

# Annual Diversity Plan Accountability Report

Reporting Unit     Science      
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Reporting Date   Dec. 1, 2014    
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Please define the groups applicable to your unit for which you collect information and make peer comparisons.

- Students
  - Undergraduate
  - Masters
  - Doctoral
  - Professional
- Faculty, Lecturers, and Instructors
- Administrators (applicable to all units)
- Budgeted Staff (applicable to all units)
- Other (Define) \_\_\_\_\_

## 1) Engaging the Data

The College of Science (CoS) has five degree-granting departments. All offer graduate degrees, and four offer undergraduate degrees. We have a long-standing College Diversity Committee comprised of tenured/tenure-track (T/TT) and academic professional track (APT) faculty of various ranks as well as a member from Multicultural Services. Committee members share issues, ideas and best practices with one another at the monthly College Diversity Committee meeting. Since many climate, diversity and equity efforts are initiated at the departmental level, diversity committee representatives work with their respective Department Heads and faculty, staff and student colleagues throughout the year to ensure issues related to climate, diversity and equity are being discussed and addressed within each unit and to provide a yearly Diversity Plan Accountability Report to the Associate Dean for College Climate. This information was used in preparing our final college report. The climate, diversity and equity efforts described in our report will help us meet the goals of Vision 2020, the College of Science Strategic Plan, and College of Science QEP (Quality Enhancement Plan for SACs accreditation) initiatives including, but not limited to, the following goals and efforts:

<i>Vision 2020/College Goal</i>	<i>Related College of Science Climate, Equity and Diversity Efforts</i>
<b>(G1)</b> Elevate Our Faculty and Their Teaching, Research, and Scholarship	Diversity in hiring; faculty mentoring; opportunities for professional development; fostering a positive and inclusive working environment
<b>(G2)</b> Strengthen Our Graduate Programs	Faculty <u>and</u> graduate student recruiting and retention; fostering an inclusive environment where students are treated as scholars; professional development opportunities
<b>(G3)</b> Enhance the Undergraduate Academic Experience	Retention efforts; undergraduate research (our QEP emphasis); student recruiting/retention/professional and leadership development opportunities
<b>(G4)</b> Diversify and Globalize the A&M Community	Recruit and retain a more ethnically, culturally, and geographically diverse faculty, staff, and student body
<b>(G5)</b> Meet Our Commitment to Texas	Student recruiting reflecting state demographics; retention; research training; professional and leadership development; STEM pipeline development

**Table 1: Climate, equity and diversity efforts related to each goal are noted throughout the text below by goal number (G1-G5).**

CoS staff are vital to the success of our faculty, students and academic programs. We strive to provide a welcoming and supportive environment for staff and continually monitor to ensure we provide appropriate compensation and opportunities for professional development and promotion. We consider all efforts focused on staff to be directly related to all goals outlined above.

Peer comparison data was requested from several universities used in previous comparisons. We did not receive complete data from all peers, so comparisons are not identical across groups. Undergraduate Peers: UC Davis, Illinois, Michigan, Minnesota, Texas. Graduate Peers: UC Davis, Illinois, Minnesota, Purdue, Texas. Faculty Peers: include all of these universities. Overall, the College of Science compares favorably with our peers in terms of number of male, female and URM (underrepresented minority) students and faculty (see **Tables 2 & 3**). We have more white faculty on average, but this may be because our peers report international faculty separately, some of whom may identify as white. Our % URM faculty is similar to our peers. The numbers are low and are being addressed through recruiting efforts. One bright note for our college is that we have **~2.5X the national average for Hispanic undergraduates** at 27% of CoS undergrads. Even compared to UC Davis and Texas, which have 16% and 23% Hispanic undergraduates, the College of Science is doing very well. The college has fewer female graduate students (32%) than our peers (37%). Some of this difference is reflected in lower female enrollment in specific departments as discussed below. Our staff are primarily white. Small numbers of URM staff are likely due to outsourcing efforts that affected this group disproportionately.

