

Eberly College of Science

Final Report

A Framework to Foster Diversity at Penn State: 2004-2009

November 30, 2009

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Progress Report: ECOS Diversity Plan 2004-2009

Challenge One: Developing a Shared and Inclusive Understanding of Diversity

1. How does the Eberly College of Science define diversity? How is this understanding demonstrated in areas of emphasis within your unit?

The Eberly College of Science (ECOS) recognizes diversity as a broad and multi-faceted issue. We strongly support the University's nondiscrimination policy and seek to provide an environment of mutual respect among individuals of all backgrounds and among individuals holding differing perspectives and ideas. We strive to have a climate supportive and welcoming for everyone, including those of different cultures, different racial and ethnic backgrounds, those of different sexual orientation, those with different religious beliefs, those with physical disabilities, and non-traditional learners. We strive to achieve equal access to education and equal success and graduation rates for all constituent groups within our student body. We encourage students in the College to explore courses and other opportunities that promote intellectual inquiry regarding diverse ideas, peoples, and cultures.

The active and distributed nature of our climate committee activities demonstrates a true commitment to creating a climate supportive and welcoming for everyone. The one-on-one attention that the Multicultural Coordinator gives to our students of color further emphasizes this focus. We believe that ECOS can and should make a contribution in the national context to enhancing the participation and success of individuals from historically underrepresented groups in the mathematical, physical, and life sciences. This drives our recruiting and retention efforts for minorities and women at all levels, from undergraduates through senior faculty (see the "Tool Box" in Appendix I for details).

2. How has your unit distributed information to students about the University's diversity initiatives? Does your unit have formal mechanisms in place for discussion of diversity initiatives with students? If so, please describe.

The ECOS diversity definition and information about our College's and the University's diversity initiatives are shared through dissemination of this plan, through our College web site, through sharing with the College and departmental Climate and Diversity Committees, and through a direct mailing of an annual climate and diversity brochure from the College to all students. We have also required that all First Year Seminars in the College include participation in the Race Relations Project.

3. How has your unit distributed information to faculty and staff about the University's diversity initiatives? Describe your unit's formal mechanisms for discussion of diversity initiatives.

The ECOS's definition of diversity and information about the College's and University's diversity initiatives are shared in the following ways: through dissemination of this plan, through our College web site and a web site designed specifically for new faculty, through sharing information with the College and departmental Climate and Diversity Committees, and through a direct mailing of an annual climate and diversity brochure to all faculty and staff. All faculty and staff also receive

periodic emails from the Dean or the HR manager reminding them of College expectations on issues relating to climate and diversity. The Dean has also continued to highlight specifically College diversity goals in our new faculty orientation programs, in his visits to departmental faculty meetings, and in meetings with our graduate and undergraduate program coordinators.

4. What is the role of the ECOS Climate and Diversity Committee? What is its composition?

In 1999, we established a College Climate and Diversity Committee to identify and address issues of climate and diversity across the College. The ECOS climate and diversity committee is well developed, well defined, and proactive. The Committee sponsors a variety of programs, makes appropriate policy recommendations, and uses a variety of approaches to communicate within the College. The membership is representative of constituent units, including faculty, students, staff, and senior administration; every department and almost every job classification are represented on the committee. Terms are typically three years, so roughly 1/3 of the committee members are new each year. The objectives for the Committee are selected based on input via surveys, interviews, committee member comments, etc. In the recent past, the Committee has addressed student advising, mentoring for junior faculty, issues relating to maternity for graduate students and post-docs, Martin Luther King (MLK) day activities for the College, and oversight of resource allocation to the departments to fund activities/actions to improve the climate for members of underrepresented groups in the College. This year's objectives for the committee include addressing retention of undergraduate students of color, post-doc mentoring and training, issues relating to the LGBT community, and the experiences of females in the College. (See Appendix II – Accomplishments of the Climate Committee)

In addition to the College committee, every department has a climate and diversity committee. Many issues and concerns are department specific and best addressed at the local level. Each departmental committee has a representative on the College committee. The departmental committees survey their constituencies and develop action plans based on that input. Our Multicultural Coordinator has worked with the departmental committees to develop plans to improve the overall multicultural atmosphere and welcoming nature of the College. Work is progressing on creating displays for each department that will celebrate the diversity within the department.

5. What is the Role of the ECOS Multicultural Coordinator?

The Eberly College of Science has made a number of deliberate changes to upgrade the position and scope of authority of our Multicultural Coordinator. In addition, we have expanded resources to support the work of the office. The College Multicultural Coordinator has the titles of Executive Assistant to the Dean and Director of Science Diversity Initiatives. The position reports directly to the Dean. Resources to support this alignment of duties and responsibilities are provided to sustain ECOS diversity initiatives annually. In addition, the Multicultural Coordinator is now a member of the ECOS Executive Committee.

The Associate Dean and Executive Assistant to the Dean also work collaboratively with the Graduate School, with our departmental Graduate Recruitment Chairs, and with the College Development Office to identify additional resources for minority graduate fellowships, for graduate student recruiting initiatives, and for partnership activities with minority-serving institutions.

In addition, the Executive Assistant to the Dean is responsible for the leadership of the College's undergraduate, graduate, and pre-college recruitment and retention diversity programs, and the academic residential programs such as the Pennypacker Experience Program, First Year in Science and Engineering Program, and the Bunton-Waller Fellows Scholars Program. His specific duties include the avocation of practical strategies for the inclusion of underrepresented groups and women in the academic and administrative units of the Eberly College of Science and the formation of multidisciplinary collaborative programs for the retention and recruitment of undergraduate and graduate students of color and women.

6. Which strategies have been most successful in addressing this challenge? Which have been least successful? Which could be termed "best practices"?

Most successful: Implementation of the ECOS college-wide and departmental climate committees has been the most successful strategy for developing a shared and inclusive understanding of diversity. As described above, the College Diversity Committee has been able to effect meaningful policy changes that have directly improved the climate for students, faculty, and staff. This committee has been empowered by the Dean of the College to identify and pursue issues of importance and to develop the appropriate recommendations for action by the ECOS Executive Committee. The committee has worked best in the years that it has identified 3-4 topics to tackle and then assigned subcommittees to address these topics. Another effective strategy for developing a shared and inclusive understanding of diversity has been the addition of the Multicultural Coordinator to the Executive Committee in the College.

Many major research-funding opportunities require that a significant contribution to the outreach and diversity objectives of the University be included in the programs. This research funding gives us an opportunity to bring additional funding to the initiatives started with College resources and further reinforces the value of these programs in the minds of our faculty.

Least successful: Our greatest challenge has been the translation of a shared understanding of diversity into programs that enhance the recruitment and retention of graduate students.

Best practice: There are Diversity and Climate Committees in every department.

7. What measures of success have you identified to gauge your progress in this Challenge? Include data demonstrating outcomes.

We have qualitative and anecdotal data to measure our effectiveness in developing a shared and inclusive understanding of diversity. Understanding, engagement, and enthusiasm of the faculty, staff, and students on the College and departmental climate and diversity committees are indicators, and we have seen steady growth. In addition, the Race Relations project in First Year Seminars has engaged large numbers of students in discussions of diversity.

We undertook a climate survey of students, staff, and faculty in the College in 2007. Results from various responses from the survey that have begun to be addresses and that guide our plans for action are described below. We note that half of respondents agreed or strongly agreed that the College proactively addresses issues of ethnicity, race, and gender, however less than half found there to be visible leadership to foster diversity in the College. Work remains to be done in communicating our vision and goals college-wide.

Challenge Two: Creating a Welcoming Campus Climate

1. How does the ECOS leadership demonstrate support for diversity?

The ECOS Climate and Diversity Committees have been charged by the Dean with helping to develop and sustain a welcoming environment that is inclusive of all groups with an emphasis on underrepresented populations and inter-group relations. Allocation of resources to these committees and other supportive activities provide a clear message. One of the Associate Deans plays a major leadership role on the College Climate and Diversity Committee.

An Associate Dean and the Executive Assistant to the Dean also work collaboratively with the Graduate School, with our departmental Graduate Recruitment Chairs, and with the College Development Office to identify additional resources for minority graduate fellowships, for graduate student recruiting initiatives, and for partnership activities with minority-serving institutions. The ECOS Dean has made a number of deliberate changes to upgrade the position and scope of authority of Multicultural Coordinator. In addition, he has expanded resources to support the work of the office.

All faculty and staff also receive periodic emails from the Dean or the HR officer reminding them of College expectations on issues relating to climate and diversity. The Dean has also continued to highlight College climate and diversity goals in discussions with the Executive Committee, in our new faculty orientation programs, and in his visits to departmental faculty meetings. Early each academic year, the Associate Deans send every member of the College – faculty, staff, and students – a brochure that highlights how the College values diversity and gives the names of the climate committee members.

2. How does your unit identify climate issues?

Through its climate and diversity committees, the ECOS has developed a structured process for identifying climate issues and has implemented approaches for addressing climate concerns. New members of the committees often bring new issues to be addressed. In addition, departmental climate and diversity committees have surveyed their constituencies periodically to identify climate issues.

Issues of concern to individuals are sometimes brought to the attention of the Multicultural Coordinator, the Associate Deans, the College's Human Resource manager, the Dean, or other members of the leadership team. Any member of the College can report climate issues by contacting any of the individuals mentioned above or by submitting an anonymous memo to the climate committee via the on-line form submission process on the climate committee web site. Individual concerns or other issues that arise repeatedly are viewed as potential general climate issues.

3. How does your unit monitor climate?

We monitor climate via a continuous process of asking individuals and committees to report problems with the climate. In addition, departmental committees have surveyed their constituents periodically.

The College performed a college-wide climate survey of students, faculty and staff in 2007. The results of the survey were distributed in spring, 2008 and have been reviewed by the College administrators, Executive committee, and climate and diversity committee.

4. How does your unit respond to climate issues?

Climate-related issues brought to and may be addressed by Climate and Diversity Committee members, Associate Deans, Multicultural Coordinator, human resources officer, or the Dean. Issues are discussed in Climate and Diversity committee meetings, in weekly meetings of the Dean, Associate Dean, and senior staff in the College, and in ad hoc meetings. If a pattern of multiple reports is evident, the issue is discussed and addressed as a more general concern for the College.

The Climate and Diversity Committee prioritizes general climate concerns: top priorities are assigned to a subcommittee to identify a solution. (See Appendix II – Accomplishments of the Climate Committee) The Dean and/or any of the other individuals engaged in dealing with climate issues are brought into the discussion and development or implementation of solutions as needed. Some of the more challenging issues, sometimes requiring new perspectives or cultural change, have required multi-year efforts. An example of this kind of issue has been the process of encouraging departments to make their primary points of student contact more multi-culturally welcoming.

A challenging climate and diversity issue has been the success and retention of minority undergraduate students. A special committee, with membership from the Climate and Diversity committee and other engaged members of the College community, is working to identify and implement ways of improving success and retention of minority undergraduate students in the ECOS majors.

5. What unit-wide and individualized approaches have you developed to enhance overall climate and individual's satisfaction with the environment?

- We have an active college-wide Climate and Diversity committee. (See Appendix II for accomplishments of the Climate and Diversity Committee.)
- The Climate and Diversity Committee wrote and the Dean has disseminated the Eberly College of Science “Code of Mutual Respect” with the entire College community (see Appendix III) of students, staff and faculty.
- The College recognizes individual contributions of nominated staff, faculty, and students with “ECOS Stars”, which are personal thank you notes from the Dean.
- The College has initiated an annual recognition of three Dean’s Climate and Diversity Awards to members of the community who have demonstrated outstanding leadership in fostering diversity or positive climate.
- We have active departmental Climate and Diversity committees that address issues within individual departments in the College. One department has appointed two ombudsmen.

- The College leadership works, individually and/or collectively, to address climate issues as they become evident.
- We have a Climate and Diversity link on the College's home page and on the new faculty web site.
- Early each academic year, we send every member of the College a brochure that highlights our commitment to diversity and gives the names of the climate committee members.
- The Associate Dean created and offered a course on supervision to all supervisors in the College. The course stresses issues of respect and fairness.
- All First Year Seminars in the College include the Race Relations Project (a peer-facilitated diversity program designed to expand awareness and multicultural dialogue).
- Each year, the human resources manager sends a number of email messages to members of the College regarding climate issues.
- The College multicultural coordinator spends a great deal of time working with individual students to provide advice and address concerns.
- We discuss climate and diversity issues with all new faculty members in the College at new faculty orientation.
- We are working to make our points of student contact more multi-culturally welcoming.
- We integrate climate and diversity issues into the College's strategic plan rather than leaving these issues only for the separate Framework to Foster Diversity. (see Challenge 7)
- The HR office does an annual salary equity analyses prior to awarding of annual raises.
- We are working to increase diversity in the College through increased recruitment and retention of individuals from underrepresented groups.

6. Which strategies for creating a welcoming campus climate for diversity have been most successful? Which have been least successful? Which could be termed "best practices"?

Most successful: Joint meetings of the College and Department Climate and Diversity Committees to share information and best practices, and to develop synergistic strategies and actions.

Early each academic year, we send every member of the College a brochure that highlights our commitment to diversity and gives the names of the climate committee members.

All First Year Seminars in the College include the Race Relations Project (a peer-facilitated diversity program designed to expand awareness and multicultural dialogue).

In support of Martin Luther King celebrations, the Climate and Diversity Committee arranged to bring the “Race Machine” to campus annually beginning in 2005, and it plans to do so in future years. The “Race Machine” has an accompanying display showing that genetic heritage does not always match physical appearance.

We are working to make our points of student contact more multi-culturally welcoming across the College.

We have an Executive Assistant to the Dean / Director of Science Diversity Initiatives who is personally committed to the support and success of each underrepresented member of our College. He spends a great deal of time working with individual students to provide advice and address concerns. The Executive Assistant to the Dean / Director of Science Diversity Initiatives is a core member of the Dean’s senior team. This structure promotes a more collaborative effort in creating a welcoming, and more diverse, ECOS climate.

Least successful: Results to date on improving success and retention for underrepresented students in the College have been disappointing. Lack of academic success and progress creates a very poor climate for some of our students.

Best practices: Climate and Diversity Committees.

7. What Measures of success have you identified to gauge your progress in this Challenge? Include data demonstrating outcomes.

We have taken a large number of actions, and have qualitative and anecdotal data to measure our effectiveness in having created a welcoming campus climate. In 2007 we conducted a college-wide climate survey to assess our effectiveness in creating a welcoming climate and fostering diversity. Key findings of the survey are:

- Seventy-nine percent of respondents were comfortable or very comfortable with the climate within the College
- Approximately half of respondents indicated that the classroom and workplace climates are welcoming to students and employees based on various diversity-related characteristics
- A small percentage of respondents (8%) had experienced offensive, hostile or intimidating conduct over the past year that was attributed most often to their status as faculty, staff or student, their gender, age, education level, or ethnicity.
- Sixty-seven percent of respondents reported “often” or “very often” feeling comfortable being open on campus about their identity. Analysis suggested that sexual minority (LGBTQ) were less comfortable than respondents overall.
- The Eberly College of Science climate is generally respectful of most groups, though several questions identified emotionally and mentally challenged, and LGBTQ people as deserving of more support and respect within the College.
- Respondents generally believe that the College does, and should, promote diversity to shape campus climate.
- Twenty-seven to forty six percent of respondents feel that the climate in the College could be improved by offering additional diversity-related programs focusing on race, ethnicity, gender and country of origin.

The survey provides both quantitative and qualitative benchmarks and identifies challenges confronting the College with respect to underrepresented students and employees. The Climate and Diversity Committee, Dean, Associate Deans and Executive Committee received and reviewed the survey results in 2008. Appendix II (and item 5 above) highlights some of the recent efforts of the 2008 and 2009 Climate and Diversity Committee that begin to address these issues. We will monitor the effectiveness of these strategies with a follow-up climate survey and by monitoring additional quantitative metrics as noted throughout this report. Additional areas of improvement form the basis for our strategic plans to improve climate and diversity in the College in the coming years.

Challenge 3: Recruiting and Retaining a Diverse Student Body

1. Describe initiatives your unit may have that are intended to contribute to recruiting or retaining undergraduate and/or graduate students from underrepresented groups.

Minority Undergraduate Student Recruitment

We have continued the following on-going minority undergraduate recruitment and retention activities. The Eberly College of Science is an active partner with the University when it comes to recruiting and retaining a diverse student body. The Office of Undergraduate Resident Instruction and the ECOS Multicultural Coordinator have responsibility for coordinating recruiting strategies with the Office of Admissions and various other internal and external constituents of the College. The following descriptions of sample activities illustrate some of the diversity initiatives in which we play a leadership role:

The Pennsylvania Junior Academy of Science

The Eberly College of Science hosts the annual meeting of the Pennsylvania Junior Academy of Science (PJAS) each spring semester at the University Park Campus. This year the event was held on May 17 – 19, 2009 with 4300 participants. The PJAS is a statewide organization of diverse junior and senior high school students designed to stimulate and promote interest in science among its members through the development of research projects and investigations.

The College provided judges for approximately 3,000 science fair projects, which were presented over the course of the meeting. In addition, students who expressed an interest in the Eberly College of Science and who received a first-place award during the State Meeting were interviewed, and scholarship offers were made to the most outstanding students, many of whom were members of underrepresented minority groups. Collaboration with technical colleges and programs has resulted in the awarding of scholarships in support of PJAS.

First Year in Science and Engineering (FISE) House

The FISE program is a diversity program that provides support for minorities and women in the areas of science and engineering. The ALCOA Pennypacker program is a diverse residence hall option at University Park that houses the FISE program and the Bunton-Waller Fellows program, a scholarship program that enhances the diversity at Penn State. FISE was created to enhance the recruitment and retention of underrepresented students who are in their first year of a science or

engineering curriculum. The Pennypacker program is a supportive living and studying environment that enhances the retention of students, particularly women and minorities.

In 2008-2009, female students represented 56% of the participants and 41% of the students were from underrepresented minority groups. Even though we were pleased with our progress, more attention will be given to enhancing underrepresented minorities for the 2009-10 academic year. In 2008-09, the ALCOA Pennypacker program supported 314 students, with 100 students in the fall making the Dean's List with a grade point average (GPA) of 3.5 or above and 63% with GPAs of 3.0 or above. In addition, 6 students had a perfect 4.0 grade point average for the 2008-09 academic year. The ALCOA program at The Pennsylvania State University through the FISE program has truly enhanced academic performance, provided a diverse living environment, and exposed students to a myriad of industry concepts such as team building and cooperative learning.

Annual Awards Convocation in Cooperation with the School District of Philadelphia

For the past 17 years, the Awards Convocation Program has been supported and administered by the Eberly College of Science, several other academic colleges, and the School District of Philadelphia. The Convocation is a luncheon that honors the top sophomores and juniors in each of the high schools in the District. As a recruiting tool, the convocation has proven to be an excellent way for Penn State to identify early and nurture minority prospects – no other University has such an arrangement, which allows access to the transcripts of the best students in the District. These students are targeted for special scholarships and academic opportunities, and the ECOS has been the lead agent in sponsoring this program and in working with the School District of Philadelphia to identify possible undergraduate applicants to the College.

