

Annual Assessment Report

Reporting Unit College of Science Reporting Date 20 December 2011
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Please define the groups applicable to your organization for which you collect information and make peer comparisons.

- Students
 - Undergraduate
 - Masters
 - Doctoral
- Faculty (all ranks: including Professors, Lecturers, and Instructors)
- Administrators (applicable to all organizations)
- Budgeted Staff (applicable to all organizations)
- Other (Define) _____

1) Engaging the Data

FACULTY

The College of Science(COS) had a loss of 13 tenured faculty members through retirement this past year; 12/13 were white and 1 was Asian. All were men. We had no other tenure or tenure-track losses. We lost 7 non-tenure track faculty due to budget reductions - 4/7 were female. There was one tenure-track hire in the college who is a white male. **Since we lost no URM (Hispanic, Black, Native American) faculty this represents an increase in faculty diversity.**

STAFF

Due to the budget cutbacks very few staff were hired in the COS. **Despite the cutbacks and low turnover of staff in the college we made marginal improvements in diversity.** The net change in staff was the loss of 10 white males and the addition of 4 females including 1 white, 2 Asian and 1 URM.

STUDENTS

The college continues to increase the diversity of the students. The number of URM undergraduates in the college increased almost 6%. Percentage of women undergraduates got closer to 50% (decreased slightly). The number of women and URM graduate students has continued its 5 year rise. (W:259-> 325; URM: 53 -> 70).

2) Recent Efforts

Over the past year we have managed to retain the diversity that had been documented in last year's report. We have a very low turnover among faculty, staff and graduate students. **The overall positive response to the climate survey indicates that policies already in place foster the type of inclusive and cooperative working environment that we desire.**

FACULTY

Due to budget cutbacks, faculty hiring was limited in the college. Retention of faculty in the college has been excellent. In light of no merit raises we strive to find other ways to make the faculty feel valued. One example of being proactive about making faculty feel valued is the annual faculty retreat in Statistics. Another is the newly established faculty awards committee in Biology. In Mathematics Professors [REDACTED] started a Women's Lunch Series with the goal of developing a strong supportive network for women (of all ranks) in the department.

STAFF

There has been very little turnover of staff in the college. Efforts are made throughout the college to make staff realize they are valued members of the organization. For example Chemistry has a staff council and Statistics has a staff retreat as means to give the staff voice in those units. Also at the faculty retreat in Statistics games are organized to see how much faculty know about the staff. This activity is extremely important for faculty to see who does what and fully appreciate the various staff roles. Additionally, the COS has actively participated in the ADVANCE faculty-staff interaction activity with members of all departments taking part in one of the focus groups.

STUDENTS

The COS does a tremendous amount of outreach to young Texans to increase their interest in Science and Texas A&M. The extensive outreach efforts of the college (detailed below) have increased the targeted recruiting of diverse groups.

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Our Science Scholars program with Palo Alto College has been a tremendous success for recruiting, retaining, and graduating low income students from the San Antonio area that are predominately first generation, Hispanic and/or female.

The college is equally proactive about recruiting at the graduate level. We have thriving NSF-REU programs in several departments that enable undergraduate students from outside programs to carry out summer research with PI's in our college. Approximately 1/3 of these students are minorities. Some of these students then come to TAMU for graduate studies. The Mathematics Department runs a NSF sponsored MCTP (Mentoring Through Critical Points) summer program, which contains strong representation from partner schools with large populations of underrepresented minorities. One of the components of this program, the bridge program for juniors, is one of our main initiatives to recruit students from these groups. We have continued to be proactive in our graduate recruiting efforts for underserved student populations through attendance at national meetings and visiting minority serving institutions. We participated in annual minority conferences including NOBCCChE (National Organization for the Professional Advancement of Black Chemists and Chemical Engineers) and SACNAS (Devoted to Advancing Hispanics, Chicanos and Native Americans in Science). Students that are met during these trips are then actively recruited including nominating them for fellowships such as Merit and Diversity. Many of our departments also run annual recruiting weekends where we bring groups of applicants to our programs for a visit, targeting top domestic and minority students. Online programs have been promoted in geographically diverse parts of the country. It is noteworthy that these programs also reach many active duty military.