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**Table 2: College of Science Faculty/Staff Data** (Only 1 yr of staff data is reported due to changes in categories to SOC codes.)

	Faculty- all ranks			Peer avg.	Staff
	FY13	FY14	FY15		
Total counts					
Female	24%	24%	23%	26%	51%
Male	76%	76%	77%	74%	49%
White Only	81.6%	79.3%	77.6%	59.6%	76.1%
American Indian Only	0.3%	0.3%	0.3%	0.3%	0.3%
Asian Only	12.6%	15.3%	12.0%	14.4%	10.4%
Black Only + 2 or more/1 Black	0.6%	0.8%	0.8%	0.7%	4.5%
Hispanic/Latino of any Race	4.1%	3.7%	3.8%	3.4%	6%
2 or More/Excluding Black	0.0%	0.0%	0.0%	0.2%	0.8%
Nonresident Alien	0.0%	0.0%	0.0%	19.8%	0%
Unknown or Not Reported	0.9%	0.6%	5.5%	2.1%	2%

**Biology:** *Faculty/Staff* Females and URM are represented reasonably well in staff and APT positions but are underrepresented among T/TT faculty. We are vigorously recruiting females and URM in searches. *Students* Females comprise the majority of students (56% of graduate students; 59% of undergrads) and URM make up 8.6% of graduate students and 39% of undergraduates (most are Hispanic). We will focus more of our graduate recruitment and retention efforts on URMs, particularly Hispanics.

**Chemistry:** *Graduate students* 37% of grad students are female, which is above the

national average of 27%. Of domestic students, 77% are white, 12% Hispanic, 9% Asian/Pacific islanders, and 3% Black, which is an increase in URM groups. (In 2012, 86% were white, 6% Hispanic, 5% Asian/Pacific islanders, and 2% Black). The national average for URMs is 5%. An article in the J. Chem. Education (2014) showed that TAMU Chemistry ranked in the **top 10 nationally for overall % of Ph.D.s awarded to URM students.** *Undergraduates* From Fall 2013 to Summer 2014, chemistry degrees were awarded to 100 students; 54% were white, 15% Hispanic, 0% Black, 12% Asian, 2% Native American, 2% International, and 15% unknown. We see an increase in URM in 2013/2014, but there is a decline in numbers of Blacks. We hope that the Department's efforts with NoBCChE (National Organization for the Professional Advancement of Black Chemists and Chemical Engineers) and OCDC (Organization for Cultural Diversity in Chemistry), a newly established student-led organization that embraces all races with the aim of fostering cultural understanding and cultural acceptance within the department, will make the department more attractive to these students.

**Table 3: College of Science Student Data and Peer Averages**

	Undergraduate			Peer	Masters + PhD			Peer
	Fall12	F'13	F'14	F'13	F'12	F'13	F'14	F'13
Enrollment Total	2,697	2,927	2,785		883	883	917	
Female	50%	49%	51%	50%	34%	33%	32%	37%
Male	50%	51%	49%	50%	66%	67%	68%	63%
White Only	56%	51%	51%	49%	39%	39%	40%	43%
American Indian Only	0%	0%	0%	0%	0.2%	0.1%	0.1%	0%
Asian Only	11%	12%	13%	24%	4%	5%	5%	9%
Black Only + 2 or more/1 Black	3%	4%	5%	4%	1%	2%	2%	1%
Hispanic/Latino of any Race	24%	27%	27%	10%	5%	6%	6%	3%
2 or More/Excluding Black	3%	3%	3%	3%	1%	1%	2%	1%
Nonresident Alien	2%	2%	2%	7%	47%	46%	44%	36%
Unknown or Not Reported	0%	0%	0%	3%	1%	2%	2%	7%

**Physics/Astronomy:** URM and female faculty, staff and student %s are low but are being addressed by recruiting and retention efforts described below. New female and URM staff have been hired.

**Statistics:** *Graduate students* Numbers of Hispanic students have increased. 35% of graduate students are female. *Faculty* 31.4% of faculty are female. There are few URM faculty, although positions are advertised to broad groups. *Staff* 24% of staff are URM.

