

Eberly College of Science

Progress Report

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

December 15, 2006

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 in the diversity arena has been the translation of a shared understanding of diversity into deliverables such as the recruitment and retention of minority graduate students in the college. We have not made significant progress; the numbers of minority graduate students has been roughly constant over a decade. The recruitment of minority faculty members has also been very challenging, but we have made some progress.

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 only 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.

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 unrepresented 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 plans to do a college-wide survey soon; we were discouraged from doing such a survey close in time to the 2004 University Faculty/Staff Survey.

4. How does your unit respond to climate issues?

Climate-related issues brought to climate and diversity committee members, Associate Deans, multicultural coordinator, human resources officer, or the Dean may be addressed by the individual made aware of the issue. Such 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 will be discussed and addressed as a more general concern for the college.

General climate concerns are prioritized by the climate committee, and the top priority ones are assigned to a subcommittee for creation of 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 may be brought into the discussion and development or implementation of solutions. 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. We are now in the second year of a special committee, with membership from the climate committee and other engaged members of the college community, 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.)

We have active departmental climate and diversity committees that address issues within each department.

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.

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: 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 in 2005, 2006 and 2007, 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. The college multicultural coordinator 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.*

While we have taken a large number of actions, we have only qualitative and anecdotal data to measure our effectiveness in having created a welcoming campus climate. It is time for us to implement a college-wide climate survey.

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 14 – 16, 2006. 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 2005-2006, female students represented 52% of the participants and 30% 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 2006-07 academic year. In 2005-06, the ALCOA Pennypacker program supported 290 students, with 81 students in the fall and 67 students in the spring making the Dean's List with a grade point average of 3.5 or above. In addition, 11 students had a perfect 4.0 grade point average for the 2005-06 academic year. Truly, the ALCOA program at The Pennsylvania State University through the FISE program has 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 14 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 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 HBCUs, HSIs, and Tribal affiliations.

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 led out of 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 06-07 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. 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 “weed-out” 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 Executive Assistant to the Dean 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 2005 are shown in Appendix III. The data provided by the Office of the Vice Provost for Educational Equity for this report are shown in Appendix IV).

Graduate Students

A snapshot of graduate enrollment rates indicates a decline in the number of underrepresented students in the College. We see a reduction over the past 3 years, but rates have been roughly constant over the past decade. Graduation and the lack of yields in recruitment of underrepresented students have accounted for the most recent downward trend. In the short-term, we will work closely with the Departments to reverse this trend so we can get back to where we were. Long-term, the activities listed in this plan will improve on these numbers.

Total Eberly College of Science Full Time Graduate Student Enrollments by Ethnicity

| | | | Fall 1997 | Fall 1998 | Fall 1999 | Fall 2000 | Fall 2001 | Fall 2002 | Fall 2003 | Fall 2004 | Fall 2005 | Fall 2006 | |
|--------------------|-----------------------------|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----|
| White | | | 268 | 254 | 267 | 273 | 295 | 323 | 349 | 328 | 302 | 280 | |
| Declined To Report | | | 13 | 11 | 12 | 15 | 19 | 20 | 19 | 18 | 18 | 18 | |
| International | | | 153 | 171 | 205 | 202 | 199 | 255 | 304 | 316 | 320 | 321 | |
| Minorities | Underrepresented Minorities | African American | 12 | 10 | 8 | 11 | 9 | 11 | 12 | 12 | 9 | 4 | |
| | | Hispanic American | 10 | 10 | 12 | 9 | 10 | 10 | 15 | 17 | 15 | 15 | |
| | | Native American | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| | | Total Under Represented | 24 | 22 | 21 | 20 | 19 | 21 | 27 | 29 | 24 | 21 | |
| | Asian American | | 13 | 12 | 14 | 15 | 18 | 16 | 22 | 21 | 20 | 20 | |
| | Total Minorities | | | 37 | 34 | 35 | 35 | 37 | 37 | 49 | 50 | 44 | 41 |
| Total Students | | | 471 | 470 | 519 | 525 | 550 | 635 | 721 | 712 | 684 | 660 | |

Since our data do not show progress in the recruitment of minority graduate students, we will ramp up our efforts to implement the items in the “Tool Box” (see Appendix I). We will track activities that we expect to lead to increased enrollment and retention to determine if these ideas have merit.

Undergraduate Students

We have measured success by looking at enrollment, retention, and graduation rates. (Comparison data from 1997 through 2005 are shown in Appendix III. The data provided by the Office of the Vice Provost for Educational Equity for this report are shown in Appendix IV).