The COS, over the last two years (2010-2012) has nominated 33 doctoral student recruits for TAMU Graduate Diversity Fellowships. Of these nominated students, 25 were selected by the University's review committee and offered fellowships. Eight recruits (24% of our nominees) accepted our offers and enrolled as Diversity Fellows in our graduate programs. The college is an active participant in the TAMU LSAMP Bridge to the Doctorate (BTD) Program. Across our last two BTD cohorts (VI and VII), 8 of 23 fellows were COS doctoral program recruits and the Science fellows included 3 Hispanic, 1 African/American and 3 female students. In a new initiative, the COS awarded \$120,000 in top-off scholarships (Dean's Doctoral Scholars; DDS) to first year recruits in 2011-2012 with high GRE scores. Minorities and females were 11.8% (6 of 51) and 45.1% (23/51) of our DDS recipient pool, respectively.

To improve retention, additional advising and support have been provided to students, with particular attention being paid to Regents' Scholars. These learning communities help to create peer mentoring and lasting relationships. Starting graduate students on a successful path is achieved by new student conferences and orientation seminars. At both the undergraduate and graduate level there are discipline specific student organizations that help all students with academic, professional and social success here at Texas A&M.

3) Future Efforts

The funds awarded to the COS from the VPAPD are being used to enhance our diversity efforts. In some cases these will be new efforts and in other cases it will allow us to more effectively target diverse groups with some of our existing programs. We will continue the many existing efforts outlined in section 2 above. A report detailing the expenditure and impact of these funds will be generated next fall.

FACULTY

As faculty hiring is still highly constrained we do not anticipate the ability to significantly change the diversity of tenure-line faculty through hiring women and URM. Efforts are underway to improve the climate for non-tenure track faculty. Two departments have embraced the instructional titles and another is committed to revisiting the issue. Since the vast majority of Lecturers and Senior Lecturers are female, this will have a significant impact on climate/diversity. Non tenure track(NTT) faculty will be given more voice as the COS Faculty Advisory Committee is being reconstituted to ensure representation of NTT faculty. Additionally, in Mathematics there will be a new position of Assistant Department Head for Lecturer and Freshman Affairs, who will be female. Also starting January 2012, the position of Associate Head for Operations and Undergraduate Affairs in Mathematics will be held by a Hispanic faculty member.

STAFF

We will continue to follow university guidelines for recruiting, interviewing, and hiring to ensure that appropriately diverse candidates are identified and considered for open positions within our department. We will seek to add URM to the technical staff whenever it is possible. We will also continue to maintain a diverse group of people on the professional/PhD level staff.

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While some departments already have activities and structures in place to respond to staff concerns and encourage professional development, others are not as far along. The COS Executive Committee will take up this issue in 2012.

STUDENTS

We will continue to develop strong ties to a number of minority serving institutions. We have committed some of our Diversity funds to support travel to minority-serving institutions and attend national minority conferences (*e.g.* ABRCMS or Annual Biomedical Research Conference for Minority Students and SACNAS, a society that is dedicated to advancing Hispanics/Chicanos and Native Americans in Science). We will also fund students to attend these (and other) meetings. In addition, there are plans to establish a local NOBCCHE (National Organization of Black Chemists and Chemical Engineers) chapter. The college will continue to partner with the Bridge to the Doctorate and LSAMP (Louis Stokes Alliance for Minority Participation) programs to help identify, recruit and retain outstanding students from underrepresented groups. Additionally, we will continue to nominate outstanding students from underrepresented groups for any available fellowships to enhance our efforts in recruiting. Chemistry will hold a minority student pizza lunch once each month with a member of that group empowered to communicate minority concerns to the Department Head. Multiple departments are using some of the diversity money to support seminar speakers chosen by the minority students. In addition to our REU and MCTP efforts, we will increase the range of partner schools through additional coordination with system schools such as Texas A&M Prairie View and Texas State University, which are partner schools in our NSF Integrative Graduate Education and Research Traineeship (IGERT) grant. In addition, the COS will continue its outreach activities in an effort to boost the input from K-12 into the academic pipeline.

4) Advisory Groups

The COS has a diverse External Advisory and Development Council with both women (7) and URM (1) as members (54 total). This group meets twice a year and Diversity is often a subject of discussion - both formally as part of the program and informally. This group has had two women serve as Chair.

The Department of Statistics Alumni Board was formed in 2008. This board meets twice a year, once in an on-campus meeting and the other via teleconference. This group consists of 13 members total with 9 males and 4 females. This group has met and provided feedback to our graduate students and helped to identify contacts in companies for our Industrial Affiliates Program.