**Math:** *Graduate Students* According to the American Mathematical Society (AMS) in Fall 2012 (the most recent report), the national graduate student averages were 30% female and 9% URM. The % of female graduate students in Math traditionally has been similar to the national average (around 30%), though it has dropped to 25% this year. The percentage of URM students at 10% is similar to the national average. The percentage of US citizens in our department (currently 46%) is below the national average of about 54%, but has improved considerably over the last couple of years (from a low of 34% in Fall 2012). Retention and graduation rates are similar among all groups. *Undergraduates* With 44.6% female undergraduates, Math is above the national average of 30%. There is also a sharp increase in Hispanic students from 4% in 2003 to 29.2% currently. Black students have increased from 1% to 4% during this period. *Faculty* There are 77 T/TT faculty, of which 9 are female (11.6%), an increase of 1 female since last year. According to Fall 2012 national data (the latest available), about 14.2% of T/TT faculty are female. We are aware of this discrepancy, and are working to address it. Given that about 30% of new doctoral degree recipients are female, we are confident that we can do that.

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## 2) Recruitment and Retention

### What efforts have been made this past year to retain diversity?

**Faculty (G1, 2, 4):** CoS is the administrative home for the NSF-funded ADVANCE Center, which works to increase numbers of female faculty in STEM fields by improving the workplace climate. The CoS Dean serves on the ADVANCE Internal Advisory Board and provides facilities to the ADVANCE Center. College faculty participate in ADVANCE activities and are members of ADVANCE administrative committees. Of particular note are the LEAD program for department head training and FASIT teams that share strategies and tools to develop good working relationships among faculty and staff. One challenge is that ADVANCE is perceived as something for women faculty only. The ADVANCE administrative coordinator is developing strategies to increase participation from male faculty since they are crucial for developing a welcoming climate for female/URM faculty. College Diversity Committee members are now tasked with reporting ADVANCE activities to faculty in their units and will encourage participation as appropriate.

Departments have mentoring programs for TT faculty. Biology has a new associate professor mentoring program to facilitate promotion to full professor. Math provides mentoring to APT faculty. The College co-sponsors TAMU's membership in the Nat. Center for Fac. Dev. & Diversity, and numerous college faculty participate in this professional development opportunity.

Accommodating dual career hires continues to be a challenge that we work diligently to address. Physics retained an Hispanic faculty member via a successful partner placement, but recruitment of a female faculty member was not successful because of lack of university resources to accommodate her partner. The college will work with the ADVANCE Dual Career Program Manager (newly created this past year) and the Office of the Dean of Faculties to identify positions for partners on and off campus.

**Staff (G1-5):** Biology corrected salary inequities; Physics did so last year. One item of concern for retention of staff is workload distribution. Staff report workload increases, probably as a result of budget cuts that eliminated positions. These perceptions may eventually affect our ability to retain staff, so units are identifying strategies to ease workloads.

**Administrators (G1, 4):** The college leadership team currently includes 2 female and 1 URM male as Associate Deans (1/3 of Deans). One female Associate Dean resigned her position in 2014 to serve as Director of the Cyclotron Institute, a large research unit in the college. An ADVANCE Administrative Fellow became permanent with an expanded role as Associate Dean of Undergraduate Research and College Climate. The Biology department named two new associate heads, one of which is a female full professor. Therefore, there is a net increase of 1 female in our administrative ranks, with 2 additional females promoted to new roles.

**Students (G2-5):** Efforts in retaining undergraduate diversity include the Chemistry undergraduate advisor meeting weekly with 25 Regent's Scholars (1<sup>st</sup> generation students, mostly Hispanic and Black) to provide additional support and advising. The Associate Dean for Undergraduate Programs runs a weekly program for transfer students to help keep them on track. We have new college-level programs in place to increase the numbers of URMs and females doing undergraduate research (a high-impact learning practice and our QEP focus). These programs include employing URM and female work-study students in undergraduate research positions and using funding from the NSF Louis Stokes Alliance for Minority Participation (LSAMP) Program to provide undergraduate research stipends. The college also provides numerous scholarships to undergraduates and hosts a banquet each spring for scholarship recipients to foster networking opportunities with donors. All units in the college pursue graduate fellowship opportunities for female and URM students. Students have earned TAMU diversity fellowships and NSF pre-doctoral fellowships.