The following tables provide retention and graduation rates for successive cohorts of baccalaureate regular admit students for each fall semester from fall 1997 through fall 2004. The data are for 1) multicultural students (African/Black American, American Indian/Alaskan Native, Asian and Pacific American, and Latino/Hispanic American) and 2) white students. Retention data indicate the percentage of students retained at any Penn State location within the college. Graduation data indicate the percentage of students who graduated from any Penn State location with any Penn State degree, including students who change to associate degree status and graduate with associate degrees.

| Multicultural Students | | | | | | | | |
|-------------------------------|------|------|------|------|------|------|------|------|
| <i>University Park</i> | | | | | | | | |
| ADMIT SEMESTER | FA97 | FA98 | FA99 | FA00 | FA01 | FA02 | FA03 | FA04 |
| NUMBER OF STUDENTS | 115 | 102 | 75 | 86 | 106 | 111 | 127 | 124 |
| % RETAINED | | | | | | | | |
| AFTER 1 YEAR | 92.1 | 94.1 | 94.6 | 90.6 | 88.6 | 86.4 | 90.5 | 95.9 |
| AFTER 2 YEARS | 88.6 | 84.3 | 92.0 | 82.5 | 79.2 | 81.9 | 83.4 | |
| AFTER 3 YEARS | 83.4 | 82.3 | 82.6 | 76.7 | 68.8 | 72.9 | | |
| % GRADUATED | | | | | | | | |
| AFTER 4 YEARS | 61.7 | 54.9 | 64.0 | 69.7 | 57.5 | | | |
| AFTER 5 YEARS | 80.0 | 77.4 | 80.0 | 75.5 | | | | |
| AFTER 6 YEARS | 80.8 | 79.4 | 82.6 | | | | | |

*These data are taken from the University database using the AIDAE-RPM utility. Retention data for students admitted in Fall 2005 are not available at this point in the data cycle; graduation data are available through the Fall 2001 cohort. "Regular admit" excludes advanced standing, provisional, non-degree and non-degree to degree, readmit, and reinstate statuses.

| White Students | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|------|
| <i>University Park</i> | | | | | | | | |
| ADMIT SEMESTER | FA97 | FA98 | FA99 | FA00 | FA01 | FA02 | FA03 | FA04 |
| NUMBER OF STUDENTS | 452 | 428 | 359 | 370 | 401 | 392 | 379 | 334 |
| % RETAINED | | | | | | | | |
| AFTER 1 YEAR | 95.5 | 94.8 | 93.5 | 96.4 | 91.7 | 93.1 | 93.4 | 94.0 |
| AFTER 2 YEARS | 92.2 | 92.7 | 90.5 | 91.0 | 89.0 | 89.0 | 90.7 | |
| AFTER 3 YEARS | 89.3 | 89.4 | 86.6 | 85.9 | 83.2 | 83.4 | | |
| % GRADUATED | | | | | | | | |
| AFTER 4 YEARS | 73.4 | 69.8 | 72.9 | 80.8 | 71.8 | | | |
| AFTER 5 YEARS | 86.7 | 86.9 | 83.2 | 89.4 | | | | |
| AFTER 6 YEARS | 87.8 | 89.0 | 84.9 | | | | | |

Retention of students in the Eberly College of Science to a degree from the college is a substantially different picture. Minority students graduate from the college at a lower rate than majority students do, and majority students only graduate from the college at a rate of about 50%. Others move on to majors in other colleges. 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 (see more details elsewhere in this report).

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 has been remarkably successful in hiring faculty from underrepresented groups. The head of this department is commended for his commitment to recruiting and retaining a diverse workforce.

University and college financial support and departmental efforts in recruitment have led to a significant 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 34.5% of the assistant professors in the college are female. As seen by the faculty representation by gender chart, 17.5% of our tenure-track faculty members are female.

Creating a more family-friendly environment has improved the overall climate for women and men in the College.

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.

Our Chemistry department tripled the number of women on its faculty over several years and has been ranked third in the percentage of female faculty among the top 50 research departments nationwide. This success, too, was in part due to the leadership of the department head.

In general, our departments of Astronomy and Physics continue to have the smallest 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.

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.

The development of a summer program is underway to bring underrepresented individuals to Penn State for a summer internship program, shortly after graduation from college, for a laboratory work experience at the level of a Research Technician, with the hope that some of them may be able to stay on as HR86 employees and later, perhaps, may decide to enter a graduate program here at Penn State. Human resources and the College are sharing in the cost to introduce this program.

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 should 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.

Over the past 12 months, we have announced 38 staff vacancies (not counting HR86 positions), received 1208 applications of which 73 were from underrepresented individuals. We interviewed 110 individuals of whom 3 were underrepresented, and we hired 28 white females and 4 white males.

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

We will continue those retention activities that are having a positive impact.

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. We learned that most 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.

Through 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 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.

We will be vigilant in ensuring respect for differences in research methodology and scholarship.

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. While the numbers are small, the numbers of women and minorities holding endowed positions has increased significantly.

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.

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.