Minority Undergraduate Student Retention

Cluster Classes

The cluster class concept is designed to assist students to succeed in introductory math and chemistry classes. Classes are offered for the first two courses in calculus and the first course in chemistry. These clusters provide collaborative learning experiences, supplemental instruction and instructor-student conferences with the intent of maximizing student performance. Due to the small size of classes (thirty students or less), students are able to interact more directly with the faculty and receive a greater amount of personal attention. Cluster classes are taught by select University faculty, and students are given personal feedback on their homework assignments concerning improvements in their understanding of concepts and procedure. We continue to offer these cluster classes and encourage the participation of all students, particularly women and underrepresented students. Collaboration with the Math department has made this one of our best practice retention efforts across the College.

Undergraduate Summer Research Programs

The Summer Research Opportunity Program (SROP) is designed to capture the interest of talented undergraduate students from underrepresented groups and to enhance their preparation for graduate study through intensive research experience. During the eight-week summer program, the program includes professional development workshops, seminars, field trips, and social activities in addition to the research experience with faculty mentors. SROP is an effective retention activity for undergraduate students in the sciences as well as a recruitment tool for diverse prospective graduate students. We continue to provide information about SROP to students, identify, and recommend students to the program, and actively participate in SROP activities. Success of this program is

enhanced with the addition of collaborations with Historically Black Colleges and Institutions (HBCUs) , Hispanic Serving Institutions (HSIs), and Tribal affiliations.

Since 2004, 53 students have participated in SROP at Penn State. Four of the students (from the 2004 – 2006 SROP experiences) applied and were accepted to graduate programs at Penn State; we are hopeful that augmented recruitment efforts will increase the number of applicants in more recent years.

Pre-First Year in Engineering & Science (PREF)

PREF is a summer bridge program for first-year students of color in science and engineering at the University Park campus. Preparatory programs for introductory calculus, physics, and chemistry courses are offered to all PREF program students. In addition, time management and study skills seminars are offered to PREF participants to ensure academic success. Experienced science faculty members participate in the PREF program in addition to current upper-level student assistants. The overall objective of PREF is to maximize the retention of first-year students of color in engineering and science majors. PREF participants, who are typically Bunton-Waller Fellows, excel in their academic studies as freshman and maintain their status as Scholars.

Commonwealth Scholars Programs (Penn State College of Medicine)

The program offers research experiences for underrepresented minority students to prepare for medical school, MCAT preparation and shadowing experiences, poster sessions of research projects, and a medical school visitation program. The Multicultural Coordinator in the College, now the Executive Assistant to the Dean, is responsible for coordinating activities with the Penn State College of Medicine, collaborating with other academic units within the University, and selecting students for participation in this program. With expanded funding, we can continue to grow the success of this program to enhance recruitment of students into professional schools.

Retention Activities led by other colleges but benefiting the ECOS

There are several additional initiatives which are not conducted by the Eberly College of Science, but in which ECOS faculty and staff participate, that support the College's effort to retain diverse undergraduate and graduate students. Samples of these collaborative programs follow:

Minority Undergraduate Research Experience: The Space Grant Consortium sponsors a Minority Undergraduate Research Experience (MURE) program that provides our ECOS minority undergraduates with the opportunity to work in a research laboratory. This opportunity is available to students beginning in their first year. The immediate impact of this program on the students is to provide them with a network of senior undergraduate students and graduate students in the lab who act as tutors, mentors and in some cases advocates for the students. The nurturing educational environment provided to the students by this program markedly increases student retention.

Women in Science and Engineering Research: Several of our faculty members take part in the Women in Science and Engineering Research (WISER) program aimed at increasing the retention rates of female freshman in science majors.

Other ECOS retention activities include:

- Student Organizations
- College Scholarship and Fellowship Awards
- Minorities in Science and Technology (MIST)

- Student National Medical Association (SNMA)
- Communications to and among students through development of list-serves and home pages
- Common area for posting information
- Alliance with Residence Life and Housing Services
- Resume database
- Newsgroups (Tutoring and supplemental instruction).

The Pennypacker Program is an important aspect of the College's overall strategy to increase the retention of underrepresented students in technical disciplines.

To improve undergraduate retention in the sciences, we need to do a better job of career counseling, especially for those students originally interested in medical school for whom medical school quickly becomes unlikely due to poor grades. Focus and enthusiasm about a future career can be very motivating for students. We need to help them identify that goal.

We also believe that encouraging minority students to engage in undergraduate research could be an important retention and graduation tool. Plans to implement an undergraduate research program which exposes first-year students to the disciplines and culture of the departments in the College continues to be a major focus to enhance the recruitment and retention of underrepresented students into technical majors.

Minority Graduate Student Recruitment

The College has contributed to locating and recruiting graduate students from underrepresented groups by coordinating its activities with the graduate school, making contact with Historically Black Colleges and Universities, offering summer research experiences, participating in research conferences and professional meetings for African/Black American, Latino/Hispanic American and American Indian/Alaskan Native students, and providing fellowships and assistantships.

To improve our recruitment of minority graduate students, we need to move beyond the good things we have been doing. We have developed several initiatives in concert with our departments. These are outlined in the "Tool Box" in Appendix I.

The unifying theme of these recruitment efforts is that we have to alter our usual recruitment practices if they are to be successful in attracting qualified minority students to Penn State. Minority students generally have many options, and we need to be proactive, aggressive, and generous with our time and resources if we want to attract them to Penn State.

We need to develop stronger and more meaningful relationships with faculty at Historically Black Colleges and Universities (HBCU) and minority serving institutions, including collaborative research, visits, publishing together, sharing teaching materials, etc. It is critical that all relationships with minority serving institutions be mutually beneficial. We have begun to develop such relationships with Hampton, Jackson State, and Lincoln Universities.

We must also work harder to recruit underrepresented students from other major research universities. Although the numbers of underrepresented students at many Research I institutions is small, the probability of success for those students in our graduate programs is high.

We must be ready to offer fellowships as soon as potential applicants are selected, and we must develop a standard offer for minority graduate students of five years of support contingent on satisfactory progress toward the degree. Top-ups over the standard offer, including a top-up for the summer between the first and second year, are necessary in many cases to attract minority students.

In the 09-10 recruiting season we will provide trips to University Park for key students early in the recruiting process, earlier than the usual recruiting weekends which often occur after offers from other institutions have already been made to minority students. These students can also come back for the usual recruiting weekend, if appropriate.

In addition to the above, the College participates in the following programs as part of its efforts to recruit minority students:

GEM

The National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM) is a program whose purpose is to provide opportunities for underrepresented ethnic minority students to obtain Ph.D. degrees in engineering and the natural sciences through a program of paid summer internships and graduate financial assistance.

The National Physical Science Consortium

The National Physical Science Consortium (NPSC) is a network of research Universities, national laboratories, and private industries uniting for the purpose of increasing scholarly and career paths in the physical sciences.

The main goal of NPSC is to target underrepresented minorities: African American; Hispanic; Native American Indian, Eskimo, Aleut; Pacific Islander (Polynesian), and/or female. NPSC will work to increase the total number of qualified minorities and women in these fields. The Eberly College of Science is an active member of NPSC.

Undergraduate Summer Research Programs

We have found that an effective strategy for recruiting graduate students regardless of ethnic background is to invite promising undergraduates to Penn State to spend the summer between their junior and senior years doing research in our faculty research groups. This program is equally effective for minority students, and several of our departments organize such programs. The immediate benefit of this strategy is that it allows faculty to make early decisions about graduate admissions into the department based on the students' performance in their labs rather than relying solely on traditional indices of performance.

SROP

The Summer Research Opportunities Program (SROP) for Minority Science Students is a collaborative effort of research centers and laboratories at Big 10 institutions including Penn State that offers research experiences for undergraduate minority scholars in the sciences. The purpose of the SROP Program is to increase the interaction of minority science students with faculty, expose these students to the research environment at a large complex research institution, and encourage these students to pursue graduate study and careers in research and academia.

Minority Graduate Student Retention

The College works to remove barriers that may impede the progress of graduate students. In addressing this issue, the College has decided that underrepresented students will be provided with financial packages that are in place for as long as the student is making satisfactory progress towards the degree. When a student is admitted into a department, the College and the department together ensure that the student will receive a fellowship or assistantship for up to five years. In addition, graduate students are counseled to follow a program of study that permits them to develop effective strategies for course work completion and preparation for their comprehensive examination. Departmental strategies for retention include many of the following activities:

- Departmental orientation and mentoring program
- Guaranteed funding through fellowships and teaching assistantships
- Advising programs designed around academic strength of students
- Support for travel to present papers and research at professional meetings
- The College has also implemented the practice of supplementing assistantships and fellowships with bonuses to fund students for two years while they are actively pursuing their degree. In addition, during the first year, students are allowed to focus their time and energy on meeting the academic expectations of their department instead of assuming teaching responsibilities.
- The departments have also made special provisions for individual students from time to time. Most common is the need to allow students from less rigorous backgrounds to spend an extra year taking courses to catch up and fill in the holes in their technical backgrounds.

Although graduate student retention efforts reside primarily in the host departments, some enhanced oversight by the Multicultural Coordinator would be additive. Since each graduate program is now required to write and share with each graduate student a formal performance analysis at least once per year, the Multicultural Coordinator can vet the performance reviews of all of the underrepresented students in a given department at the end of each academic year. The Multicultural Coordinator will discuss with the person(s) who carried out the reviews and with the students what these reports bode for the future and what the best course of action would be to enhance success.

2. Describe specific initiatives your unit may have that are intended to reduce intergroup disparities in enrollment, retention, and graduation rates.

University scholarships such as the Bunton-Waller (undergraduate) Program have contributed significantly to recruitment by placing scholarship and scholarly activities as the highest priorities for student selection. Since 2005, 36 undergraduates in the College received Bunton-Waller Scholarships. Four of these students have graduated, and 31 are currently registered at Penn State. These students have maintained an average GPA of 3.11. Merit based awards have also enhanced the recruitment efforts of the College to attract more individuals from underrepresented groups into technical disciplines.

We have also continued to ask faculty as part of their research grants submission to build in support for students from underrepresented groups to be recruited into their labs. In addition, the College has continued to provide resources to fund analogous, college-based research activities for students.

As described elsewhere, we have embarked on an initiative to partner with faculty at minority serving institutions with the goal of establishing research collaborations, having joint publications, creating a pipeline of qualified minority students, and creating a pattern of minority visitors to campus. The Dean provides summer support, up to \$8,000, for faculty from a minority serving institution to come to University Park.

A sub-committee of the climate committee, with additional membership from across the College, is formulating aggressive actions aimed at improving retention of our undergraduates, particularly underrepresented students. Areas of focus include inclusion of students in research activities early on, more aggressive time management and study skills advising in FYS and from individual advisors, options to re-take the first exam in the three traditional critical courses – calculus, chemistry and physics, careful scheduling in the freshman year for those who come to us less well prepared, mechanisms for early interventions for students in trouble, and better access to tutoring and other help. We have begun with detailed analyses of the data on past and current students.

3. What mechanisms for collaboration has your unit established?

We ensure communications among departments as they work to implement the initiatives in the “Tool Box” as noted in earlier sections of this narrative. Also, the Dean, Associate Deans, and the Multicultural Coordinator work together to coordinate linkages among departments and across campus. A representative from each department serves on the College climate committee. The College Multicultural Coordinator is a member of that committee, and we establish objectives and goals each year that speak to diversity and climate issues. The Multicultural Coordinator, because of change in title and reporting directly to the Dean, is able to assume a leadership role to impact progress of meeting the goals of the diversity strategic plan.

4. Which recruitment and retention initiatives have been most successful? Which have been least successful? Which could be termed best practices?

Most successful:

- Bunton-Waller Undergraduate Program
- First-Year in Science and Engineering House Departmental visits to minority serving institutions
- Collaboration with research centers (e.g., MRSEC)
- Research funding for minority REU programs

Least successful:

- Standard efforts to recruit minority graduate students are becoming less successful.
- Directing undergraduate students to career paths beyond the medical school option has proven to be difficult, but more work is warranted.

Best practices:

- Bunton-Waller Undergraduate Program
- First-Year in Science and Engineering House

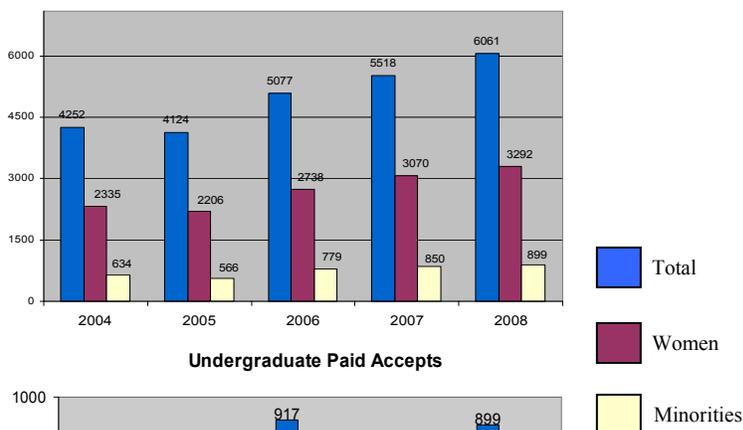
5. What measures of success have you identified to gauge your progress in this Challenge? Include data demonstrating outcomes.

We have measured success by looking at enrollment, retention, and graduation rates. Comparison data from 1997 through 2009 are provided in Appendix IV. The data provided by the Office of the Vice Provost for Educational Equity for this report are contained in Appendix V.

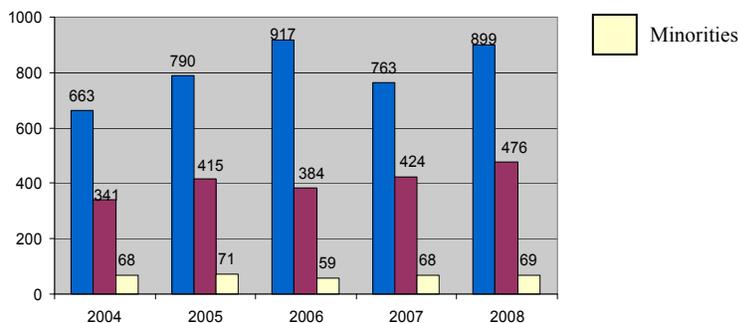
Undergraduate Students

Tables containing the complete sets of data are in the appendices. We first have examined the

Undergraduate Applicants



Undergraduate Paid Accepts

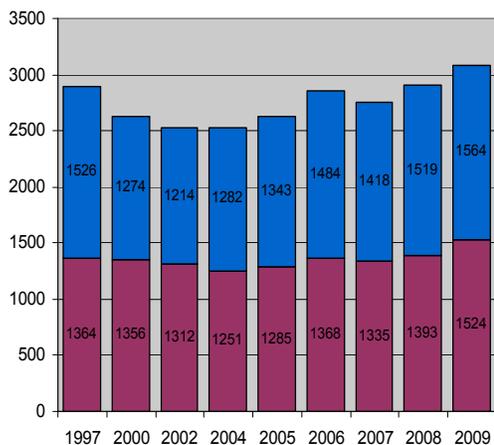


enrollment of undergraduates by comparison of the number of applications versus students who accept admission. These data are shown in the below and show that the numbers of applications to the College have increased in the past 5 years, including those from women and under-represented minorities. Parallel increases in the total number of students and women entering the College have occurred, however we have not had significant success in improving the number of minority students enrolled in the College.

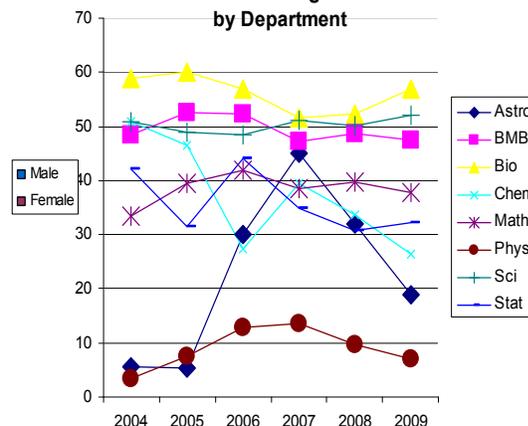
We have also examined the gender distribution of undergraduate students in the College and by department. In 2009, 49.4% of undergraduates in the College are women. However, there are wide

variations by discipline, as seen in the plot on the right hand side of the percentage of women in each of the seven departments and enrolled as Science majors. Appendix IV contains the numerical data for these; in several programs (Biology, Biochemistry & Molecular Biology, Science) the percentage of females is relatively steady and equivalent to males. In both the Astronomy & Astrophysics and Statistics departments, there are a small number of majors so that changes of only

ECOS Undergraduates by Gender



% Female Undergraduates by Department



small numbers of female students have dramatic impact on the above data (e.g. a change of 1 to 9 female students in Astronomy and Astrophysics results in a shift from 5 to 45%). It is obvious from the data that only a small fraction of the students in Physics is female, however this is a trend that is seen nationally. Of note is the apparent declining percentage of female Chemistry majors over the prior four years despite an increase in the number of students. We hypothesize that the new Forensics program in the College, which has ~ 65% female students, is attracting students who might otherwise be Chemistry majors, but we continue to study this effect.

