home to 14 centers and institutes as well as many specialized laboratories and active research groups dedicated to conducting and promoting targeted, interdisciplinary research and teaching. For more about focus areas and specific units, visit <http://www.science.tamu.edu/research/centers/>.

## UNIQUE UNDERGRADUATE OPPORTUNITY

Our undergraduates are exposed to challenging research opportunities designed to enhance their academic experiences and better prepare them for advanced studies or careers in science. As seniors, many are mentored by faculty researchers as Undergraduate Research Fellows or Research Scholars — paid positions with some projects. Three departments also offer paid summer Research Experiences for Undergraduates programs funded by the National Science Foundation.

## INTERDISCIPLINARY EXCELLENCE

Because the search for answers requires an increasingly interdisciplinary approach, we are forging collaborations that break traditional barriers, combine

uncommon skills, and produce unique results. Here are just a few examples of our success to date:

**Bioinformatics:** This National Cancer Institute-funded, post-doctoral training program housed in Statistics is building bridges between life and computational sciences as it analyzes the relationship between diet and cancer risk.

**Biological Clocks:** As part of a five-year, \$5 million National Institutes of Health grant, a group of Biology researchers is using the newest genetic techniques to study biological clocks in organisms from bacteria to mammals.

**Cyclotron:** This U.S. Department of Energy-supported institute is a major technical and educational resource for Texas and the U.S. Beyond educating students in accelerator-based science and technology, it brings in \$4 million annually in external use and testing.

**Inorganic Chemistry:** This program, one of the strongest nationwide, includes structure and bonding in molecules, catalysis, and theoretical chemistry of inorganic molecules and solids.

**Nanotechnology:** Thanks to our pioneering chemists, Texas A&M is one of five collaborating institutions in an \$18 million National Institutes of Health program to develop nanotechnology-based therapies and diagnostics tools for treating heart and lung diseases.

**Neuroscience:** This program brings together faculty from five Texas A&M departments to study the brain and its impact on behavior. To date, nearly 80 faculty members are involved.

**Quantum Optics:** This world-class group looks at problems that span the gamut of quantum physics and engineering. Their insights are used in diverse areas, ranging from quantum computers to biological applications.

**Functional Genomics:** These researchers apply the power of modern analytical methods to study protein structure, identification, and function to chart the results of physiological characteristics and responses in living systems.

**Theoretical Physics:** This group conducts fundamental research to build a theoretical framework to advance our understanding of condensed matter, nuclear, high energy, atomic, and atmospheric physics, and quantum optics.

## HELPFUL RESOURCES

### DIVISION OF RESEARCH

This office oversees research activities for the entire campus and coordinates related efforts with other Texas A&M University System components. It also administers several externally funded grant programs as well as competitive development funds. For more information, go to <http://vpr.tamu.edu>.

### SPONSORED RESEARCH SERVICES

This office manages pre- and post-award functions of sponsored research contracts and grants for selected A&M System members to advance the discovery, development, communication, and application of knowledge in a wide range of academic and professional fields. For additional details, visit <https://srs.tamus.edu/>.

## COUNCIL OF PRINCIPAL INVESTIGATORS

This elected group represents principal investigators from each Texas A&M college and A&M System agency and is committed to continuous research and graduate studies environment improvement. To learn more, go to <http://cpi.tamu.edu/>.

## SIGMA XI

This organization was founded to recognize, encourage, and promote scientific research at Texas A&M and to honor its community of science scholars. Members are nominated and elected on the basis of noteworthy achievement in pure and applied science. To learn more, go to <http://sigmaxi.tamu.edu/>.

## OFFICE OF TECHNOLOGY COMMERCIALIZATION

The Texas A&M University System Office of Technology Commercialization (OTC) serves as industry's connection to A&M innovation. On average, the OTC files a patent application every other day and executes one license agreement per week. It also ranks among the top 10 nationwide in the number of licenses executed annually with small businesses. For more, visit <http://otc.tamu.edu/>.

## TELL ME MORE!

To learn more about research and related funding opportunities and activities in the College of Science, contact:

**Dr. Michael Hall**  
Executive Associate Dean  
(979) 845-7361  
[hall@science.tamu.edu](mailto:hall@science.tamu.edu)

## ABOUT THE COLLEGE

*The College of Science at Texas A&M University takes great pride in providing the highest quality science education, scholarly research, and technical expertise to the people and industries of Texas and the nation. Through five departments and many interdisciplinary centers and institutes, we advance discovery and solve real-world problems while producing the next generation of scientific leaders and technologies and playing a key role in helping Texas A&M succeed in its mission to become one of the nation's top 10 public institutions by the year 2020.*

## QUICK FACTS

- Five departments (Biology, Chemistry, Mathematics, Physics & Astronomy, Statistics)
- 27 degree programs — 16 bachelor's, 4 master's, 7 doctorates
- 2,893 undergraduate majors
- 261 tenured/tenure-track faculty (14% of total)
- \$41.5 million/year in research
- ~44% of A&M distinguished professors
- U.S. leader in minority & female Ph.D.s
- Teach 20% of total A&M semester credit hours

© 2015 Texas A&M University. All rights reserved. This is an official publication of Texas A&M University. It was designed, compiled and edited by College of Science Communications, Texas A&M University. 1516\_CLSC\_Research; 15-09-28.

<sup>1</sup> 2014. Division of Research, Texas A&M University.

<sup>2</sup> 2014 "College of Science Annual Report," Office of the Dean, College of Science, Texas A&M University.