### What efforts have been made this past year to recruit diversity?

**(G1-5)** The college works to identify diverse pools of qualified candidates for hiring/recruiting at all levels (faculty, staff, student). These efforts involve targeted recruitment of individuals and advertising positions using diversity/EEO language and to URM groups to foster a diverse candidate pool. The Dean's office reviews faculty candidate short lists to ensure that diverse candidates are considered and/or interviewed. These efforts are paying off with more females/URMs on interview short lists. We are proactive in interviewing and hiring females, URM, and LGBTQ individuals as graduate research/teaching assistants and postdoctoral fellows.

**Faculty (G1, 2, 4):** Search committee chairs attend university search committee training and members participate in ADVANCE STRIDE workshops, which provide training on best practices for interviews. Committees have broad representation (gender, ethnicity, rank). All recent interview groups included female and/or URM candidates. Math hired a female full professor last year. Physics interviewed 3 women and 1 Hispanic male in recent searches; none were hired. Physics and Statistics hired female lecturers.

**Administrators (G4):** National searches were conducted to hire new Heads of Biology, Chemistry and Statistics. Although all three departments identified and invited specific female candidates to apply, none applied for the positions. We are currently searching for a new Dean of Science. A search firm has been hired, and one important qualification is a commitment to diversity. The search firm and committee are working to identify female and diverse dean candidates.

**Staff (G1-5):** Staff are recruited following the TAMU Human Resources policies and vacant position posting guidelines to work towards meeting the diversity goals set for each posting.

**Students (G2-5):** The college and its departments have many outreach programs that help create a pipeline of STEM students from Texas. Campus-based efforts draw students from across the state and include math fair, Chemistry Open House, Physics Festival, Chemistry Roadshow, Saturday Morning Physics, Physics Roadshow, and science bowls. We continue to use diversity funds to

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support efforts such as bringing disadvantaged kids to campus for events. The roadshows also leave our community for presentations at Houston inner city and south TX schools. Biology faculty and students made monthly presentations at a local Title I (i.e., large % of economically disadvantaged/URM students) high school and at Title I elementary school science open house.

The college runs several NSF-funded Research Experiences for Undergraduate (REU) programs that bring in undergraduates from across the country to work with our faculty. ~1/3 of participants are URM and many are female, which is important in fields such as Physics and Math where there are proportionally fewer women faculty. We have successfully recruited graduate students from these REU programs. The college hosts the Summer Scholars program for URM REU participants from across campus. Weekly meetings with URM faculty provide information on topics such as graduate applications and giving research presentations.

Chemistry and Physics recruit undergraduate and graduate students at URM conferences including NOBCCHE, SACNAS (devoted to advancing Hispanics, Chicanos and Native Americans in science), and ABRCMS (Annual Biomedical Conf. for Minority Students). Chemistry uses a GRE search service to identify URM applicants and directly contacts students to encourage application.

Statistics is creating an undergraduate degree. Departments facilitate applications/offer diversity fellowships to incoming URM graduate students every year, e.g. University-wide diversity fellowships, Chemistry Fellowships, LSAMP bridge to the doctorate program. Chemistry has been more active in encouraging more students to apply for external fellowships. Of their current NSF fellows, 3 are female and 2 are Hispanic. In Biology, 4/5 NSF pre-doctoral fellows are female or URM.

### 3) Advisory and/or Developmental Council Groups

**(G1-5)** The 2013-2014 chair of the college's external advisory board was female, and 12/57 members are female. We will work with the current and future dean to increase the diversity of the board. Statistics has an alumni advisory board and is working to increase diversity among its members. Efforts are made to ensure diverse representation (gender, ethnicity, rank) on department-level committees. For example, of 11 members of the Biology executive committee 2 are female, 2 are URM faculty and 2 are staff. The Statistics Faculty Advisory Committee consists of 9 members, 3 females and 6 males, with ranks ranging from senior lecturer to professor. The Chemistry Academic Operations Committee is comprised of 3 females and 1 Black male of 6 males.