Table 1. Baccalaureate Minority Students

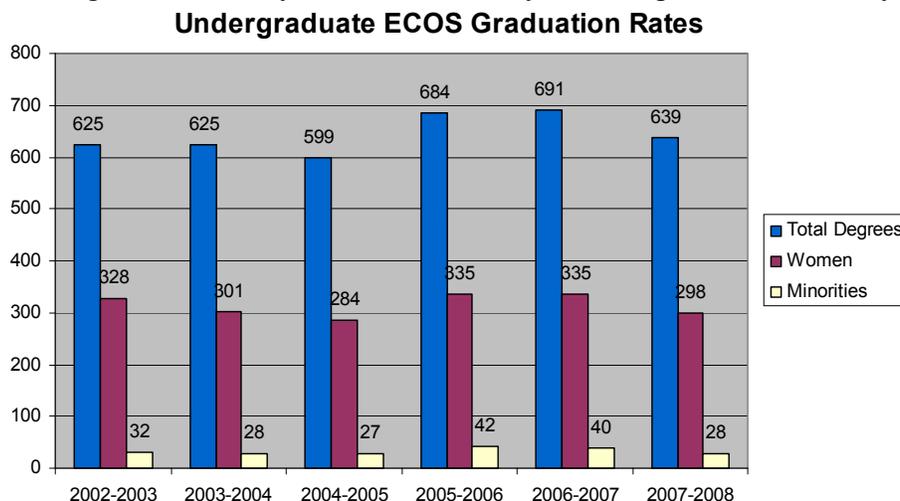
Retention/Year	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008
# Initially Enrolled in Cohort	110	125	120	138	135	131	140
Retention to Semester 3	85.5%	88.0%	92.5%	92.0%	92.6%	91.6%	88.6%
Retention to Semester 5	80.0%	84.0%	85.0%	85.5%	89.6%	85.5%	
Retention to Semester 7	75.5%	80.8%	79.2%	81.9%	88.1%		
Retention to Semester 9	26.4%	16.8%	35.8%	26.1%			
4 - Year Graduation Rate	49.1%	64.8%	45.0%	54.4%			
5 - Year Graduation Rate	73.6%	79.2%	76.7%				
6 - Year Graduation Rate	78.2%	80.8%					

Table 2. Baccalaureate White Students

Retention/Year	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008
# Initially Enrolled in Cohort	441	459	409	517	621	473	557
Retention to Semester 3	92.5%	92.8%	93.4%	63.2%	94.5%	94.5%	91.7%
Retention to Semester 5	88.7%	88.7%	91.9%	90.3%	89.9%	89.6%	
Retention to Semester 7	85.7%	87.4%	88.0%	87.2%	86.3%		
Retention to Semester 9	19.3%	18.5%	19.1%	20.7%			
4 - Year Graduation Rate	64.6%	68.2%	68.2%	66.5%			
5 - Year Graduation Rate	80.0%	85.0%	84.8%				
6 - Year Graduation Rate	82.5%	85.8%					

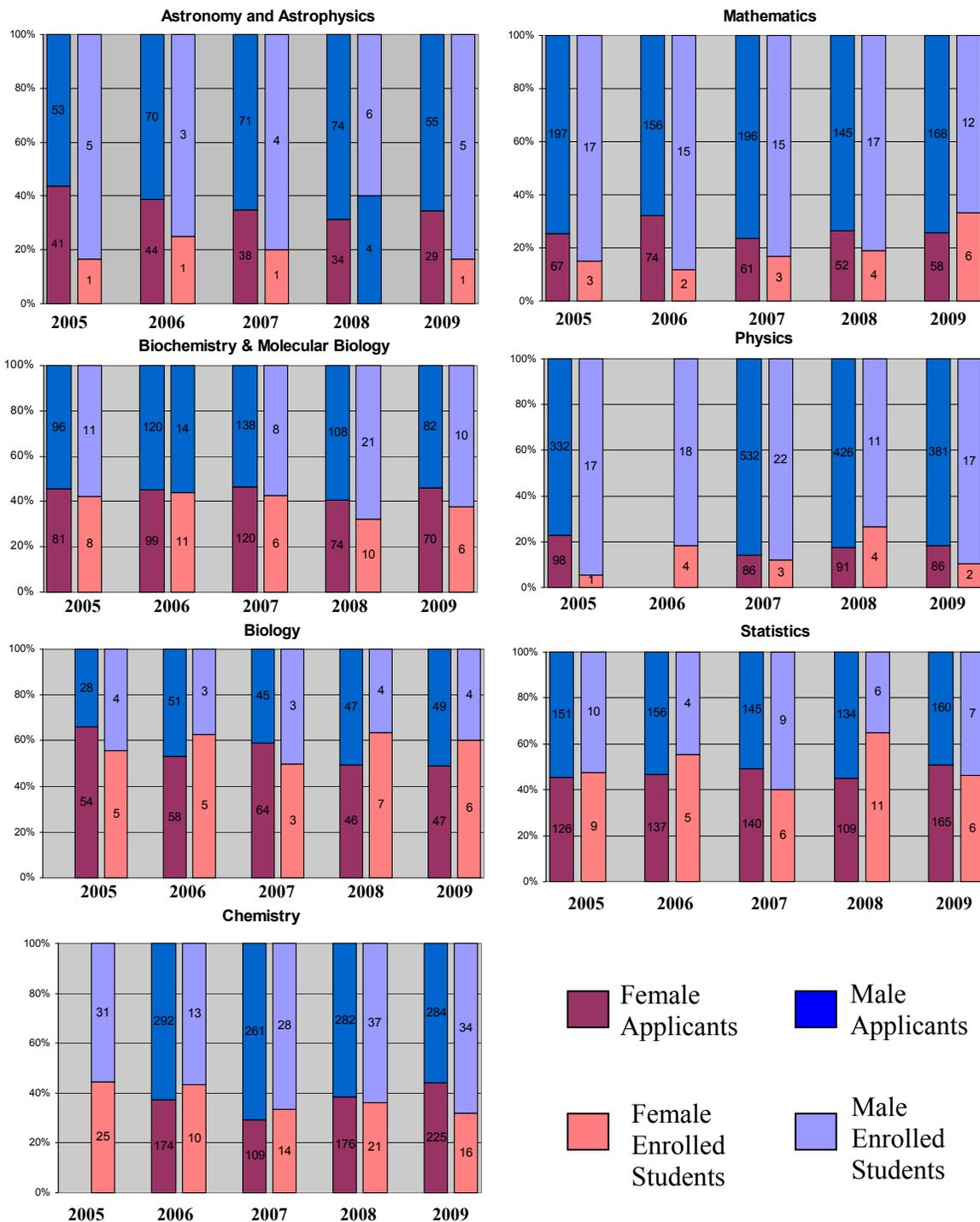
Graduation data of ECOS undergraduates are shown above for the prior six years and are considered together with the retention data in the following tables. Approximately 46% of baccalaureate degrees in the College are earned by women and 4% by under-represented minority students. The below table reports retention and graduation rates for students at University Park who begin their undergraduate studies in the Eberly College of Science.

Retention of students who begin in the College to completion of a degree in the Eberly College of



Science is a substantially different picture. Of the fall 2003 cohort, ~48% of students graduate from the College and minority students graduate from the College at a lower rate than majority students. Others move on to majors in other colleges. A retention sub-committee of the climate committee, with additional membership from across the College, is formulating aggressive actions aimed at improving retention of our undergraduates, particularly underrepresented students (see more details elsewhere in this report).

Graduate Students



We have begun to examine graduate student recruitment data at a detailed level by examining the number of applications and enrollments of students in each department by gender and ethnicity. Complete raw data from 2005 – 2009 are contained in Appendix IV. Consistent with national trends, the numbers of minority students applying to our graduate programs remains low. The chart above summarizes the relative percentages (and numbers) of students who apply and ultimately enroll by gender. These data vary considerably by department in both the number of applications to the graduate programs and the relative percentage of women. For example, Biology has the greatest percentage of women in both the application pool and enrolled students, and Chemistry has the largest number of graduate student applications and enrollment. Non-ideal trends are noted: slightly lower percentages of women in the incoming classes versus applicant pools (Astronomy & Astrophysics, Physics), slightly declining participation of women in Chemistry. We share these evaluations and data with the departments to increase awareness and improve recruitment.

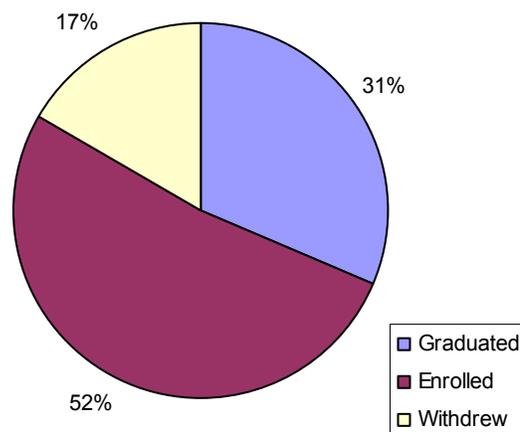
Graduate Student Enrollment by Ethnicity

	2005	2006	2007	2008	2009
Hispanic/Latino	15	15	16	20	22
American Indian or Alaska Native	0	2	2	0	0
Asian American	20	20	24	21	24
Black or African American	9	4	4	4	8
Native Hawaiian or Other Pacific Islander	*	*	*	*	1
Two or more races	*	*	*	*	6
White	320	298	307	330	322
Race/Ethnicity Unknown	*	*	*	*	19
International	320	321	330	330	327
Total	684	660	683	705	729

The above data is a summary of graduate enrollment rates over the past 5 years, and indicates a modest increase in the number of students and slight increase in the number of underrepresented graduate students in the College. Full data are provided in Appendix IV. With a concerted and continued enhancement of efforts among graduate recruitment officers, the multicultural office, and the Dean’s office, we will continue to ramp up our efforts to implement the items in the “Tool Box” (Appendix I) to improve the participation of minorities in our graduate programs. We will track activities that we expect to lead to increased enrollment and retention to determine if these ideas have merit.

We have also examined the long-term success rates of minority graduate students by tracking

**Minority Graduate Students
1999 - 2009**



enrollment and graduation rate, as shown in the above chart. Of the minority graduate students who enrolled in the College between 1999 and 2009, 31% have graduated (with masters or doctoral degrees), 52% are still enrolled, and 17% withdrew from their programs. These numbers lag slightly behind majority students, and our efforts as we move forward must focus on providing the tools and support that will ensure the success of minority students in graduate studies.

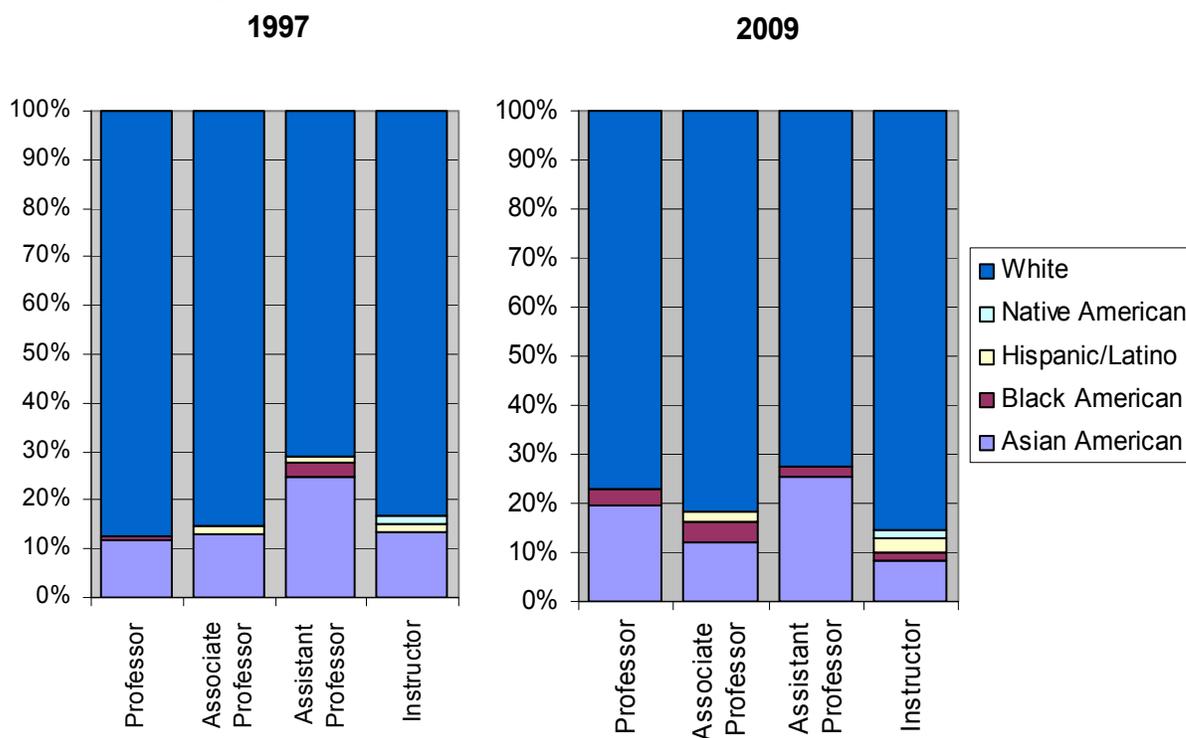
Challenge 4: Recruiting and Retaining a Diverse Workforce

1. How has your unit actively and successfully engaged in locating and recruiting faculty and/or staff from underrepresented groups?

2. What strategies have been implemented to improve identification and assessment of credentials for purposes of hiring and promotion?

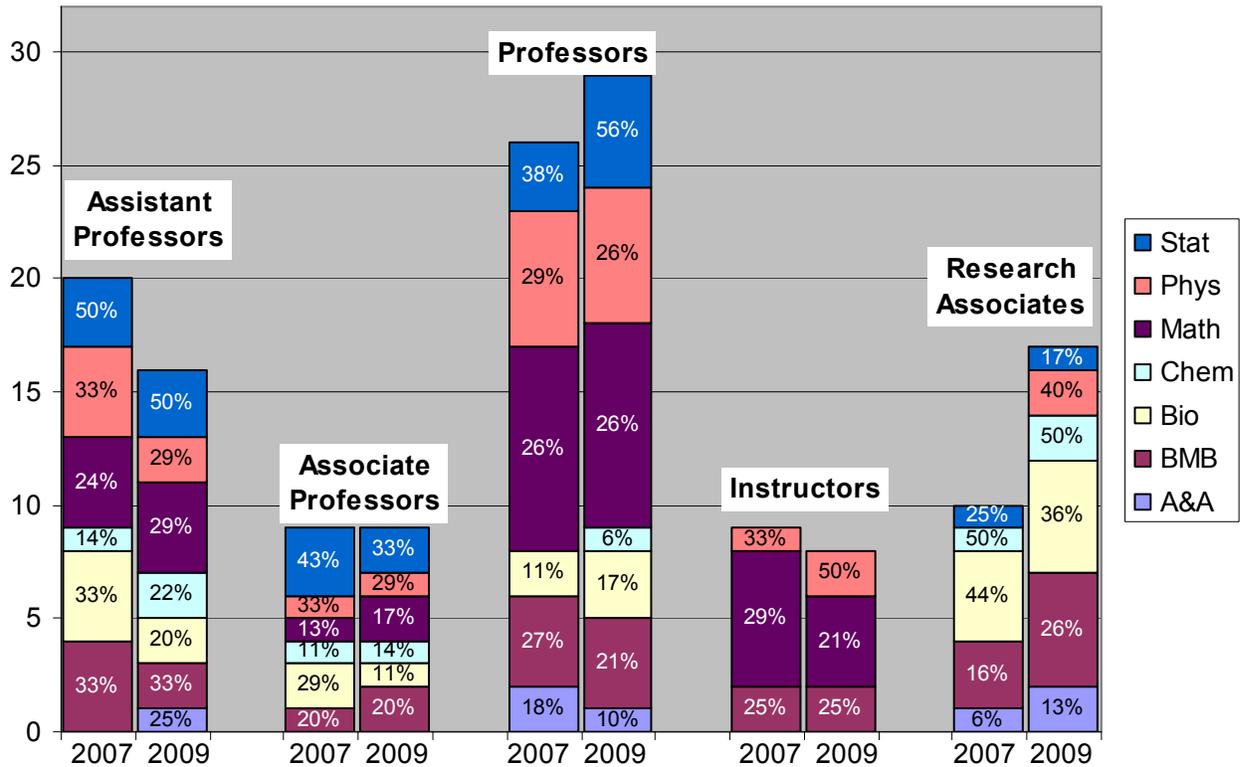
Faculty

Analysis of recent faculty recruiting indicates that while the number of applicants from underrepresented groups remains small, our departments have interviewed and extended offers to a proportionally larger percentage of applicants in these groups. The department of Biochemistry and Molecular Biology in particular has been remarkably successful in hiring faculty from underrepresented groups. The former head of this department is commended for his commitment to recruiting and retaining a diverse workforce.



Appendix IV contains the full data for diversity of faculty by rank in the College. Comparison between 1997 and 2009, a period chosen to reflect long-term changes in diversity as a result of promotions, is shown in the above figure. These data show that we continue to hire a more diverse pool of Assistant Professors, and that over time the diversity of the Full and Associate Professors is increasing.

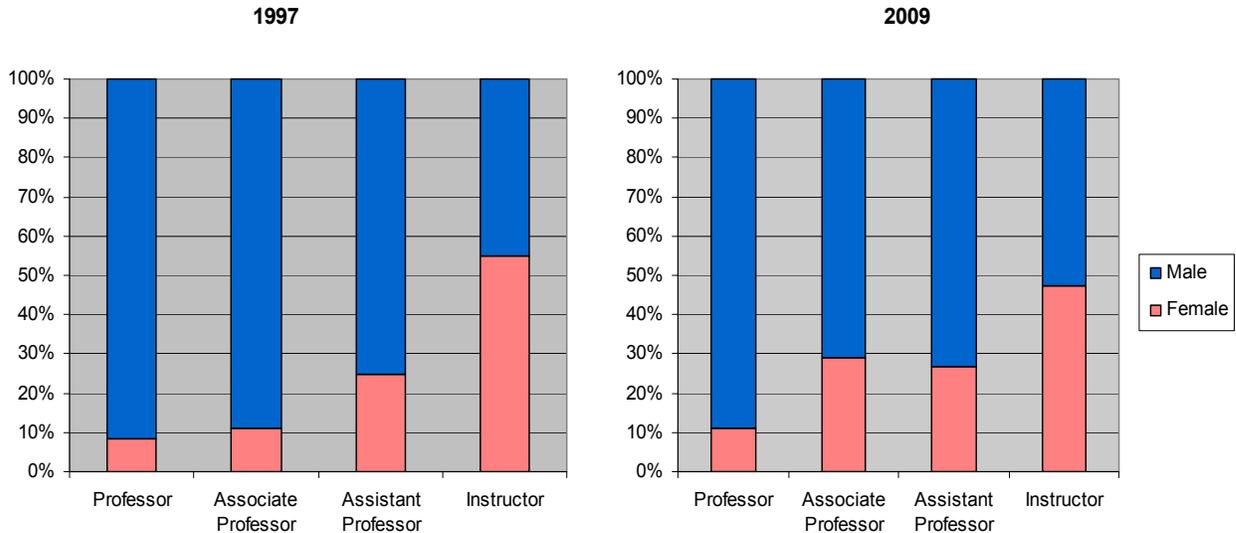
Minority Faculty by Department



University and College financial support and departmental efforts in recruitment have led to an increase in the successful recruitment of female faculty members. Our College goal is to reach 25% females in our tenured and tenure-track faculty ranks within the next 5 years. Currently 27% of the assistant professors in the College are female; in the compiled data in Appendix IV, 19% of our tenure-track faculty members are female. The below figure compares the distribution of faculty by rank and gender over the 12 year period 1997 – 2009. These data show real, long-term improvements in increasing the percentage (and number, see Appendix IV) of women faculty who are tenured and promoted.

Dual career issues continue to have a major impact on our ability to attract female and minority faculty. Spousal hiring is an issue in more than 50% of such recruitments. Finding appropriate employment for the spouse increases recruitment success. While limited employment opportunities on campus and in the community contribute to the challenge of attracting female and minority faculty, we have worked aggressively to find spousal employment opportunities.

We remain committed to the goal of improving female representation in the College, and the Dean reminds faculty search committees to review CIC web sites on women and minority Ph.D. recipients and purchases departmental rosters from the Minorities and Women Doctoral Directory.