The Department of Chemistry is advised by two primary committees. Their Executive Committee has 1 Latino and 2 women of 7 faculty. Their P&T committee has 1 African American of 7 males. Members of both groups are elected by faculty vote. Minorities have served regularly on both of these committees. The membership term is 3 years.

In Mathematics the Associate Head for Graduate Studies is Hispanic, the Director of the Honors Program is female and 2 advisers are female

The Department of Physics and Astronomy is establishing a Departmental Diversity and Climate Committee to help provide oversight and guidance to the department in related areas. This new committee will have representation from the faculty, graduate students and staff and act as an advisory group to the Department Head. The department has also taken steps to add graduate student representation to the appropriate standing committee within the department in order to include their perspective in the operation and governance of the department.

5) Organizational Climate

A climate survey was done in the fall of 2011 to find areas of concern. All faculty, staff and students were sent a request to fill out a short survey via Survey Monkey. The college wide results were discussed at a COS Executive Committee meeting. The Likert scale responses for each department were given to the department head and diversity committee representative. All of the departments were asked to review their results and see if there were areas in which they could improve the climate. For reasons of confidentiality the written comments have not yet been released to anyone. These comments will be coded so that the richness in them can be utilized without identifying the respondent. The overall climate in the college is quite good. A high proportion of faculty, staff and graduate student respondents indicate that their department fosters a welcoming, supportive atmosphere that values diverse perspectives. A first look at the responses of those who considered themselves members of an underrepresented group did not reveal marked differences with the population as a whole. A more detailed analysis is

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underway and a complete report will be available in the spring. The results of the climate survey will be reported to faculty, staff and students in the College, and members of the College will be reminded of the importance of continuing to foster an inclusive and cooperative work environment.

Stress management and health/wellness represents one area that could represent an opportunity for improvement. Chemistry plans to bring in a clinical psychologist and a nutritionist to discuss ways of maintaining ones physical well-being with grad students, faculty and staff. Biology has facilitated interactions among the students in an effort to improve their work and learning environment. Additionally, their Department Head is providing funds toward a monthly graduate student gathering that encourages participants to present and discuss their research. Physics and Astronomy's newly constituted Climate and Diversity Committee will review these survey data more thoroughly and develop additional strategies for improving the climate and diversity of the department. They have also recently reconfigured their Graduate Student Credentials and Records Committee to be responsible for providing each graduate student with an annual review of their progress in addition to its existing responsibility for making recommendations for TA assignments within the department. We expect that this annual review may help to reduce some of the anxiety that many students voiced in the recent College Climate Survey.

6) Other Efforts

One goal is to increase research participation by students from underrepresented groups who may not be aware that it is possible to have a research-oriented career. In a pilot program, the Department of Biology is introducing students to research by offering them paid, part-time research internships using diversity-related funding from the COS. Their targeted groups are Regents' Scholars and/or minority students (preferably freshman or sophomores). We identified 6 students to whom we are offering these positions for either spring or summer 2012. Students in the program will be encouraged to pursue research for course credit in additional semesters. We plan to use some portion of future diversity money to expand this program.

Outreach (selected events):

The College of Science plays an important role in not only educating current Aggies, but also in fostering the scientific curiosity of future Aggies and the population at large. Many of these activities reach out to diverse audiences.

Administered by the College of Science Dean's Office

- Women in Science and Engineering
Susan M. Arseven 'Make A Difference' Memorial Award
Ethel Ashworth-Tsutsui Memorial Lecture & Awards
Women in Science and Engineering Annual Conference
- Expanding Your Horizons
- Texas A&M Junior Science Bowl
- Texas A&M Regional Science Bowl
- Texas Junior Academy of Science
- Texas Junior Science & Humanities Symposium
- Texas Science Olympiad
- SSTEM grant – 2+2 with Palo Alto Junior College
- Summer Scholars – Research Experience for Undergraduates supplement program
- Advanced Placement Institutes in Biology, Chemistry, Mathematics, Physics and Statistics

Administered by Departments

- Chemistry Open House & Science Exploration Gallery
- Physics Extravaganza
- Saturday Morning Physics
- Chemistry Road show
- Physics shows
- High school math contest
- Science Café
- Mini math fair
- Integral bee
- Physics camp for the Youth Adventure Program
- Summer Mathematics Research Training High School Camp
- Mentoring through Critical Transition Points program (for high school and first year college students)
- Summer Educational Enrichment in Math (for middle school students)
- Math Awareness Month (for K-12)
- Monthly Viewing Nights at the Physics Observatory
- Physics Exhibit in the Children's Museum