### 4) Unit Climate

#### ***A positive climate for all college stakeholders impacts each of the college goals outlined on page 1 (G1-5)***

The 2011 College Climate Survey (faculty, staff, graduate students) indicated high satisfaction (>65-70%) among all groups. For example, most of our staff are long-term members of their units. College-specific surveys identified a small number of issues related to religious and political tolerance that are reflected in the recent university-wide surveys as well. These issues are difficult to attack systemically, although individual issues are promptly handled within units by Department Heads.

Since only 10% (~100) of CoS graduate students responded to the university-wide climate survey, Chemistry administered a graduate student survey in 2014. The response rate was better (46%), with >60% reporting that faculty, graduate students, and staff are committed to diversity and value diverse perspectives. Likewise, at least 89% feel they have average or excellent physical health and emotional well-being. One concern was stress caused by finances. The chemistry graduate student stipend was raised in September 2014 to address this issue. Identified issues will be used for our next college-wide survey in 2015.

ADVANCE FASIT teams have been deployed in departments. Departments are creating their own Climate and Diversity committees. The CoS Faculty Code of Conduct is available on our website. Monies from diversity allocations are supporting activities to enhance interactions among faculty, staff, and graduate students and to provide professional development opportunities. Activities include support for diverse visiting speakers (travel and engagement with students and postdocs) and for female graduate students to attend the CoS WISE Conference. Other activities include grad student research talks in departmental colloquia; faculty-only research talks; grad/postdoc research talks and retreats; undergraduate research poster presentations; faculty and staff coffee hours; student and faculty research colloquia; activities during Staff Appreciation Week; Undergraduate Society of Physics Students (involves upper division students with tutoring for lower division students); and faculty/staff/student social events. A Chemistry female faculty group now meets 1-2 times/semester to foster open discussion and increase female faculty interactions.

We noted one weakness in our response to the climate surveys: few stakeholders appear aware of the results of climate surveys or any actions that are taken to address problem areas. Faculty results are reported to college faculty, generally at faculty meetings. Concrete actions are rarely discussed widely, although Department Heads and Diversity Committee members work on improvements, generally behind the scenes. Similarly, students and staff are not aware of survey results or actions. Lack of communication may be because some of these groups do not have a regular venue for group members to come together. To move toward an improved culture of equity and inclusiveness, all stakeholders need to have a voice in our college. We are developing the following strategies to improve communication and awareness of climate, diversity and equity initiatives in the college:

**(i.)** The first effort is staff focused. The Associate Dean for College Climate has created a Staff Diversity Committee, comprised of diverse staff from each department, the Cyclotron Institute, and the college. At the first meeting of this group (Oct. 2014), staff were made aware of the Office of the Vice President and Associate Provost for Diversity and the Diversity Plan. Staff did not know the

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results of recent climate surveys or why these surveys are conducted. We are not doing enough to distribute information. Staff identified lack of communication with upper-level administrators (e.g., President, Provost) as a key issue affecting work climate. TAMU initiatives such as the PwC audit are of major concern and stress to staff, who feel their input was not sought during decision-making processes (i.e., staff have no voice, a major theme in the campus-wide staff climate survey); results and future impacts of PwC were not well-communicated by upper administrators. The Staff Diversity Committee will continue monthly meetings with the Associate Dean to develop strategies to improve climate within their units; determine best practices for communication among staff and administrators at all levels; discuss issues of diversity, climate and equity that are of concern; and work with the Associate Dean to develop a meaningful staff climate survey in 2015. The committee will provide input for the 2015 Diversity Plan Report.