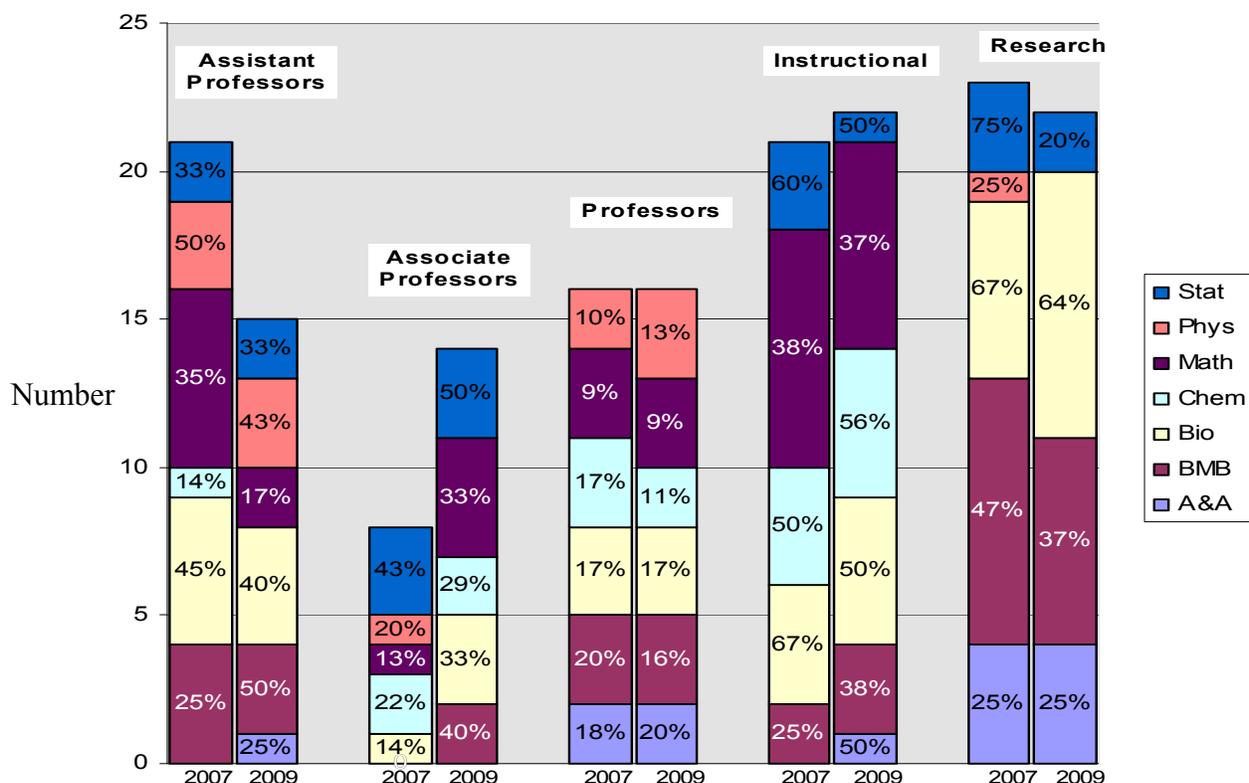
Most departments have found that general advertising is less effective than one-on-one personal contact with potential candidates. This is particularly true for minority candidates and senior female candidates. For junior minority hires, one department has had notable success by identifying qualified candidates early in their graduate training, establishing contact, and making offers of employment before the individual is really on the job market. We have offered this as a best practice in the College. Other departments are beginning to look into this approach.

In cases where we need to hire in a specific sub-discipline, one department has identified potential female candidates by reviewing recent issues of *Science* and *Nature*. Those individuals who published notable articles in the target discipline were subsequently contacted.

We have also considered the number of women faculty in the College by department, summarized in the below figure (full data in Appendix IV). For example, the Chemistry department tripled the number of women on its faculty over several years and was ranked third in the percentage of female faculty among the top 50 research departments nation-wide. This success, too, was in part due to the leadership of the former department head. However in the last two years, the number of women faculty in Chemistry has declined; we have redoubled our encouragement and support of recruiting top women candidates to reverse this trend.

In general, our departments of Astronomy & Astrophysics and Physics continue to have the smallest applicant pools of female faculty candidates. We are providing extra encouragement and incentives to foster hiring of females onto the tenure track in these departments. College leadership remains committed to increasing female representation in these disciplines, and there has been progress in the Physics department.

Female Faculty by Department



Creating a more family-friendly environment has improved the overall climate for women and men in the College. We communicate and embrace the policy enabling assistant professors who become new parents to pause the tenure clock for one year without penalty. Female faculty members also are encouraged to consider a one semester leave from teaching responsibilities following the birth or adoption of a child.

Staff

The College is committed to strengthening the ties with diverse communities outside of the locality of State College to improve the representation of ECOS staff from underrepresented populations. The College Human Resources Manager is working with the Employment & Compensation Division of the Office of Human Resources (OHR) to explore mechanisms whereby we might make some progress in the area of diversity.

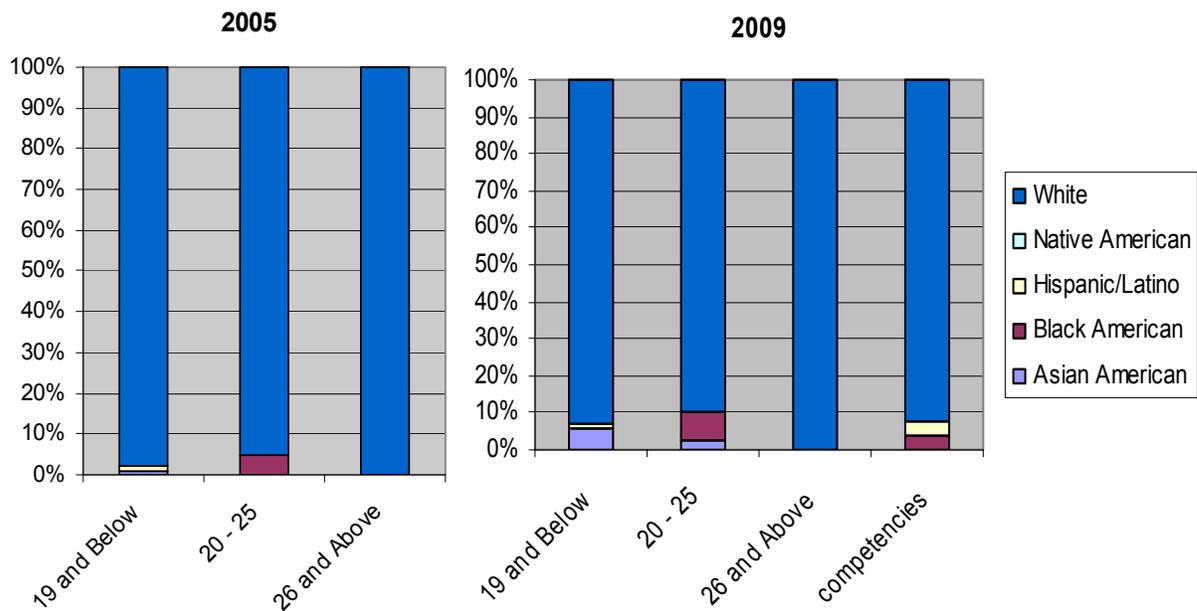
A large percentage of our staff positions are HR86 positions. Sometimes these jobs serve as an effective transition between the undergraduate and graduate studies for our students. We will poll our current HR86 staff members to see why they took the position and to see how it is or is not helping them to achieve their professional goals. If our belief that this is a good transition route for some students is borne out in the data, we will advertise this possibility to those students who might benefit and might be encouraged to attend graduate school this way. Certainly some of our minority students will fall into this category.

One additional strategy being explored by the College is the possibility of posting vacancies at Grade 15 and 16 simultaneously at Step One (inside PSU) and Step Two (outside PSU); this could increase the diversity profile of applicants, increasing the possibility of additional interviews and hires. We have tried this approach for a number of openings without obvious success, but this approach continues to be a possible option.

Still another strategy is a more focused participation in OHR diversity programs with interns and summer work experience programs, with an aim to transitioning participants to full time, regular jobs. Our College historically has rarely participated in these programs, and we want to explore how we might encourage greater participation.

Yet another proposal is to review carefully diverse applicants from positions that have been filled by someone else. Then, when we post similar positions in the future, if the previous candidate is deemed qualified, we would ask the Employment and Compensation Division to encourage the individual to apply, helping to increase the diversity of the pool and the possibility of interview and selection.

All these approaches give us the opportunity to increase diversity among the group of individuals interviewed for staff positions. The challenge of not having an indigenous diverse community in State College has strengthened our resolve to reach out to other communities to create a mutually beneficial plan.



The above plot of the ethnic diversity of the staff in the College examines the initial outcomes of our efforts over the last four years and is a compilation of data from Appendix IV. In this time period, the percentage of minority staff members in the College increased from 3.0% to 8.3%. We are continuing our efforts to further increase diversity of our staff: Over the past 12 months, we have announced 21 staff vacancies (not counting HR86 positions), received 1178 applications of which 136 were from underrepresented individuals. We interviewed 72 individuals of whom 4 were underrepresented, and we hired 14 white females, 5 white males, 1 asian female and 1 black male.

3. What retention strategies have you implemented in your unit to retain and promote the success of faculty and/or staff from underrepresented groups?

Faculty

In talks by the Dean and other means, we try to make it clear that we want all faculty members in the College to succeed. The Dean has instituted regular meetings with female faculty members and follows up regularly on issues and needs expressed in those meetings. We host social events for female faculty and their families and for pre-tenure faculty and their families with the aim of fostering a sense of community and facilitating both research and personal connections.

We have also implemented and continue to improve a web resource for new faculty that points them to much of the information they need to begin active and successful research and teaching careers at Penn State (see <http://www.science.psu.edu/newfacultyguide/>). Many junior faculty members re-invent the wheel, discovering the needed and available resources on their own with great expenditure of time and effort. Minority faculty and female faculty are perhaps less likely to find someone to point them to appropriate resources, so we believe this information tool is particularly helpful for female and minority faculty.

Many of the retention efforts happen at the department level. All of our departments have instituted formal or informal mentoring programs to help promote the success and retention of junior faculty members. A little extra monetary support to carry someone through a dry spell, or a small reduction in teaching or service load during a time when a project is wrapping up or a big proposal has to go in has been shown to do much to facilitate success and foster institutional loyalty. We have several specific success stories where this type of intervention made a big difference. We will continue to share these ideas and experiences at our Executive Committee meetings to encourage every department to think creatively about retention strategies for their minority and female faculty.

The literature teaches us that retention of female and minority faculty members may require greater respect and value be given to collaborative work and community service activities, and that careful attention be paid to how letters of recommendation and evaluation are written and interpreted. Facilitating appropriate respect and value for collaborative work will be important in our College in this regard. We have already instituted procedures where by we ask for statements from a faculty member's collaborators to avoid biases against the value of collaborative work.

Based on what we learned from Virginia Valian during her visit to campus in November 2003, we have made our department heads, search committees, P&T committees, and the female faculty members in the College aware of the research, which shows that both men and women typically write weaker letters of reference for women than for men. Women are described with fewer superlatives, with more "grindstone" adjectives like hard working, and their excellence is qualified by their gender (men are simply "the best"; women are "the best woman").

We perform annual assessments of the P&T process to look for flaws and biases in our processes, in what we ask for in letters of reference, in how we choose letter writers, etc. The Dean appoints the College P&T committee each year. In 2009 the committee is composed of nine faculty members, all of whom are male: one is Asian-American and the other 8 members are white. The committee is trained to be aware of and ensure respect for differences in research methodology and scholarship.

The data above indicate the percentages of women associate and full professors are increasing as they successfully achieve tenure and promotion. From 2000 – 2009, thirty four female faculty members have been hired by the College, five of them with tenure. Twelve of the 34 have been granted promotion and tenure following the normal course of review; two departed Penn State prior to gaining tenure; fifteen are still on the tenure track.

The Dean actively seeks opportunities for endowed chairs and professorships to be filled by women and minority faculty members, both for recruiting purposes and to recognize current members of the faculty. Thirty-four faculty in the College hold endowed chairs, professorships and faculty fellowships. Of these, five are female, one is African American, and four are asian. (These do not include distinguished professorships or Evan Pugh professorships.) The numbers of women and minorities holding endowed positions has increased significantly in the past 10 years.

Finally, in situations where highly successful faculty members have obtained offers to move to other institutions, the College has worked hard to counter those offers. These efforts have been variably successful. We will continue those retention activities that are having a positive impact. For minority faculty members in particular, proactive retention strategies before outside offers are in hand are particularly important.

Staff

One type of staff job that historically attracts minority candidates is the HR86 research support category. These positions are intended, by their design, to meet short term research needs, and the people employed in them typically move on, after a few years, to graduate school or professional positions in industry. There are relatively few opportunities for advancement and continuing employment, given the high degree of specialty involved in particular positions. However, we are committed to working with employees who wish to remain, but whose current projects are ending.

Another area where we have had success in hiring minorities is in the IT job category. One of the key issues—competitiveness with the national IT market— has been difficult for us to address in this time of budget reductions and so retention is a major concern for us.

Although we currently have no diversity among the most populated staff job families (staff assistant and administrative positions), we have sent almost all of our staff supervisors to the University's Mastering Supervision program and will continue initiatives to enhance the effectiveness of management practices to ensure appropriate retention and development of all staff members. The Associate Dean in the College has presented a workshop on supervisory skills hoping to sensitize some of our supervisors to their most egregious behaviors thus making the ECOS a better place to work and to stay.

For professional and leadership development opportunities for staff members from underrepresented groups, we offer units some financial incentives, but supporting these individuals for future career opportunities is challenging. Four of the eight are already at relatively high grades or levels, so advanced career opportunities at Penn State will be very limited. Three others are employed in HR86 research support positions, working in fixed term appointments on specific short-term projects, funded by soft money. One is a Grade 15 staff assistant whose job recently expanded, and whose position is under review for possible promotion. However, the College plans

to partner with OHR to explore the possibilities for professional and leadership development opportunities.

4. Which recruitment and retention strategies have been most successful? Which have been least successful? Which could be termed “best practices”?

Most successful: The Dean has made resources available to the departments to recruit the highest-qualified underrepresented minorities for inclusion in the final candidate pool.

The Dean and the Provost have worked together to provide the most competitive salaries and start-up packages possible. Highly qualified women and minorities are in high demand, and the competition for these individuals is fierce.

We have seen that the personal commitment of a department head to increasing the diversity and gender balance of the department is a critical component of success in recruiting female and underrepresented faculty.

Family friendly policies and initiatives have proven to be very important in both recruitment and retention of faculty and staff. We regularly communicate to all new faculty the policy allowing assistant professors who become new parents to pause the tenure clock for one year without penalty. In addition, female faculty members also are provided with one semester leave from teaching responsibilities.

Least successful: Efforts to diversify our candidate pools have not been as successful as we would like.

An area of real need that falls outside the purview of the College is the need to provide more, high quality day care for infants through age 3 on campus. Day care problems can very negatively affect both the happiness and productivity of young parents and has negatively impacted recruiting.

The Provost’s Distinguished Post-doctoral Scholar program, aimed at bring minority post-docs here with the intent to offer them faculty positions, has proved to be ineffective. The program has been eliminated.

We have not done a good job of creating a sense of community among our faculty of color.

Current HR strategies of recruiting staff internally have only maintained the status quo in numbers of minority staff members.

5. What measures of success have you identified to gauge your progress in this Challenge? Include data demonstrating outcomes.

Staff Data

We have used the data on numbers of underrepresented individuals in each job family to gauge our success. 8.3% of our staff are from underrepresented groups, and 4.4% of our faculty are from underrepresented groups. In the faculty ranks, we do not consider Asian Americans underrepresented (17%).

The above charts compare data for faculty and staff as indicated, with full data sets from 1997 through 2009 contained in Appendix IV. The data provided by the Office of the Vice Provost for Educational Equity for this report are shown in Appendix V.

Departments and the Dean's Office should report annually on their success in recruitment, retention, and development of members from diverse groups, including what actions they took to try to recruit members from diverse pools.

Challenge 5: Developing a Curriculum That Fosters Intercultural and International Competencies

1. What initiatives has your College taken in supporting multicultural curriculum efforts?

To foster multicultural and racial understanding

Beginning in FA'05, all Eberly College of Science First Year Seminars required students to attend the Race Relations Project, an hour and a half dialog on race facilitated by trained students. "The Race Relations Project (RRP) is comprised of a select group of trained undergraduate students who facilitate Socratic-type conversations with their peers on the topic of race relations. Their mission is to build a vision of what is really happening with race relations in this generation by engaging participants in conversation about their personal experiences with the issue. They are not attempting to teach or to preach, but to deepen and expand the number of voices and views included in this exploratory dialogue. After initiating thousands of conversations on race relations, it has been shown that Socratic dialogue provides an opportunity for individuals to constructively question one another's views while critically examining their own. A dynamic forum such as this, where every view is open to further inquiry, forms the heart of higher education and the foundation of the Race Relations Project." -from Dr. Laurie Mulvey, RRP

Although very few College of science students look forward to the RRP experience, last year 87% found the conversation worthwhile and 93% felt they were allowed to express their own views and experiences. 76% said the conversation gave them new insights into race and race relations. More than 60% of the science majors who filled out the response survey thought that they were likely to use insights from the RRP program in their future career. Close to 70% of the PSU 16 students said, they would recommend the RR project to their peers. This is noteworthy when compared to the less than 25% who looked forward to attending. Two-thirds of the PSU 16 students responded that they would consider continuing the RRP conversation further.

The climate and diversity committee collaborated with the Africana Center, the College of Liberal Arts, the Race Relations Project, and the Office of Educational Equity to offer a weeklong program celebrating Martin Luther King, Jr. The program included a host of activities that focused on promoting racial diversity for the Penn State and surrounding community that included speakers, panel discussions, and the Human Race Machine, an interactive machine that allows people to see themselves as a different race.

To Foster International Competencies

The Director and Associate Director of the ECoS International Office have made presentations about Study Abroad to the First-Year Seminars of all academic programs in the College.

In 2008 – 2009, nearly 100 science students from all majors in the College have participated in study abroad in 49 different locations throughout the world. We have worked with the Office of the Registrar to provide more detail on the transcript that depict the specific experiences of ECoS students who have engaged in study abroad. The Education Abroad Records Manager incorporates all of the students' courses from abroad on their Penn State transcripts. There is also a notation on the bottom of the transcript that indicates the semester the student was abroad together with the location and University name. Science students who have completed the requirements for and applied to earn the International Science Certificate have an additional notation added to their transcripts.

We are working with our European partner schools to package segments of Penn State degree programs so that it will be clear to our students that they can complete pre-approved courses abroad in satisfaction of ECOS degree requirements. We expect to continue our program of sending program faculty abroad in furtherance of this goal.

Students enrolled in the Science/MBA program are required to complete co-op assignments, which may be outside of the country. We are developing an extramural option to add to every ECOS undergraduate degree program that will strongly encourage our students to participate in externships, internships, international, and/or co-op experiences.

Given the great likelihood that experiences in Asia will become ever more important to our students, we have included the National University of Singapore and King Mongkutt's University of Technology in Bangkok as international partners. We have very recently signed an agreement with Peking University in Beijing, China to enable the promotion of research and education cooperation by facilitating exchanges between PKU and Penn State, including graduate and undergraduate students.

In Summer 2009, the Mathematics Department in ECOS co-organized the second international summer program on differential equations with Peking University. Twelve Penn State students traveled to China to participate in coursework, projects, and cultural experiences. In July, 2010 students from Peking University will visit Penn State for summer courses and research projects.

We are developing, with the cooperation of the central administration, a program of summer courses for international College and pre-college students with the aim of improving the international flavor of the summer session and enhancing the internationalization of our students.

To foster ethical and cultural understanding

The first action item of the Eberly College of Science 2008 – 2013 strategic plan articulates efforts to enhance the undergraduate experience to better prepare our graduates to be the scientific leaders of the future. A central goal is to infuse ethics into the curriculum and we therefore have opened discussions with Dr. Nancy Tuana, Director of the Rock Ethics Institute to accomplish this. Dr. Tuana was an invited speaker at our most recent Advisory Board meeting, and described approaches and strategies for incorporating ethics into our existing courses. In the next academic year will be continuing to work with the College on these efforts.

2. What research and teaching in your college has advanced the University's diversity agenda?

This is a long-term goal of the College to integrate the University's diversity agenda into research and teaching. The College has happily agreed to collaborate with the Office of Educational Equity to develop modules to assist with the introduction of the University's diversity agenda into the Science curriculum.

3. How is diversity integrated into the curriculum of your college?

See Race Relations Project description above. Also, in survey courses with non-technical emphases, heightening the contributions of other cultures and nations to the development of the underlying science has given students an enhanced appreciation of the universality of the field and has provided the cultural framework within which the science fits.

4. Which strategies for developing a curriculum that fosters intercultural and international competencies have been most successful? Which have been least successful? Which could be termed "best practices"?

Most Successful: In survey courses with non-technical emphases, heightening the contributions of other cultures and nations to the development of the underlying science has given students an enhanced appreciation of the universality of the field.

Least successful: It has been difficult to insert intercultural and international elements into upper division science and mathematics courses since the subject matter itself is highly acultural.

Best practices: In non-technical survey courses, teaching the history and social factors involved in a particular scientific discovery before teaching the discovery itself has not only provided the cultural framework within the science fits but has improved the teaching of the science itself.

5. What measures of success have you identified to gauge your progress in the Challenge? Include data demonstrating outcomes.

We measure success by the number and kind of diversity related activities we have integrated into our curriculum, acknowledging that the opportunities in science are limited. We are pleased with having incorporated the Race Relation Project experience into our First Year Seminars.

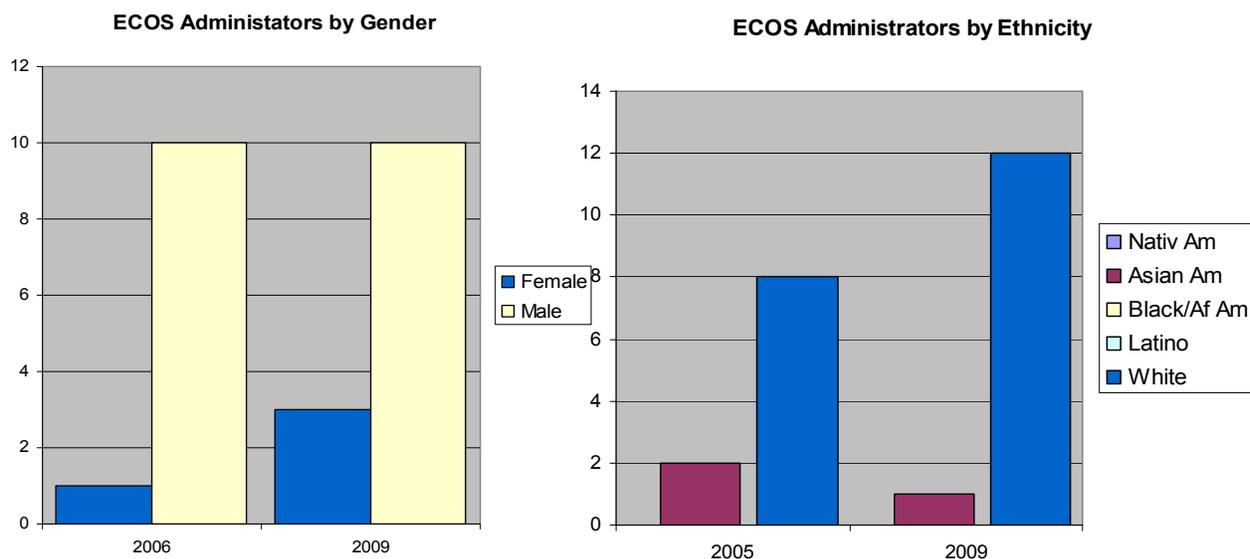
Challenge 6: Diversifying University Leadership and Management

1. How are unit leaders actively involved in diversity efforts?

We continue, and build on, the practices that have enhanced the ECOS community climate and diversity in the last few years. Major areas of progress include a significant increase in the proportion of female faculty and the establishment of active College and departmental Climate and Diversity Committees. Moving forward, the practices of the College will build on our past success as we implement new programs and have a strategic leadership group consisting of the Dean, Associate Deans and the College's Executive Assistant to the Dean. We have regular discussions

and planning with the College Executive Committee and periodic involvement of other faculty and staff in climate and diversity planning.

2. What is the diversity profile of the unit’s administrative and executive levels?



Included in the 2009 data are the two acting Associate Deans in the College. The three women serving in administrative roles are a department head (Barbara Garrison, Chemistry), associate dean (Karin Foley), and acting associate dean (Mary Beth Williams).

Appendix IV contains specific data for the gender and ethnicity of the administrators in the College.

3. Describe the procedures followed to create both diverse applicant pools and search committees for administrative searches. How is information about expectations regarding candidates’ skills and experiences with managing diversity communicated to the committee and the candidates?

Under the leadership of the Dean’s office, departments receive instructions that are conveyed to all search committees regarding the guidelines and procedures for academic and administrative searches. As searches are carried out, the Dean regularly talks to department heads about the importance of finding and making offers to minority and female candidates.

In April 2009, several members of the College attended the Academic Leadership Forum’s Strategies and Tactics for Recruiting for Diversity and Excellence (STRIDE) workshop. The half-day session identified potential obstacles and biases in evaluating faculty applications, and described strategies for recruiting a diverse applicant pool. Based on the positive feedback, our long-term goal is to train a group of faculty to give the STRIDE presentation each fall to the departmental faculty search committees.

4. How does your unit identify staff and faculty from underrepresented groups who have administrative aspirations and potential, as well as assist them in developing leadership and management skills? How are such individuals supported in identifying opportunities for advancement?

The College has also encouraged employees at all levels in its organization to participate in the University's Leadership and Management Development initiatives and has provided financial support to make it possible. In the case of staff members, this has involved many female employees and has contributed to their opportunities to move into higher-level positions. We will continue these efforts and expand a process begun informally of consciously offering developmental opportunities to potential future leaders.

5. Which strategies for diversifying your unit's leadership and management have been most successful? Which have been least successful? Which could be termed "best practices"?

Progress in moving minority and female faculty and staff members into leadership positions is proceeding at a pace slower than anticipated. We will continue to nominate minority faculty and staff for the CIC Academic Leadership Program if they are interested. We have also developed a list of individuals, including female and minority group members, whom we believe have the potential and inclination to move into leadership positions. We will ensure that these individuals have opportunities to advance and hone their leadership skills by appointing them to head up key activities in the College, such as the P&T committee and key search committees. In conjunction with active searches in the past few years, the Dean has had very direct discussions with women faculty leaders about their interest in administrative positions. In 2009, Professor Barbara Garrison agreed to serve as the Head of the Chemistry Department.

The College has also initiated an Administrative Fellow program to provide faculty with first-hand experiences and exposure to administrative functions in the College and across the University. Administrative Fellows are selected from among faculty who express interest. In summer 2009, Professor Chuck Fisher (Biology) and Associate Professor Mary Beth Williams (Chemistry) were selected to serve for one year as the first Administrative Fellows and Acting Associate Deans for Research and for Administration and Planning, respectively. We plan to continue the Administrative Fellow program to continue to broaden the participation of faculty in administrative functions in the College.

6. What measures of success have you identified to gauge your progress in this Challenge? Include data demonstrating outcomes.

We will measure success by seeing the numbers of women and underrepresented individuals in leadership and management positions. However, for our minority and female tenure-track faculty members, achieving tenure is the most important prerequisite to leadership development. We purposefully focus our efforts and energies in mentoring these faculty members to maximize their research and teaching accomplishments. As these faculty members achieve tenure, we will look for opportunities to bring them into leadership roles in the College, such as center directors, committee chairs, departmental leadership roles, department heads, CIC Academic Leadership Programs, PSU leadership programs, etc. It is important, however, that we not derail their academic achievement in our push to have female and minority leaders in the College. The goals and aspirations of the subject faculty members will dictate which opportunities are appropriate.

Comparison data from 1997 through 2009 are provided in Appendix IV. The data provided by the Office of the Vice Provost for Educational Equity for this report are contained in Appendix V.

Challenge 7: Coordinating Organizational Change to Support Our Diversity Goals

1. How does your unit's strategic plan reflect the importance of diversity for meeting your goals and objectives?

The importance of diversity is reflected throughout our 2008 – 2013 Strategic Plan with specific goals within our action items.

Action 1: Enhance the undergraduate major experience and position students to become the scientifically-trained leaders of tomorrow.

- Promoting working and learning in a diverse environment
- Increase our emphasis on substantive international learning experiences
- Infuse engagement with ethical questions into the curriculum

Specific actions include the creation of the Student Academic Achievement Center in Ritenour, where undergraduate student support services will be centralized, including a new space for collaborative learning and tutoring. As part of this effort, creation of a new Center for Excellence in Science Education, which will be housed in the Student Academic Achievement Center, is underway with the goals of promoting and supporting faculty-driven improvements in teaching and learning in the College.

Action 2: Continue to increase the numbers of undergraduate students who apply for admission to the Eberly College of Science and further engage those admitted to matriculate.

- Build on current recruitment programs such as Bunton-Waller programs and initiate additional approaches to further increase the diversity of our applicants
- Work to increase undergraduate applications from international students

Action 3: Improve the educational experience of students across the University who enroll in our courses to fulfill general education requirements or to build foundations for their majors.

- Incorporate intercultural/multicultural components in our core courses where possible
- Promote and support improvements in teaching and learning through the Center for Excellence in Science Education.

Action 4: Enhance the quality and diversity of our graduate students and provide those students with the research experiences and additional professional preparation that will set them on track to move up to leadership positions in a range of professions.

- Improve the quality and diversity of graduate students accepted to our programs by providing larger stipends, improving marketing, and building on recent successes.
- Provide more career information, counseling, and preparation.
- Provide more leadership training opportunities for graduate students.
- Increase the opportunities for graduate students to engage in international experiences.

Action 5: Provide support and encouragement for every member of the College community – students, staff and faculty – to reach the highest levels of intellectual achievement and personal and professional growth.

- Increase the diversity of our leadership
- Provide development experiences and training for future leaders
- Continue our focus on fostering a family-friendly environment
- Conduct periodic climate surveys
- Build on activities that have proven to be successful (e.g. the College Climate and Diversity Committee)

Action 6: Extend our progress in improving our departments by promoting the success of our faculty and by recruiting outstanding new faculty members, with extended efforts to increase the diversity of faculty.

- Increase the number of qualified minority faculty who receive and accept our offers through targeted and aggressive recruiting
- Monitor faculty hiring processes and practices to ensure that applicant pools match national availability
- Obtain and share knowledge about gender and race equity literature
- Work to increase the number of faculty offers made to minority candidates
- Sit in on P&T meetings to ensure equity
- Encourage recruitment, acceptance and matriculation of minority graduate students and postdocs
- Participate in local and national workshops on gender and race issues

Action 7: Enhance the creative environment in the College and support the highest levels of intellectual accomplishment within and across disciplines.

- Create a vibrant environment in which multi- and interdisciplinary research and teaching can thrive and be rewarded
- Maintain access to highly talented students and researchers by further connecting with the international community.

Action 9: Enter a new era in outreach with enhances local and regional programs and a presence on the national stage to address the goal of enhancing public understanding of science.

- Become active participants in the PA STEM Initiative, to increase the number of students, especially members of underrepresented groups, who consider STEM careers
- Enhance the educational benefits to underrepresented and disadvantaged populations

2. What organizational realignments, systems of accountability, resource mobilization and allocation strategies, and long-term planning strategies have been implemented by your unit to ensure the realization of the University's diversity goals?

While this question has been addressed under several Challenges, the ECOS has made a number of deliberate changes to upgrade the position and scope of authority of the Executive Assistant to the Dean and Director, Science Diversity Initiatives. In addition, we have expanded resources to support the work of the office.

The College multicultural coordinator now reports directly to the Dean under the amended title of Executive Assistant to the Dean. Resources to support this new alignment of duties and responsibilities are provided to sustain ECOS diversity initiatives annually. In addition, this position is now a member of the ECOS Executive Committee. This office also partners with the Office of Educational Equity in the Graduate School to enhance recruitment and retention of underrepresented groups.

The Associate Dean and Executive Assistant to the Dean also work collaboratively with the Graduate School, with our departmental Graduate Recruitment Chairs, and with the College Development Office to identify additional resources for minority graduate fellowships, for graduate student recruiting initiatives, and for partnership activities with minority-serving institutions.

3. What budget and development approaches have been implanted by your unit to ensure financial stability of diversity priorities?

It is well publicized and understood by the academic departments that resources are available from the College to support the recruitment of female and minority faculty. In partnership with the University, the College assumes a percentage of the salary of female and minority faculty members to encourage the departments to recruit aggressively with the intention of yielding new tenure line faculty. The College has encouraged departments to submit the highest-ranking minority and female candidates in all searches for consideration of appointments. Resources are provided to the departments to cover the costs for bringing these candidates to campus.

4. Describe the systems of accountability and reward that support the achievement of diversity goals.

It has been standard practice to recognize and reward, in the evaluation of department heads, all efforts to diversify the faculty. Success of this practice is evidenced by the progress that has been made in the representation of female faculty members. We are optimistic that long-term, we will see similar progress in the ranks of minority faculty. If we sustain this effort, we will see progress reflected across all ranks of female and minority faculty members. We intend to build on the ten endowed chairs and professorships that are currently held by female and minority faculty members.

Beginning in 2009, the College has asked the departments to track the number of women and minority applicants for faculty positions and report this data prior to making job offers to new faculty.

5. What partnerships, with internal or external units and/or constituencies, have you created to advance the University's diversity goals?

Most important to our College is an on-going effort to support graduate student recruiting, graduate student fellowships and relationship-building initiatives with minority-serving institutions. We are encouraged by outreach activities by the academic departments to develop partnerships with minority serving institutions to build on the practice that we have established. Department heads have traveled to HBCUs and faculty have been invited from the University of Puerto Rico, HBCUs, and HSIs to collaborate and participate in research activities with their counterparts here in the College. In some cases, these collaborations have resulted in the submission of joint proposals.

6. Which strategies to coordinate organizational change in support of diversity goals have been most successful? Which have been least successful? Which could be termed "best practices"?

Most successful: We have established a College Climate and Diversity Committee on which membership is representative of constituent units, including faculty, students, staff and senior administration. Objectives for the committee are selected based on input via surveys, interviews, committee member comments, etc. Most recently, the Committee has addressed student advising, mentoring for very junior faculty, issues relating to maternity, Martin Luther King (MLK) day activities for the College, and oversight of resource allocation to the departments to fund activities/actions to improve the climate for members of underrepresented groups in the College.

Formation of departmental Climate and Diversity Committees has been one of our most successful best practice strategies. Many issues and concerns are department specific and can best be addressed at the local level. Each departmental committee has a representative on the College level committee. The departmental committees surveyed their constituencies and developed action plans based on that input. Our Multicultural Coordinator has worked with the departmental committees to develop plans to improve the overall multi-cultural atmosphere and welcoming nature of the College. Joint departmental and College Climate and Diversity Committee meetings are used to share best practices and align goals and strategies.

A cultural change has occurred in faculty hiring where discussions of quality are no longer an obstacle in the recruitment of female and minority faculty members. The commitment to recruiting outstanding female and minority faculty is now accepted without the conflict of maintaining academic excellence.

Least successful: We had planned to have a diversity recruitment coordinator identified in each department to focus on graduate student recruitment. This has not happened to the extent we would like, but we continue to believe that this approach has merit. We will work harder to ensure that coordinators are appointed and will bring them together periodically to share practices and experiences.

Best practices: None identified yet.

7. What measures of success have you identified to gauge your progress in this Challenge? Include data demonstrating outcomes.

We will measure success in coordinating organizational change to support our diversity goals by measuring our success on the other challenges.

CONCLUSION

Consistent with Penn State's decentralized structure, our College embraces the responsibility for addressing the dimensions of diversity noted in this plan and for successfully fulfilling the challenges and targeted areas for improvement within each challenge for our College. We are not satisfied with our progress, or with the buy-in and support, we have achieved across the College.

We have made progress toward achieving some of the goals that we have set out for ourselves in this report, and we look forward to participating in and driving, as active and engaged leaders, the over-all effort to transform our College and Penn State into a truly "pluralistic learning community characterized by excellence".

APPENDIX I – The “Tool Box”

A “Tool Box” to Foster Diversity in the Eberly College of Science

Overall Goals: Consistent with our vision of being a premier center of research and education in the basic sciences, we will make a significant contribution to enhancing the participation of individuals from historically under represented groups in the mathematical, physical, and life sciences. At the undergraduate level, we will work to achieve the same college retention rate for minority students as for majority students. At the graduate student level and at all faculty levels we will work to achieve minority representation at least equal to the national levels of these populations. The real goal is to go beyond the national levels and provide leadership in this area. To achieve these goals, we must certainly sustain our current populations and grow representation at every level. The best recruiting tool we have is the success of the minority individuals who are already here.

To support achieving these goals, we offer the following suggestions, or “tool box”, for use by the entire college including the Dean’s Office, departments, programs, and student recruiting and advising centers:

FACULTY DIVERSITY

Faculty Recruitment Tools

- Develop a plan for maintaining current progress in achieving diversity in each department. The success of our current minority faculty members is our best recruitment tool.
- Actively recruit minority candidates for the Provost’s Distinguished Post-doctoral Scholar program and explore the provision of additional salary support through the program.
- Advertise positions in publications/newsletters directed at women and minorities that are published by discipline-specific professional societies.
- Track our own outstanding BS and PhD recipients and actively recruit them when they are ready for faculty positions.
- Remind all search committees of the goal to recruit minority faculty and of the incentives available for minority hiring.
- Aggressively identify and seek out minority candidates. Commit to achieving increased diversity among the applicant pool for every search.
- Recruit candidates vigorously and include the following elements in the process: provide outstanding start-up packages and salary offers; carefully organize campus visits, include meetings with other minority faculty; address dual career issues early in the search process, including the use of other University partners across campus to find possible solutions for spousal employment needs.

- Have a diversity advocate in each department who is assigned to actively contribute to minority faculty and graduate student recruitment; consider this role to be a major committee or service assignment in the department.
- The Dean will provide funds to cover the expenses incurred in bringing any minority faculty candidate to campus.

Faculty Retention Tools

- Provide outstanding mentoring from day one.
- Do an annual assessment of each individual's situation and proactive resource allocation to ensure retention.
- Provide leadership and professional development opportunities as appropriate.
- Work to develop an on-going critical mass of minority faculty members in the college.
- Make college and department level climate improvements on an on-going basis.
- Develop initiatives, perhaps joint with other colleges, to increase a sense of community for our minority faculty members.
- The college will require demonstrated skills in supporting and managing diversity as a standard qualification for leadership positions and for performance assessment of those in leadership positions.
- Include members of underrepresented groups on key college committees such as P&T, strategic planning, and executive committee, but do not overload these individuals with service responsibilities.