(ii.) Members of the College Diversity Committee (faculty) will facilitate communication among all stakeholders. We will work with Heads/Assoc. Heads, student advisors, and staff to ensure information is relayed and to give a voice to each constituency. Departments will proactively provide mentoring for graduate students who appear to be struggling with issues related to academics or diversity/climate. We will also work to create a college-level student diversity committee that will report to the Associate Dean.

## 5) Equity

**Salary (G1, 2, 4):** Salary inequities are continually evaluated across all groups. Statistics corrected faculty salary inequities. Biology corrected staff salary imbalances. The 2% merit pool made it difficult to also correct salary inequities for Biology faculty. Chemistry equity salary increases were implemented for T/TT female faculty, and salary increases were given to GAT/GANT/GAR students in Chemistry and Statistics. Physics addressed salary inequities in prior years and continues to monitor their progress. Mathematics instituted the Instructional Professor track as a means for addressing salary inequities for APT faculty, improving APT morale.

**Advancement/promotion (G1, 2, 4):** The sole promotion to Full Professor in Biology this year is Hispanic. A female was promoted to Associate Professor in Statistics. A female now serves as Associate Head for Operations in Biology and as an ADVANCE Administrative Fellow. Faculty in the college won national awards (e.g., Fellow of the Am. Society of Microbiology; Fellow of the American Academy of Arts and Sciences). College staff won departmental, college, and university-level awards.

**Invited speakers (G1-4):** Efforts to increase #s of female/URM/LGBTQ invited speakers were successful and are now self-sustaining.

**Staff training and development (G1-5):** Departments provide funds and encourage staff to take courses to facilitate their training and career development. Department Heads are diligently working to address salary inequities and identify appropriate career ladders for promotion. Staff awards are presented at the college and department level.

**Student leadership/professional development (G2-5):** The College of Science Dean's Student Advisory Panel is comprised of student leaders across the college disciplines. 18/21 members are female and 8/21 are URM, including all 3 male members. Chemistry encourages undergraduate and graduate student leadership development through student organizations including GSAC (graduate student association of chemistry), NoBCChE, and OCDC and involves URM undergraduates in minority student conferences to support department recruiting efforts. Other units have similar opportunities for student leadership development. Departments offer opportunities for graduate students to host outside seminar speakers each year and to meet with visiting speakers as group or individuals. The College/departments offered mentoring for students developing NSF-REU and pre-doctoral fellowship applications.

## 6) Future Efforts (G1-5)

**New college climate surveys.** Surveys will be designed with input from members of the Faculty and Staff Diversity Committees. We will ensure results are reported/discussed in a timely fashion with the requisite parties so that action is taken on identified issues.

**Solicit and fund proposals** from all stakeholders for improvements to climate, diversity and equity. Proposed projects must fit within our diversity allocation budget/goals and will describe plans for sustainability beyond the funds awarded. Biology will run a pilot program in spring 2015, and best practices will be identified so a similar process can be run from each unit and/or the college.

**Website redesign.** A diversity statement will be added to the college website. Our previous diversity webpage received very little traffic. We will improve traffic by providing interesting and useful content, including information on college activities and links to relevant TAMU diversity information (e.g., Associate Provost for Diversity, Multicultural Services, Aggie Allies). The webpage will be a repository for all college-level diversity reports to ensure they are shared widely. Chemistry and Biology are revamping their websites to emphasize diversity (e.g., NoBCChE and OCDC) and STEM-related outreach activities to attract URMs to TAMU.

**Engaging the LGBTQ community.** Our website redesign will include prominent language to the effect that we are an open and affirming college. Signs will designate Biology buildings as "safe zones" for the LGBTQ community. We will hold LGBT 101 workshops at faculty meeting times, and department members will be encouraged to undergo Aggie Ally training.

**Increasing efforts in the following areas:** initiate STEM nights at Title I elementary schools in Bryan ISD, following successful Biology STEM nights in College Station; identify more diverse (URM, LGBTQ) seminar speakers; increase URM student participation in NOBCChE, SACNAS, and OCDC, including scientific outreach events and community service; correct salary imbalances at faculty, staff and graduate levels as opportunities arise; continue to nominate outstanding faculty and staff members for local and national awards.