STUDENT DIVERSITY

Graduate Student Recruitment Tools

- Actively participate in the SROP and McNair programs (with support from the Associate Dean for Resident Instruction, departments will identify and meet with potential candidates from both programs during their respective annual sessions).
- Develop the ability to offer fellowships as soon as potential applicants are selected.
- Develop a standard offer letter for minority graduate students that offer five years of support contingent on satisfactory progress toward the degree. Top-ups over the standard offer, including a top-up for the summer between the first and second year, may be necessary and appropriate in most cases for minority students.
- Develop meaningful relationships with faculty at Historically Black Colleges and Universities (HBCU) and minority serving institutions including collaborative research, visits, publish together, share teaching materials, etc. It is critical that all relationships with minority serving institutions be mutually beneficial. Other initiatives:
- Make HBCU partners aware of the various workshops offered by ECOS for faculty and students
 - Biotechnology Training Programs – offered during the academic year

Bioinformatics workshops – offered in the summer
Laboratory workshops on Techniques in Molecular Biology - Loida Escote-Carlson is the instructor
Nanofab training and workshops
There must be others across campus

- Host a conference to showcase what ECOS has to offer to faculty from HBCU's and minority serving institutions
 - Showcase training and educational opportunities, like those listed above.
 - Showcase collaborative research opportunities including summer or semester sabbaticals or shorter visits for faculty or students.
 - Develop lists of research interests of HBCU faculty and identify matches in the ECOS faculty.
 - Showcase collaborative teaching and course material/curriculum sharing opportunities.
 - Break into face-to-face, faculty discussion sessions by department to explore interest and opportunities at the individual and department levels.
 - Find a source of resources so that we can provide travel and tuition support for workshops and travel and salary support for collaborative research opportunities.
- Develop an active minority REU program in the college. Most departments already have active summer research programs for undergraduates; we need to add a focus on minority student recruiting to these efforts and provide competitive stipends/travel/living expenses for these students (\$5-6000/student/summer).
- Institute recruiting trips to appropriate minority serving institutions – departments should work together where possible.
- Provide all-expense paid trips to University Park for key students early in the recruiting process, earlier than the usual recruiting weekends that occur after offers are out. These students can also come back for the usual recruiting weekend, if appropriate.
- Explore establishing mutual articulation agreements with HBCU's like Clark-Atlanta to offer admission to those minority students who they think have a high probability for success at PSU. We might be particularly interested in students who have completed a Masters at Clark-Atlanta or elsewhere. Again, any agreement has to specify a benefit for the other institution as well.
- Have a diversity advocate in each department who has been released from some other duties and has the time and obligation to actively participate in minority student and faculty recruitment.

Graduate Student Retention Tools

- Continue to implement college and department level climate improvements as the ideas/opportunities are identified.
- Offer the same transition/bridge support and opportunities to fill in gaps to all students: minority students should not be singled out and made to fall behind their cohort. There are students from a wide range of backgrounds who need support/remedial courses in one area or another. It is not just the minority students who have these needs.
- Make sure minority students are connected with other minority students across the college and across campus. (Black GSA?) Develop initiatives, perhaps joint with other colleges, to increase a sense of community for our minority students.
- Ensure students are aware of the programs and resources available through the Office of Graduate Educational Equity.
- Faculty advocacy is critical.
- Provide resources as necessary to ensure minority student attendance and presentation at national professional meetings.
- Work to develop an on-going critical mass of minority students in every department
- Continue the program of Dean's support for minority colloquium speakers to bring role models onto campus.
- Conduct student exit interviews and refine diversity strategies annually based on their input.

Undergraduate Student Retention Tools

At the undergraduate level, we will work to achieve the same college retention and graduation rates for minority students as for majority students.

- Make every department (all faculty members) and advising office aware of whom the minority students are starting with freshman, not just declared majors at the junior year. Encourage a team approach (student, department, faculty, exec.asst/multicultural coordinator) to student support and mentoring. Encourage research experiences for these students early on.
- Make college and department level climate improvements on an on-going basis.
- Provide students with focused, attentive advising, careful balancing of course loads, etc.
- Explore the idea of having junior and senior level minority students. Mentor/support/interact with minority students before they arrive and during their freshman and sophomore years.
- Assist with faculty advocacy and getting these relationships established early in each student's enrollment in the college.
- Provide the means for minority students to get involved in research very early. If the faculty members know who the minority students are, they can be more responsive to requests from minority students to work in their labs.

- Provide students with career path information beyond the medical school option. Many of our pre-meds leave the college once they are told they cannot get into medical school.
- Encourage minority students' consideration of health profession careers in addition to the traditional MD.
- Continue the program of Dean's support for minority colloquium speakers to bring role models onto campus. Create opportunities for students to meet with these visitors.
- Conduct senior exit interviews to learn from students who have been successful.
- Conduct an analysis of the traditional "weed out" courses. Do we need smaller sections for some at-risk students? Are there certain ways/orders of scheduling courses that are better than others are?

COLLEGE CLIMATE TOOL

Improve the ECOS climate for all individuals. Encourage the college climate committee and department level committees to increase their focus on climate for underrepresented groups. Currently most of the work is focused on general climate issues applicable to everyone.

DIVERSE WORKFORCE TOOL

Develop and implement strategies to improve the success of search processes in identifying and assessing the credentials of women and minority employee candidates for faculty and staff positions.

APPENDIX II – Accomplishments of the ECOS Climate and Diversity Committee

The Eberly College of Science Committee on Climate and Diversity has accomplished many things. We highlight them below, with most recent accomplishments listed first:

- Created the Dean’s Climate and Diversity Awards.
- Created a Code of Mutual Respect and Consideration to address the issue of relationships between all individuals in the college.
- A sub-committee was formed to address the college’s climate toward members of the LGBT community.
- Created a poster for depicting LGBTQ scientists. Posters were displayed throughout college buildings during National Pride Week.
- Increased college membership in the LGBT Support Network through a membership drive. All support network members are given a poster, pin, or sticker to hang in their office areas. Thus creating a visible welcoming climate for LGBT members of the college.
- “Straight Talk” presentations were organized for members of the college and departmental climate and diversity committees.
- In 2007 the committee developed a Climate Survey to administer to all members in the college.
- Articulated a minimum acceptable maternity/parental leave policy for graduate students and post-docs; working with OHR to implement the policy University-wide.
- Continuing to work with departmental climate committees to make their points of student contact more multi-culturally welcoming.
- Submitted a report to the Dean highlighting equity and promotional issues for instructional rank faculty. Specific recommendations for action were included and were acted upon by the Dean.
- Revamped the Climate and Diversity Committee web site. Meeting minutes are now posted on the web.
- Since faculty-staff, interactions are often cited as a climate issue in the college and since the results of the 2004 faculty/staff survey highlighted leadership, respect, and supervision as issues across the college, the climate committee contributed to the development of a workshop “Supervision 101”. All staff supervisors in the college have taken the workshop.

- In recognition of Martin Luther King Day/Week celebrations, the committee arranged, in 2005, 2006, 2007, 2008, and 2009 for the “Race Machine” to be brought to campus and for an accompanying display showing the genetic heritage of a diverse group of people and how genetic heritage does not always match physical appearance. This MLK activity has been very successful and very popular. Through continued support from various units on campus, including the Race Relations Project, we expect to continue to offer it every year.
- The college has added the Race Relation Project (a peer-facilitated diversity program designed to expand the multicultural dialogue) to all First Year Seminars in the college.
- A prominent link exists on the college home page for Climate and Diversity.
- After the presentation by the Lesbian, Gay, Bisexual, Transgender (LGBT) Support Network to the climate committee, the College leadership joined the LGBT Support Network.
- Each department formed a departmental climate and diversity committee in order to identify and address issues of a local nature. Every department did some sort of survey to get the process started. We continue to bring department committee chairs together from time to time to share ideas.
- Many departments continue to make modifications to their advising processes in order to improve the quality and accessibility of advising for undergraduates.
- To aid new faculty members in getting up to speed and finding all the information they need to do their work (research, teaching and service), a web site was created for new faculty: <http://www.science.psu.edu/newfacultyguide/>
- Based on a policy developed by our committee and proposed for implementation in the college, a university-wide policy was adopted giving one semester of teaching relief for a faculty member giving birth or having primary care responsibility for a new child.
- Solicited the assistance of then Senior Faculty Mentor, James Stewart, in examining the experiences of pre-tenure faculty members in the college. His report formed the basis for a number of activities aimed at helping junior faculty, specifically increased emphasis on quality mentoring, increased emphasis on transparency of the tenure process, increased effort in making information available to faculty, and increased communication about the college support for policies which support work/life issues.
- Faculty/staff relations were highlighted as an issue affecting climate for all. Lists of topics and processes that most often lead to conflict were developed and communicated. The HR office and the Dean send emails throughout the year

- Shone a light on the fact that many individuals, particularly staff and senior faculty, feel marginalized in our departments. Approaches to departmental governance contribute in many cases. Issues relating to this topic have been discussed at the Executive Committee meetings and elements of this issue were included in the subsequently developed workshop, Supervision 101.
- Brought attention to the fact that almost all of our college Alumni Fellows were white males. Women and minority individuals have been well represented since.
- Developed posters for display in ECOS buildings for use during MLK week. Also arranged for showings of the film “The Color of Fear” during MLK week.
- Developed a web site for the Climate and Diversity Committee, which included a survey tool.
- The report from the first Climate Committee got a lot of attention and a number of positive actions resulted, many by groups other than the Climate Committee, but the Committee deserves credit for shining a light on the issues. Some immediate progress included:

The Dean and the college HR office communicate broadly and often about family friendly policies available at the University.

The HR office has initiated a series of regular communications stressing respect in the workplace.

All departments now have formal mentoring programs for faculty.

The HR office continues to do annual salary analyses and highlight any inequities or inconsistencies for the Dean. The analysis includes comparisons of salary by level and gender.

The college has a clearly articulated goal (and consistent actions) to increase the representation of women at all faculty ranks. Progress has been substantial.

Focus on the status of senior women prompted a group of senior women to meet and develop a list of suggested actions for the college. Almost all of these were accomplished with significant support from the Dean.

A focus on the roles, responsibilities and promotional opportunities for instructional faculty prompted the college to charge a committee to develop concrete guidelines for promotion of instructional faculty. These were implemented in 2003.

The first Climate and Diversity Committee wrote the initial report on Climate and Diversity for the College in December 1999. (The topics highlighted continue to be relevant in 2006!)

Areas highlighted as general climate issues were:

- Mechanisms for coping with family issues
- Civility of workplace relationships
- Mentoring of faculty and staff
- Rewards and incentives for research, teaching, and service
- Equitable treatment of persons of all sexual orientations
- Equal access and opportunities for disabled persons
- Opportunities for management and leadership development
- Religious tolerance

Areas highlighted as personnel issues were:

- Representation of women on the faculty at all levels
- Status of senior women faculty
- Diversity of faculty, staff, and students
- Responsibilities and promotion criteria for instructors
- Student advising and support

APPENDIX III – Eberly College of Science Code of Mutual Respect

Code of Mutual Respect and Cooperation for Faculty, Staff and Students in The Eberly College of Science

As members of the Eberly College of Science community, we should be respectful of others at all times whether we are students, staff, or faculty. We can create an environment that fosters mutual respect and dignity for everyone if we as individuals act upon the 12 Principles of the *Code of Mutual Respect and Cooperation*. These principles remind us to conduct ourselves in a professional manner at all times and to promote a positive climate for everyone.

The 12 Principles of the code are:

1. Treat everyone equally and with respect.
2. Be courteous and tactful.
3. Be ready to communicate.
4. Encourage others and share your expertise with them.
5. Give and accept constructive criticism.
6. Be receptive to change.
7. Be a team player.
8. Get involved.
9. Have a positive attitude.
10. Be honest and accept responsibility.
11. Recognize other people's priorities.
12. Strive to do your best.

1. *Treat everyone equally and with respect.* Students, staff, and faculty interact with each other frequently in the university environment. Our interactions with each other can create a welcoming and productive atmosphere if we are respectful of others in the same way that we expect others to respect us. As we go about our work, we should recognize that everyone has an important part to play in the operation of our university, and therefore it is to our benefit to make the organization work as efficiently as possible. That can only happen if we treat each other respectfully across peer groups and equally within those peer groups.

2. *Be courteous and tactful.* We should remember to show our gratitude for any assistance that we receive from anyone within the university: from the custodians and groundskeepers to the highest academic officers. Friendly greetings and expressions of appreciation will produce a healthier work environment, especially since some of us spend more time at work than we spend at home with our families. It pays to be courteous when we interact with each other.

3. *Be ready to communicate.* Our work gets done more efficiently if we communicate with each other. Many problems arise because we never talk to each other about things that might not be going smoothly or not working properly. Often we expect that others will know what we are thinking in a given situation. Instead, the opposite is usually true

because it is very hard to understand how other people think or feel. So, we need to talk to each other and to make the effort to put ourselves in someone else's shoes. Our actions will help us to understand how someone else might feel as they react to a specific situation. It is essential that we communicate with each other, when things are going right and especially when things are not going as expected.

4. *Encourage others and share your expertise with them.* Since we are part of an educational institution, this is the place where we should share our knowledge with each other. We can learn a lot from others even though we may be experts in our own area. So, take a moment to show encouragement to anyone who has just started in your unit or the university, as well as younger people or those at levels below yours. Take a moment to share your enthusiasm for your job and to teach them something new that they can share with others.

5. *Give and accept constructive criticism.* A "critic" is a person who judges the merits of another person's work. We can use criticism to congratulate someone on a job that was well done and to describe ways in which other jobs can be accomplished to great satisfaction. We should always be open to such positive comments about our work and willing to learn new ways to improve our work habits. Conversely, persistent negative comments without constructive suggestions for improvement are counterproductive. Constructive criticism is given in the spirit of encouragement when we truly want to help each other to improve; and everyone benefits from this improvement.

6. *Be receptive to change.* We need to be receptive to change if we truly desire to improve our work performance. As we learn new information, we become different people because we have a broader base of knowledge from which we can view the world. This improved perspective helps us to adapt to new environments and to new coworkers, and enables us to learn even more.

7. *Be a team player.* Our university is a very big place and yet it can feel like a small place if we work together to achieve our goals. We all depend on each other to make the system work smoothly. For example, the beautiful gardens cared for by the grounds keepers put us in a happy mood as we make our way to our offices. The custodians make sure that our offices and facilities are clean and healthy for us. The staff assistants process the paperwork so that students can register for the courses that they need, and the faculty can be prepared for their classes. Every part depends on every other part whether or not we recognize those links. So, it is important that we each play our role to the best of our abilities, within our units and as part of the larger family at Penn State.

8. *Get involved.* As we become more involved in our work, we become more productive and things run more smoothly. Greater involvement in our work environment also results in improved communications between people, especially as we get to know each other better.

9. *Have a positive attitude.* As we learn and mature, we need to foster a work environment built on positive attitudes. These improved attitudes lead to constructive interactions with others and allow us to learn from them.

10. *Be honest and accept responsibility.* When things are going well, we are usually happy to take the credit for our successes. And yet, it is very hard to accept responsibility when things do not work out as planned. Our challenge is to be our own toughest critics so we can understand why our efforts resulted in certain outcomes. It takes practice to be able to review our own work, with a positive attitude, and with openness to positive criticism of ourselves. The key is to be honest with ourselves and with others. In an environment where positive criticism is readily given and received, it should be easy to accept responsibility for our actions.

11. *Recognize other people's priorities.* As we go about our busy lives, we often forget that we are not the only ones who need to get our work done. We all have to set priorities during the workday, even if each activity takes only a few minutes to complete. So, if we are respectful of others, we need to be patient and wait our turn, especially when making requests of our staff assistants who often have to deal with students and faculty simultaneously.

12. *Strive to do your best.* Positive interactions with others will enhance our work ethic and make us enjoy our work environment. We will naturally strive to do our best in a professional, constructive, and welcoming atmosphere.

APPENDIX IV – Data Comparisons through 2009

UNDERGRADUATE DATA

Undergraduate Student Enrollment by Ethnicity Eberly College of Science, University Park Campus

	Fall, 2002		Fall, 2005		Fall, 2006		Fall, 2007		Fall, 2008		Fall, 2009	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Hispanic/Latino	3	69	3.3	88	3.02%	86	2.83%	78	3.06%	89	4.11%	127
American Indian or Alaska Native	< 1 ^a	5	< 1 ^a	1	0.04%	1	0.11%	3	0.17%	5	0.13%	4
Asian	11	267	13	359	13.01%	371	13.11%	361	13.56%	395	12.27%	379
Black or African American	3	78	4	102	3.93%	112	4.21%	116	3.95%	115	3.59%	111
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*	*	*	*	*	0.06%	2
Two or more races	*	*	*	*	*	*	*	*	*	*	1.49%	46
White	82	2059	76	2062	76.75%	2189	76.53%	2107	73.52%	2141	67.29%	2078
Race/Ethnicity Unknown	*	*	*	*	0.00%	0	0.00%	0	0.00%	0	3.72%	115
International	2	48	3	89	3.26%	93	3.20%	88	5.73%	167	7.32%	226
Race/Ethnicity Total		2526		2701		2852		2753		2912		3088

*Report from FACTBOOK
*Data collection began in
2009*

Undergraduate Student Enrollment, by Gender
Eberly College of Science, University Park Campus

Gender	Fall 2000		Fall 2002		Fall 2004		Fall 2005		Fall 2006		Fall 2007		Fall 2008		Fall 2009	
	%	(N)														
Female	51.6	1356	51.9	1312	49.4	1251	48.9	1285	48.0	1368	48.5	1335	47.8	1393	49.4	1524
Male	48.4	1274	48.1	1214	50.6	1282	51.1	1343	52.0	1484	51.5	1418	52.2	1519	50.6	1564
Total	100.0	2630	100.0	2526	100.0	2533	100.0	2628	100.0	2852	100.0	2753	100.0	2912	100.0	3088

Female Undergraduate Enrollment by Department
Eberly College of Science, University Park Campus

Department	2004		2005		2006		2007		2008		2009	
	%	(N)										
Astronomy and Astrophysics	5.6	1	5.3	1	30.0	6	45.0	9	32.0	8	18.8	3
Biochemistry												
Molecular Biology	48.5	127	52.7	138	52.2	117	47.2	101	48.7	134	47.6	148
Biology	58.8	248	60.1	253	56.8	213	51.6	206	52.4	232	56.9	279
Chemistry	50.8	31	46.4	26	27.4	17	39.4	26	33.8	25	26.4	24
Mathematics	33.5	53	39.4	65	41.8	62	38.4	66	39.7	74	37.9	75
Physics	3.4	2	7.5	5	12.9	9	13.5	10	9.6	7	7.1	5
Science	50.9	781	48.9	791	48.5	916	51.0	902	50.1	902	52.1	980
Statistics	42.1	8	31.6	6	44.0	11	34.8	8	30.8	8	32.3	10

Retention and Graduation Rates
Starting Campus: University Park
Starting College: Science

Freshman Baccalaureate Minority Students

Retention/Year	Fall 1997	Fall 1998	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008
# Initially Enrolled in Cohort	106	99	78	82	106	110	125	120	138	135	131	140
Retention to Semester 3	87.7%	93.9%	92.3%	86.6%	84.9%	85.5%	88.0%	92.5%	92.0%	92.6%	91.6%	88.6%
Retention to Semester 5	86.8%	82.8%	88.5%	75.6%	76.4%	80.0%	84.0%	85.0%	85.5%	89.6%	85.5%	
Retention to Semester 7	84.0%	77.8%	80.8%	74.4%	74.5%	75.5%	80.8%	79.2%	81.9%	88.1%		
Retention to Semester 9	32.1%	37.4%	29.5%	20.7%	27.4%	26.4%	16.8%	35.8%	26.1%			
Retention to Semester 11	3.8%	2.0%	1.3%	1.2%	0.0%	3.6%	3.2%	4.2%	0.0%			
Retention to Semester 13	1.9%	1.9%	0.0%	2.4%	0.9%	0.0%	2.4%	0.0%	0.0%			
4 - Year Graduation Rate	44.3%	39.4%	52.6%	53.7%	48.1%	49.1%	64.8%	45.0%	54.4%			
5 - Year Graduation Rate	76.4%	72.7%	79.5%	72.0%	73.6%	73.6%	79.2%	76.7%				
6 - Year Graduation Rate	80.2%	75.8%	80.8%	73.2%	75.5%	78.2%	80.8%					

Freshman Baccalaureate White Students

Retention/Year	Fall 1997	Fall 1998	Fall 1999	Fall 2000	Fall 2001	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008
# Initially Enrolled in Cohort	513	470	419	427	458	441	459	409	517	621	473	557
Retention to Semester 3	95.9%	94.9%	92.1%	95.3%	90.0%	92.5%	92.8%	93.4%	63.2%	94.5%	94.5%	91.7%
Retention to Semester 5	91.8%	92.6%	89.5%	91.1%	88.2%	88.7%	88.7%	91.9%	90.3%	89.9%	89.6%	
Retention to Semester 7	90.8%	89.8%	87.4%	88.3%	84.1%	85.7%	87.4%	88.0%	87.2%	86.3%		
Retention to Semester 9	30.8%	37.2%	22.9%	20.6%	24.2%	19.3%	18.5%	19.1%	20.7%			
Retention to Semester 11	2.7%	4.0%	2.6%	2.1%	3.5%	3.2%	2.2%	3.2%	0.0%			
Retention to Semester 13	1.2%	1.7%	1.0%	1.4%	1.3%	1.1%	1.3%	0.0%	0.0%			
4 - Yr Graduation Rate	59.1%	53.2%	63.7%	68.9%	60.5%	64.6%	68.2%	68.2%	66.5%			
5 - Yr Graduation Rate	86.7%	85.5%	83.1%	87.6%	83.0%	80.0%	85.0%	84.8%				
6 - Yr Graduation Rate	88.7%	89.1%	85.4%	89.2%	85.6%	82.5%	85.8%					

Data collected from Penn State University – Admissions Report

GRADUATE STUDENT DATA

Graduate Student Application and Enrollment by Department, Ethnicity, and Gender

		2005		2006		2007		2008		2009	
		Applications	Enrolled								
A&A	Total	94	6	114	4	109	7	108	10	84	6
	Domestic	48	5	57	2	67	5	62	6	54	5
	International	46	1	57	2	42	2	46	4	30	1
	Male	53	5	70	3	71	4	74	6	55	5
	Female	41	1	44	1	38	1	34	4	29	1
	African American		0		0		0		0	0	0
	Latino		1		0		0		0	1	0
	Native American		0		0		0		0	0	0
	White		2		2		4		6	51	5
	Other		0		0		0		0	1	0
Not indicated		2		0		1		0	1	0	
BMB	Total	177	19	219	25	258	14	182	31	152	16
	Domestic	59	16	62	11	46	9	57	12	52	7
	International	118	3	157	14	212	5	125	19	100	9
	Male	81	8	99	11	120	6	74	10	70	6
	Female	96	11	120	14	138	8	108	21	82	10
	African American	1	0	0	0	4	2	0	0	0	0
	Latino	2	2	1	0	1	0	1	1	1	0
	Native American	1	0	0	0	0	0	0	0	0	0
	White	42	10	44	5	38	4	49	10	34	9
	Other	6	0	2	1	0	2	6	18	5	5
Not indicated	7	4	15	5	3	1	1	2	12	2	
Biology	Total	82	9	109	8	109	6	93	11	96	8
	Domestic	27	6	38	5	43	4	51	9	34	4
	International	55	3	71	3	66	2	42	2	62	4
	Male	28	4	51	3	45	3	47	4	49	4
	Female	54	5	58	5	64	3	46	7	47	6
	African American	2	1		0	1	0	2	1	0	0
	Latino	0	0	3	1	1	0	1	1	1	1
	Native American	0	0		0	0	0	1	0	1	0
	White	21	4	27	3	33	3	37	5	30	3
	Other	1	1	5	0	4	0	2	1	2	0
Not indicated	3	0	3	1	4	1	7	1	0	0	

Chemistry	Total	443	56	466	23	370	42	458	58	509	50
	Domestic	213	44	238	20	172	34	221	47	290	41
	International	230	12	228	3	198	8	237	11	219	9
	Male		31	292	13	261	28	282	37	284	34
	Female		25	174	10	109	14	176	21	225	16
	African American		0	1	0	3	0	4	2	14	0
	Latino		2	3	0	4	2	4	4	12	2
	Native American		0	0	0	0	0	0	0	3	1
	White		42	234	20	165	32	135	39	231	32
	Other		0	0	0	0	0	23	2	30	6
	Not indicated		0	0	0	0	0	55	0	0	0
Mathematic	Total	264	20	230	17	257	18	197	21	226	18
	Domestic	104	4	75	3	96	6	89	8	97	8
	International	160	16	160	14	161	12	108	13	129	10
	Male	197	17	156	15	196	15	145	17	168	12
	Female	67	3	74	2	61	3	52	4	58	6
	African American	0	0	0	0	0	0	2	0	1	0
	Latino	0	0	0	0	3	0	4	0	3	0
	Native American	0	0	1	1	2	0	0	0	0	0
	White	93	4	63	2	71	6	66	6	83	10
	Other	7	0	3	0	7	0	5	1	8	0
	Not indicated	4	0	8	0	13	0	12	1	2	0
Physics	Total	430	18	514	22	618	25	517	15	467	19
	Domestic	96	8	128	8	164	10	150	9	132	11
	International	334	10	386	14	454	15	367	6	335	8
	Male	332	17		18	532	22	426	11	381	17
	Female	98	1		4	86	3	91	4	86	2
	African American		0		0	0	0	2	1	1	0
	Latino		0		2	1	0	2	0	4	0
	Native American		0		1	0	0	0	0	0	0
	White		8		5	136	10	145	8	103	9
	Other		0		0	2	0	0	0	18	2
	Not indicated		0		0	25	0	1	0	6	0
Statistics	Total	277	19	293	9	285	16	243	17	325	13
	Domestic	37	5	54	5	26	4	27	1	27	3
	International	240	14	239	4	259	12	216	16	298	10
	Male	151	10	156	4	145	9	134	6	160	7
	Female	126	9	137	5	140	6	109	11	165	6
	African American	2	0	0	0	0	0	0	0	0	0
	Latino	1	0	1	0	0	0	2	0	0	0
	Native American	0	0	0	0	0	0	0	0	0	0
	White	23	4	41	5	22	4	20	1	0	3
	Other	8	1	6	0	1	0	3	0	0	0
	Not indicated	3	0	6	0	3	0	2	0	27	0

Graduate Student Enrollment, by Ethnicity
Eberly College of Science, University Park Campus

Ethnicity	Fall 2000		Fall 2002		Fall 2005		Fall 2006		Fall 2007		Fall 2008		Fall 2009	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Hispanic/Latino	2	11	2	10	2.4	15	2	15	2	16	3	20	3	22
American Indian or Alaska Native	< 1 ^a	0	< 1 ^a	0	< 1 ^a	0	<1	2	< 1	2	<1	0	0	0
Asian	3	16	3	18	3	20	3	20	4	24	3	21	3	24
Black or African American	2	12	2	11	1.3	9	<1	4	< 1	4	<1	4	1	8
Native Hawaiian or Other Pacific Islander	*	*	*	*	*	*	*	*	*	*	*	*	<1	1
Two or more races	*	*	*	*	*	*	*	*	*	*	*	*	1	6
White	55	327	54	351	47	320	45	298	45	307	47	330	44	322
Race/Ethnicity Unknown	*	*	*	*	*	*	*	*	*	*	*	*	3	19
International	39	234	40	259	46	320	49	321	48	330	47	330	45	327
Total		600		649		684		660		683		705		729

* Data collection began in 2009

Graduate Student Enrollment, by Gender
Eberly College of Science, University Park Campus

Gender	Fall, 2000		Fall, 2002		Fall, 2005		Fall 2006		Fall 2007		Fall 2008		Fall 2009	
	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Female	34	204	33	216	35	246	41.9	384	55.6	424	37.2	262	37.6	274
Male	66	396	67	433	65	465	58.1	533	44.4	339	62.8	443	62.4	455
Total	100	600	100	649	100	711	100.0	917	100.0	763	100.0	705	100.0	729

FACULTY DATA

**Faculty Employment, by Rank, by Ethnicity
Eberly College of Science, University Park Campus**

FALL 2002 Ethnicity	Professor		Associate Professor		Assistant Professor		Instructor	
	%	(N)	%	(N)	%	(N)	%	(N)
Asian American	16	19	19	11	28	25	17	15
Black American	3	3	2	1	2	2	2	2
Hispanic/Latino	2	2	0	0	0	0	1	1
Native American	0	0	0	0	1	1	1	1
Sub-Total	21	24	21	12	31	28	21	19
White	80	94	79	45	69	61	79	70
Total	101	118	100	57	100	89	100	89

FALL 2005 Ethnicity	Professor		Associate Professor		Assistant Professor		Instructor	
	%	(N)	%	(N)	%	(N)	%	(N)
Asian American	15.4	21	12.8	6	23.5	16	7.4	5
Black American	2.9	4	2.1	1	4.4	3	1.5	1
Hispanic/Latino	1.5	2	2.1	1	1.5	1	1.5	1
Native American	0.0	0	0.0	0	0.0	0	1.5	1
Sub-Total	19.9	27	17.0	8	29.4	20	11.8	8
White	80.1	109	83.0	39	70.6	48	88.2	60
Total	100.0	136	100.0	47	100.0	68	100.0	68

FALL 2007 Ethnicity	Professor		Associate Professor		Assistant Professor		Instructor	
	%	(N)	%	(N)	%	(N)	%	(N)
Asian American	15.9	22	16.3	8	23.5	16	10.9	7
Black American	2.9	4	2.0	1	4.4	3	1.6	1
Hispanic/Latino	1.4	2	6.1	3	0.0	0	3.1	2
Native American	0.0	0	0.0	0	0.0	0	1.6	1
Sub-Total	20.3	28	24.5	12	27.9	19	17.2	11
White	79.7	110	75.5	37	72.1	49	82.8	53
Total	100.0	138	100.0	49	100.0	68	100	64

FALL 2009 Ethnicity	Professor		Associate Professor		Assistant Professor		Instructor	
	%	(N)	%	(N)	%	(N)	%	(N)
Asian American	18.1	26	13.2	7	25.4	15	8.2	5
Black American	2.8	4	5.7	3	1.7	1	1.6	1
Hispanic/Latino	1.4	2	1.9	1	0.0	0	3.3	2
Native American	0.0	0	0.0	0	0.0	0	1.6	1
Sub-Total	22.2	32	20.8	11	27.1	16	14.8	9
White	77.8	112	79.2	42	72.9	43	85.2	52
Total	100.0	144	100.0	53	100.0	59	100.0	61

Faculty Employment, by Rank, by Gender 2000/2002/2005/2007/2009
Eberly College of Science, University Park Campus

FALL 2000¹

	Professor		Associate Professor		Assistant Professor		Instructor ²	
	%	(N)	%	(N)	%	(N)	%	(N)
Gender								
Female	9.1	11	11.3	6	26.9	14	46.5	34
Male	90.9	110	88.7	47	73.8	38	53.4	39
Total	100.0	121	100.0	53	100.0	52	100.0	73

FALL 2002¹

	Professor		Associate Professor		Assistant Professor		Instructor ²	
	%	(N)	%	(N)	%	(N)	%	(N)
Gender								
Female	9.1	11	16.0	8	30.2	19	41.1	30
Male	90.9	110	84.0	42	69.8	44	58.9	43
Total	100.0	121	100.0	50	100.0	63	100.0	73

FALL 2005¹

	Professor		Associate Professor		Assistant Professor		Instructor ²	
	%	(N)	%	(N)	%	(N)	%	(N)
Gender								
Female	11.0	15	12.8	6	36.8	25	39.7	27
Male	89.0	121	87.2	41	63.2	43	60.3	41
Total	100.0	136	100.0	47	100.0	68	100.0	68

FALL 2007¹

	Professor		Associate Professor		Assistant Professor		Instructor ²	
	%	(N)	%	(N)	%	(N)	%	(N)
Gender								
Female	11.6	16	20.4	10	30.9	21	45.3	29
Male	88.4	122	79.6	39	69.1	47	54.7	35
Total	100.0	138	100.0	49	100.0	68	100.0	64

FALL 2009¹

	Professor		Associate Professor		Assistant Professor		Instructor ²	
	%	(N)	%	(N)	%	(N)	%	(N)
Gender								
Female	12.5	17	28.9	15	28.6	16	45.8	27
Male	93.4	127	73.1	38	76.8	43	57.6	34
Total	100.0	136	100.0	52	100.0	56	100.0	59

1 Faculty include STN, FT1, FT2, FTM and Adjunct Appointments

2 Instructors include instructors, Lecturers and Senior Lecturers

Faculty Employment, by Rank, by Gender, by Department
Eberly College of Science University Park Campus

2007		Assistant Professor		Associate Professor		Professor		Subtotal		Instructor		Research Assistant		Total*	
		%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Astronomy and Astrophysics	Female	0	0	0	0	22	2	11	2	0	0	25	4	18	6
	Male	100	2	100	3	78	9	89	17	100	1	75	12	82	28
Biochemistry and Molecular Biology	Female	25	4	0	0	20	3	22	7	25	2	47	9	31	18
	Male	75	8	100	5	80	12	78	25	75	6	53	10	69	41
Biology	Female	45	5	14	1	17	3	25	9	67	4	67	6	35	17
	Male	55	6	86	6	83	15	75	27	33	2	33	3	65	32
Chemistry	Female	14	1	22	2	17	3	18	6	50	4	0	0	23	10
	Male	86	6	78	7	83	15	82	28	50	4	100	2	77	34
Mathematics	Female	35	6	13	1	9	3	17	10	38	8	0	0	22	18
	Male	65	11	87	7	91	32	83	50	62	13	100	1	78	64
Physics	Female	50	3	20	1	10	2	19	6	0	0	25	1	18	7
	Male	50	3	80	4	90	19	81	26	100	3	75	3	82	32
Statistics	Female	33	2	43	3	0	0	24	5	60	3	75	3	35	11
	Male	67	4	57	4	100	8	76	16	40	2	25	1	65	19
Total	Female							19	45					26	87
	Male							81	197					74	250

* *Tenure track and non-tenure track faculty*

2009		Assistant Professor		Associate Professor		Professor		Subtotal		Instructor		Research Assistant		Total*	
		%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Astronomy and Astrophysics	Female	25	1	0	0	20	2	18	3	50	1	25	4	23	8
	Male	75	3	100	3	80	8	82	14	50	1	75	12	67	27
Biochemistry and Molecular Biology	Female	50	3	40	2	16	3	25	8	38	3	37	7	32	19
	Male	50	3	60	5	84	16	75	24	62	5	63	12	68	41
Biology	Female	40	4	33	3	17	3	27	10	50	5	64	9	39	24
	Male	60	6	67	6	83	15	73	27	50	5	36	5	61	37
Chemistry	Female	0	0	29	2	11	2	11	4	56	5	0	0	19	9
	Male	100	9	71	5	89	17	89	31	44	4	100	4	81	39
Mathematics	Female	17	2	33	4	9	3	15	9	37	7	0	0	20	16
	Male	83	12	67	8	91	32	85	52	63	12	0	0	80	64
Physics	Female	43	3	0	0	13	3	17	6	0	0	0	0	14	6
	Male	57	4	100	5	87	20	83	29	100	4	100	5	86	38
Statistics	Female	33	2	50	3	0	0	24	5	50	1	20	1	25	7
	Male	67	4	50	3	100	9	76	16	50	1	80	4	75	21
Total	Female							19	45					25	89
	Male							81	193					75	267

* Tenure track and non-tenure track faculty

ACADEMIC ADMINISTRATOR DATA

Academic Administrator Employment, by Ethnicity Eberly College of Science, University Park Campus

Ethnicity	Fall 1997		Fall 2000		Fall 2002		Fall 2005		Fall 2007		Fall 2009	
	%	(N)										
Asian American	0	0	8	1	9	1	20	2	20	2	8.3	1
Black American	0	0	0	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0	0	0	0
Native American	0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total	0	0	8	1	9	1	20	2	20	2	8.3	1
White	100	11	92	11	91	10	80	8	80	8	91.7	12
Total	100	11	100	12	100	11	100	10	100	10	100	13

Academic Administrator Employment, by Gender Eberly College of Science, University Park Campus

Gender	Fall 1997		Fall 2000		Fall 2002		Fall 2005		Fall 2007		Fall 2009	
	%	(N)										
Female	9	1	8	1	0	0	0	0	10	1	15.4	2
Male	91	10	92	11	100	11	100	10	90	9	85.6	11
Total	100	11	100	12	100	11	100	10	100	10	100	13

STAFF DATA

**Staff Employment, by Grade, by Ethnicity,
1997/2000/2002/2005/2007/2009
Eberly College of Science**

FALL 1997

Ethnicity	19 and Below		20 - 25		26 and Above	
	%	(N)	%	(N)	%	(N)
Asian American	3	4	0	0	0	0
Black American	0	0	3	1	0	0
Hispanic/Latino	< 1	1	3	1	0	0
Native American	0	0	0	0	0	0
Sub-Total	3	5	6	2	0	0
White	97	130	94	30	100	1
Total	100	135	100	32	100	1

FALL 2000

Ethnicity	19 and Below		20 - 25		26 and Above	
	%	(N)	%	(N)	%	(N)
Asian American	2	3	< 1	1	0	0
Black American	0	0	< 1	1	0	0
Hispanic/Latino	< 1	1	0	0	0	0
Native American	0	0	0	0	0	0
Sub-Total	2	4	1	2	0	0
White	97	121	96	50	100	3
Total	99	125	97	52	100	3

FALL 2002

Ethnicity	19 and Below		20 - 25		26 and Above	
	%	(N)	%	(N)	%	(N)
Asian American	1	2	2	1	0	0
Black American	1	1	2	1	0	0
Hispanic/Latino	0	0	2	1	0	0
Native American	0	0	0	0	0	0
Sub-Total	2	3	6	3	0	0
White	98	142	94	50	100	3
Total	100	145	100	53	100	3

FALL 2005

Ethnicity	19 and Below		20 - 25		26 and Above	
	%	(N)	%	(N)	%	(N)
Asian American	0.8	1	0	0	0	0
Black American	0	0	4.7	2	0	0
Hispanic/Latino	1.6	2	0	0	0	0
Native American	0	0	0	0	0	0
Sub-Total	2.4	3	4.7	2	0	0
White	97.6	122	95.3	41	100	1
Total	100	125	100	43	100	1

FALL 2007

Ethnicity	19 and Below		20 - 25		26 and Above		Competencies ²	
	%	(N)	%	(N)	%	(N)	%	(N)
Asian American	3.4	4	0.0	0	0.0	0	0.0	0
Black American	0.0	0	4.7	2	0.0	0	3.7	1
Hispanic/Latino	0.9	1	0.0	0	0.0	0	3.7	1
Native American	0.0	0	0.0	0	0.0	0	0.0	0
UDL	0.0	0	0.0	0	0.0	0	0.0	0
Sub-Total	4.2	5	4.7	2	0.0	0	7.4	2
White	95.8	113	95.4	41	100.0	1	92.6	25
Total	100.0	118	100.0	43	100.0	1	100.0	27

FALL 2009

Ethnicity	19 and Below		20 - 25		26 and Above		Competencies ²	
	%	(N)	%	(N)	%	(N)	%	(N)
Asian American	5.9	4	2.5	1	0.0	0	0.0	0
Black American	0.0	0	7.5	3	0.0	0	2.7	3
Hispanic/Latino	1.5	1	0.0	0	0.0	0	0.9	1
Native American	0.0	0	0.0	0	0.0	0	0.0	0
UDL	0.0	0	0.0	0	0.0	0	0.9	1
Sub-Total	7.4	5	10.0	4	0.0	0	4.7	5
White	92.6	63	90.0	36	100.0	1	95.3	101
Total	100.0	68	100.0	40	100.0	1	100.0	106

¹ Staff Data do not include Academic Administrators (see Table 7)

² Conversion to Competencies began in 2006

Staff Employment by Grade, by Gender
Eberly College of Science, University Park Campus

FALL 2000

	19 and Below		20 - 25		26 and Above	
Gender	%	(N)	%	(N)	%	(N)
Female	86	107	40	21	0	0
Male	14	18	60	31	100	3
Total	100	125	100	52	100	

FALL 2002

	19 and Below		20 - 25		26 and Above	
Gender	%	(N)	%	(N)	%	(N)
Female	82	119	40	21	0	0
Male	18	26	60	32	100	3
Total	100	145	100	53	100	3

FALL 2005

	19 and Below		20 - 25		26 and Above	
Gender	%	(N)	%	(N)	%	(N)
Female	87.2	109	51.2	22	0	0
Male	12.8	16	48.8	21	100	1
Total	100	125	100	43	100	1

FALL 2007

	19 and Below		20 - 25		26 and Above		Competencies	
Gender	%	(N)	%	(N)	%	(N)	%	(N)
Female	87.3	103	65.1	28	0.0	0	25.9	7
Male	12.7	15	34.9	15	100.0	1	74.1	20
Total	100.0	118	100.0	43	100.0	1	100.0	27

FALL 2009

	19 and Below		20 - 25		26 and Above		Competencies	
Gender	%	(N)	%	(N)	%	(N)	%	(N)
Female	72.1%	49	62.5%	25	0.0%	0	76.4%	81
Male	27.9%	19	37.5%	15	100.0%	1	23.6%	25
Total	100.0%	68	100.0%	40	100.0%	1	100.0%	106

¹ Staff Data do not include Academic Administrators (see Table 6)

TECHNICAL SERVICE DATA

**Technical Service Employment, by Grade, by Ethnicity
Eberly College of Science, University Park Campus**

Ethnicity	Fall 2000				Fall 2002				Fall 2005				Fall 2007				Fall 2009			
	7 and Below		8 and Above		7 and Below		8 and Above		7 and Below		8 and Above		7 and Below		8 and Above		7 and Below		8 and Above	
	%	(N)																		
Asian American	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black American	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hisp./Latino	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Native American	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White	100	23	100	1	100	20	100	1	100	19	100	1	100	17	100	1	100	15	100	1
Total	100	23	100	1	100	20	100	1	100	19	100	1	100	17	100	1	100	15	100	1

**Technical Service Employment, by Grade, by Gender
Eberly College of Science, University Park Campus**

Gender	Fall 2000				Fall 2002				Fall 2005				Fall 2007				Fall 2009			
	7 and Below		8 and Above		7 and Below		8 and Above		7 and Below		8 and Above		7 and Below		8 and Above		7 and Below		8 and Above	
	%	(N)																		
Female	4	1	0	0	5	1	0	0	10.5	2	0	0	6	1	0	0	7	1	0	0
Male	96	22	100	1	95	19	100	1	89.5	17	100	1	94	16	100	1	93	14	100	1
Total	100	23	100	1	100	20	100	1	100	19	100	1	100	17	100	1	100	15	100	1

APPENDIX V - Official Data provided by the Office of the Vice Provost for Educational Equity for preparation of the 12.01.2009 Framework Update

UNDERGRADUATE STUDENTS

Fall 2008 Undergraduate Student Enrollments, UP Campus, by UP College and Ethnicity

College	Am Ind/ Ala Nat		Blk/ Af Am		As/Pac Am		Hisp		Multicultural Std Subtotal		White/ Not Reported		Inter- National		Totals
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
Ag Sc	1	0.1%	53	3.2%	39	2.4%	58	3.5%	151	9.1%	1495	90.3%	10	0.6%	1656
A & A	7	0.5%	52	3.4%	63	4.2%	51	3.4%	173	11.5%	1315	87.2%	20	1.3%	1508
Bus	2	0.0%	185	3.1%	483	8.1%	204	3.4%	874	14.7%	4743	79.8%	326	5.5%	5943
Comm	7	0.2%	184	6.3%	88	3.0%	112	3.9%	391	13.5%	2464	85.0%	43	1.5%	2898
DUS	0	0.0%	151	5.6%	128	4.7%	139	5.2%	418	15.5%	2196	81.5%	82	3.0%	2696
EMS	1	0.1%	36	3.4%	28	2.7%	26	2.5%	91	8.7%	881	84.1%	76	7.3%	1048
Ed	2	0.1%	36	1.9%	36	1.9%	38	2.0%	112	5.9%	1768	93.6%	8	0.4%	1888
En	3	0.1%	115	2.0%	356	6.3%	175	3.1%	649	11.4%	4766	83.7%	280	4.9%	5695
HHD	3	0.1%	286	5.8%	216	4.4%	165	3.4%	670	13.6%	4183	85.2%	56	1.1%	4909
IST	1	0.1%	42	3.8%	72	6.5%	33	3.0%	148	13.3%	946	85.3%	15	1.4%	1109
LA	5	0.1%	266	5.5%	179	3.7%	238	4.9%	688	14.3%	4015	83.5%	108	2.2%	4811
Sc	5	0.2%	117	3.9%	402	13.5%	90	3.0%	614	20.7%	2186	73.6%	170	5.7%	2970
Totals	37	0.1%	1523	4.1%	2090	5.6%	1329	3.6%	4979	13.4%	30958	83.4%	1194	3.2%	37131

Fall 2008 Undergraduate Student Enrollments, UP Campus, by UP College and Gender

College	Female		Male		Totals
	#	%	#	%	#
Ag Sc	785	47.4%	871	52.6%	1656
A & A	871	57.8%	637	42.2%	1508
Bus	2092	35.2%	3851	64.8%	5943
Comm	1788	61.7%	1110	38.3%	2898
DUS	1267	47.0%	1429	53.0%	2696
EMS	282	26.9%	766	73.1%	1048
Ed	1452	76.9%	436	23.1%	1888
En	911	16.0%	4784	84.0%	5695
HHD	3315	67.5%	1594	32.5%	4909
IST	123	11.1%	986	88.9%	1109
LA	2426	50.4%	2385	49.6%	4811
Sc	1411	47.5%	1559	52.5%	2970
Totals	16723	45.0%	20408	55.0%	37131

Fall 2005 Undergraduate Student Enrollments, UP Campus, by UP College and Ethnicity

College	Am Ind/ Ala Nat		Blk/ Af Am		As/Pac Am		Hisp		Multicultural Stnd Subtotal		White/ Not Reported		Inter- National		Totals
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
Ag Sc	1	0.1%	39	2.7%	26	1.8%	35	2.4%	101	7.0%	1334	92.3%	10	0.7%	1445
A & A	5	0.3%	34	2.2%	64	4.2%	35	2.3%	138	9.1%	1358	89.6%	20	1.3%	1516
Bus	5	0.1%	164	3.5%	430	9.1%	153	3.2%	752	16.0%	3781	80.2%	181	3.8%	4714
Comm	6	0.2%	163	6.0%	105	3.9%	91	3.4%	365	13.4%	2310	85.1%	40	1.5%	2715
DUS	2	0.1%	121	4.7%	127	4.9%	108	4.2%	358	13.8%	2196	84.9%	34	1.3%	2588
EMS	2	0.2%	29	3.5%	28	3.4%	21	2.5%	80	9.7%	730	88.4%	16	1.9%	826
Ed	1	0.1%	27	1.4%	36	1.9%	46	2.4%	110	5.7%	1819	94.1%	5	0.3%	1934
En	1	0.0%	116	2.1%	381	7.0%	128	2.4%	626	11.5%	4594	84.4%	223	4.1%	5443
HHD	3	0.1%	252	6.3%	153	3.8%	124	3.1%	532	13.3%	3427	85.7%	39	1.0%	3998
IST	0	0.0%	24	3.1%	61	7.9%	19	2.4%	104	13.4%	661	85.2%	11	1.4%	776
LA	8	0.2%	290	5.8%	185	3.7%	241	4.8%	724	14.5%	4205	84.3%	59	1.2%	4988
Sc	1	0.0%	102	3.8%	359	13.3%	88	3.3%	550	20.4%	2062	76.3%	89	3.3%	2701
Totals	35	0.1%	1361	4.0%	1955	5.8%	1089	3.2%	4440	13.2%	28477	84.6%	727	2.2%	33644

Fall 2005 Undergraduate Student Enrollments, UP Campus, By UP College and Gender

College	Female		Male		Totals
	#	%	#	%	#
Ag Sc	633	43.8%	812	56.2%	1445
A & A	866	57.1%	650	42.9%	1516
Bus	1734	36.8%	2980	63.2%	4714
Comm	1690	62.2%	1025	37.8%	2715
DUS	1199	46.3%	1389	53.7%	2588
EMS	246	29.8%	580	70.2%	826
Ed	1516	78.4%	418	21.6%	1934
En	884	16.2%	4559	83.8%	5443
HHD	2660	66.5%	1338	33.5%	3998
IST	95	12.2%	681	87.8%	776
LA	2541	50.9%	2447	49.1%	4988
Sc	1316	48.7%	1385	51.3%	2701
Totals	15380	45.7%	18264	54.3%	33644

GRADUATE STUDENTS

Fall 2008 Graduate Student Enrollments, UP Campus, by UP College and Ethnicity

College	Am Ind/ Ala Nat		Blk/ Af Am		As/Pac Am		Hisp		Multicultural Std Subtotal		White/ Not Reported		Inter- National		Totals
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
Ag Sc	0	0.0%	6	1.7%	7	2.0%	11	3.1%	24	6.8%	194	54.6%	137	38.6%	355
A & A	2	1.0%	8	3.8%	5	2.4%	6	2.9%	21	10.0%	145	69.4%	43	20.6%	209
Bus	2	0.6%	22	6.4%	23	6.7%	9	2.6%	56	16.3%	186	54.2%	101	29.4%	343
Comm	0	0.0%	5	6.3%	3	3.8%	3	3.8%	11	13.9%	49	62.0%	19	24.1%	79
EMS	1	0.3%	10	2.6%	4	1.0%	14	3.6%	29	7.4%	213	54.5%	149	38.1%	391
Ed	4	0.5%	47	6.3%	17	2.3%	17	2.3%	85	11.5%	515	69.4%	142	19.1%	742
En	1	0.1%	15	1.2%	37	2.9%	17	1.3%	70	5.5%	410	32.2%	793	62.3%	1273
HHD	0	0.0%	11	2.7%	11	2.7%	6	1.4%	28	6.8%	280	67.6%	106	25.6%	414
IST	0	0.0%	2	2.1%	4	4.2%	1	1.0%	7	7.3%	31	32.3%	58	60.4%	96
LA	3	0.4%	33	4.2%	28	3.5%	33	4.2%	97	12.2%	485	61.2%	210	26.5%	792
Sc	0	0.0%	4	0.5%	24	3.3%	23	3.1%	51	7.0%	347	47.5%	333	45.6%	731
Totals	13	0.2%	163	3.0%	163	3.0%	140	2.6%	479	8.8%	2855	52.6%	2091	38.5%	5425

Fall 2008 Graduate Student Enrollments, UP Campus, by UP College and Gender

College	Female		Male		Totals
	#	%	#	%	#
Ag Sc	195	54.9%	160	45.1%	355
A & A	132	63.2%	77	36.8%	209
Bus	110	32.1%	233	67.9%	343
Comm	45	57.0%	34	43.0%	79
EMS	130	33.2%	261	66.8%	391
Ed	473	63.7%	269	36.3%	742
En	250	19.6%	1023	80.4%	1273
HHD	307	74.2%	107	25.8%	414
IST	38	39.6%	58	60.4%	96
LA	456	57.6%	336	42.4%	792
Sc	276	37.8%	455	62.2%	731
Totals	2412	44.5%	3013	55.5%	5425

Fall 2005 Graduate Student Enrollments, UP Campus, by UP College and Ethnicity

College	Am Ind/ Ala Nat		Blk/ Af Am		As/Pac Am		Hisp		Multicultural Student Subtotal		White/ Not Reported		Inter- National		Totals
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#
Ag Sc	0	0.0%	9	2.4%	3	0.8%	11	2.9%	23	6.1%	212	55.8%	145	38.2%	380
A & A	1	0.4%	8	3.4%	5	2.2%	6	2.6%	20	8.6%	165	71.1%	47	20.3%	232
Bus	0	0.0%	11	4.2%	11	4.2%	2	0.8%	24	9.1%	141	53.4%	99	37.5%	264
Comm	1	1.3%	8	10.5%	2	2.6%	2	2.6%	13	17.1%	31	40.8%	32	42.1%	76
EMS	2	0.4%	9	1.9%	9	1.9%	11	2.4%	31	6.6%	230	49.3%	206	44.1%	467
Ed	12	1.4%	65	7.5%	25	2.9%	25	2.9%	127	14.6%	581	66.6%	164	18.8%	872
En	1	0.1%	20	1.8%	24	2.1%	16	1.4%	61	5.4%	383	33.6%	695	61.0%	1139
HHD	0	0.0%	16	4.4%	10	2.8%	5	1.4%	31	8.6%	231	64.2%	98	27.2%	360
IST	0	0.0%	4	5.6%	2	2.8%	2	2.8%	8	11.1%	27	37.5%	37	51.4%	72
LA	1	0.1%	36	4.3%	28	3.3%	25	3.0%	90	10.7%	527	62.9%	221	26.4%	838
Sc	0	0.0%	9	1.3%	21	3.0%	17	2.4%	47	6.6%	338	47.5%	326	45.9%	711
Totals	18	0.3%	195	3.6%	140	2.6%	122	2.3%	475	8.8%	2866	53.0%	2070	38.3%	5411

Fall 2005 Graduate Student Enrollments, UP Campus, by UP College and Gender

College	Female		Male		Totals
	#	%	#	%	#
Ag Sc	185	48.70%	195	51.30%	380
A & A	145	62.50%	87	37.50%	232
Bus	84	31.80%	180	68.20%	264
Comm	51	67.10%	25	32.90%	76
EMS	153	32.80%	314	67.20%	467
Ed	556	63.80%	316	36.20%	872
En	208	18.30%	931	81.70%	1139
HHD	257	71.40%	103	28.60%	360
IST	22	30.60%	50	69.40%	72
LA	512	61.10%	326	38.90%	838
Sc	246	34.60%	465	65.40%	711
Totals	2419	44.70%	2992	55.30%	5411

FACULTY DATA

Faculty, Fall 2008, by Ethnicity

SCIENCE	Professor		Associate Professor		Assistant Professor		Instructor		Totals	
	#	%	#	%	#	%	#	%	#	%
Am Ind	0	0.0%	0	0.0%	0	0.0%	2	2.1%	2	0.5%
Af Am	4	2.9%	2	2.9%	1	1.1%	1	1.0%	8	2.0%
As Am	24	17.5%	12	17.6%	20	21.1%	13	13.5%	69	17.4%
Hisp	0	0.0%	1	1.5%	3	3.2%	2	2.1%	6	1.5%
SbT	28	20.4%	15	22.1%	24	25.3%	18	18.8%	85	21.5%
White	109	79.6%	53	77.9%	71	74.7%	78	81.3%	311	78.5%
Totals	137	100%	68	100%	95	100%	96	100%	396	100%

Faculty, Fall 2005, by Ethnicity

SCIENCE	Professor		Associate Professor		Assistant Professor		Instructor		Totals	
	#	%	#	%	#	%	#	%	#	%
Am Ind	0	0.0%	0	0.0%	0	0.0%	1	1.0%	1	0.3%
Af Am	4	3.1%	1	1.8%	3	3.0%	1	1.0%	9	2.3%
As Am	20	15.5%	7	12.3%	23	23.0%	21	21.2%	71	18.4%
Hisp	1	0.8%	1	1.8%	0	0.0%	1	1.0%	3	0.8%
SbT	25	19.4%	9	15.8%	26	26.0%	24	24.2%	84	21.8%
White	104	80.6%	48	84.2%	74	74.0%	75	75.8%	301	78.2%
Totals	129	100%	57	100%	100	100%	99	100%	385	100%

Faculty, Fall 2008, by Gender

SCIENCE	Professor		Associate Professor		Assistant Professor		Instructor		Totals	
	#	%	#	%	#	%	#	%	#	%
Female	16	11.7%	21	30.9%	26	27.4%	45	46.9%	108	27.3%
Male	121	88.3%	47	69.1%	69	72.6%	51	53.1%	288	72.7%
Totals	137	100%	68	100%	95	100%	96	100%	396	100%

Faculty, Fall 2005, by Gender

SCIENCE	Professor		Associate Professor		Assistant Professor		Instructor		Totals	
	#	%	#	%	#	%	#	%	#	%
Female	15	11.6%	14	24.6%	38	38.0%	48	48.5%	115	29.9%
Male	114	88.4%	43	75.4%	62	62.0%	51	51.5%	270	70.1%
Totals	129	100%	57	100%	100	100%	99	100%	385	100%

UP Colleges – Executives, Academic Administrators, Staff, and Tech Service, Fall 2008, by Ethnicity

SCIENCE	Class	Grd	Am Ind/ Ala Nat		Blk/ Af Am		As/Pac Am		Hisp		Multicultural Subtotal		White		Totals
			#	%	#	%	#	%	#	%	#	%	#	%	
	Exec		0	0	0	0	0	0	0	0	0	0	1	100.0%	1
	Exec SbT		0	0	0	0	0	0	0	0	0	0	1	100.0%	1
	Acam		0	0	0	0	2	16.7%	0	0	2	16.7%	10	83.3%	12
	Acam SbT		0	0	0	0	2	16.7%	0	0	2	16.7%	10	83.3%	12
	Staff	26-32	0	0	0	0	0	0	0	0	0	0	2	100.0%	2
	Staff	20-25	0	0	2	4.3%	0	0	0	0	2	4.3%	44	95.7%	46
	Staff	11-19	0	0	0	0	0	0	1	0.8%	1	0.8%	125	99.2%	126
	Staff	Comp	0	0	2	6.3%	0	0	0	0	2	6.3%	30	93.8%	32
	Staff SbT		0	0	4	1.9%	0	0	1	0.5%	5	2.4%	201	97.6%	206
	Tech	8-12	0	0	0	0	0	0	0	0	0	0	16	100.0%	16
	Tech	1-7	0	0	0	0	0	0	0	0	0	0	1	100.0%	1
	Tech SbT		0	0	0	0	0	0	0	0	0	0	17	100.0%	17
	TOTALS		0	0	4	1.7%	2	0.8%	1	0.4%	7	3.0%	229	97.0%	236

UP Colleges – Executives, Academic Administrators, Staff, and Tech Service, Fall 2008, by Gender

SCIENCE	Class	Grd	Female		Male		Totals
			#	%	#	%	
	Exec		0	0	1	100.0%	1
	Exec SbT		0	0	1	100.0%	1
	Acam		1	8.3%	11	91.7%	12
	Acam SbT		1	8.3%	11	91.7%	12
	Staff	26-32	0	0	2	100.0%	2
	Staff	20-25	31	67.4%	15	32.6%	46
	Staff	11-19	110	87.3%	16	12.7%	126
	Staff	Comp	10	31.3%	22	68.8%	32
	Staff SbT		151	73.3%	55	26.7%	206
	Tech	8-12	1	6.3%	15	93.8%	16
	Tech	1-7	0	0	1	100.0%	1
	Tech SbT		1	5.9%	16	94.1%	17
	TOTALS		153	64.8%	83	35.2%	236