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. 4% of our staff are from underrepresented groups, and 4% of our faculty are from underrepresented groups. In the faculty ranks, we do not consider Asian Americans underrepresented. (Comparison data from 1997 through 2005 are shown in Appendix III. The data provided by the Office of the Vice Provost for Educational Equity for this report are shown in Appendix IV). Presented here are data from October, 2006.

| October 2006 Staff and Technical Service Employees by Ethnicity | | | | | | | | |
|---|-------|-----------------|-------------|----------|----------|------------------------|------|-------|
| Class | Grade | Native American | Black/Af Am | Asian Am | Hispanic | Multicultural Subtotal | | White |
| | | # | # | # | # | # | % | # |
| | | STFF | 26-32 | 0 | 0 | 0 | 0 | 0 |
| | 20-25 | 0 | 2 | 0 | 0 | 2 | 4.8% | 40 |
| | 11-19 | 0 | 0 | 2 | 2 | 4 | 3.5% | 109 |
| | COMP | 0 | 1 | 0 | 1 | 2 | 8.0% | 23 |
| STFF Subtotal | | 0 | 3 | 2 | 3 | 8 | 4.4% | 173 |
| TECH | 8-12 | 0 | 0 | 0 | 0 | 0 | 0.0% | 1 |
| | 1-7 | 0 | 0 | 0 | 0 | 0 | 0.0% | 18 |
| TECH Subtotal | | 0 | 0 | 0 | 0 | 0 | 0.0% | 19 |
| | | 0 | 3 | 2 | 3 | 8 | 4.0% | 192 |

| October 2006 Staff and Technical Service Employees by Gender | | | | | | | |
|--|-------|---------------------------|-------|------|--------|--------|--|
| Class | Grade | Female | | Male | | Totals | |
| | | # | % | # | % | # | |
| | | Eberly College of Science | | | | | |
| STFF | 26-32 | 0 | 0.0% | 1 | 100.0% | 1 | |
| | 20-25 | 25 | 59.5% | 17 | 40.5% | 42 | |
| | 11-19 | 103 | 91.2% | 10 | 8.8% | 113 | |
| | COMP | 8 | 32.0% | 17 | 68.0% | 25 | |
| STFF Subtotal | | 136 | 75.1% | 45 | 24.9% | 181 | |
| TECH | 8-12 | 0 | 0.0% | 1 | 100.0% | 1 | |
| | 1-7 | 1 | 5.6% | 17 | 94.4% | 18 | |
| TECH Subtotal | | 1 | 5.3% | 18 | 94.7% | 19 | |
| Totals | | 137 | 68.5% | 63 | 31.5% | 200 | |

Faculty Data

| Eberly College of Science October 2006 Faculty (Professorial and Instructional Ranks) by Ethnicity | | | | | | | | | | |
|---|------------|---------------|--------------|---------------|---------------|---------------|-----------------|---------------|------------|---------------|
| | Full Prof. | | Assoc. Prof. | | Assist. Prof. | | Instruct. Ranks | | Res. Ranks | |
| | # | % | # | % | # | % | # | % | # | % |
| Nativ Am | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 1.6% | 0 | 0.0% |
| Asian Am | 22 | 17.2% | 6 | 12.8% | 16 | 24.2% | 5 | 8.2% | 10 | 17.5% |
| Black/Af Am | 4 | 3.1% | 1 | 2.1% | 3 | 4.5% | 1 | 1.6% | 0 | 0.0% |
| Latino | 1 | 0.8% | 1 | 2.1% | 0 | 0.0% | 3 | 4.9% | 0 | 0.0% |
| Subtotals | 27 | 21.1% | 8 | 17.0% | 19 | 28.8% | 10 | 16.4% | 10 | 17.5% |
| Unidentified | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 1 | 1.8% |
| White | 101 | 78.9% | 39 | 83.0% | 47 | 71.2% | 51 | 83.6% | 46 | 80.7% |
| Totals | 128 | 100.0% | 47 | 100.0% | 66 | 100.0% | 61 | 100.0% | 57 | 100.0% |

(ECOS Oct. 2006 Faculty Cont.)

| 10/2006 Faculty | Totals | |
|------------------|------------|---------------|
| | # | % |
| Nativ Am | 1 | 0.3% |
| Asian Am | 59 | 16.4% |
| Black/Af Am | 9 | 2.5% |
| Latino | 5 | 1.4% |
| Subtotals | 74 | 20.6% |
| Unidentified | 1 | 0.3% |
| White | 284 | 79.1% |
| Totals | 359 | 100.0% |

| Eberly College of Science October 2006 Faculty (Tenured and Tenure-track only) by Ethnicity | | | | | | | | |
|--|-----------|--------------|---------------------|--------------|---------------------|--------------|-----------|--------------|
| | Professor | | Associate Professor | | Assistant Professor | | Totals | |
| | # | % | # | % | # | % | # | % |
| Nativ Am | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Asian Am | 22 | 17.3% | 6 | 14.0% | 13 | 21.3% | 41 | 17.7% |
| Black/Af Am | 4 | 3.1% | 1 | 2.3% | 3 | 4.9% | 8 | 3.5% |
| Latino | 1 | 0.8% | 1 | 2.3% | 0 | 0.0% | 2 | 0.9% |
| Subtotals | 27 | 21.3% | 8 | 18.6% | 19 | 31.1% | 54 | 23.4% |
| White | 100 | 78.7% | 35 | 81.4% | 42 | 68.9% | 177 | 76.6% |
| Overall Totals | 127 | 100.0% | 43 | 100.0% | 61 | 100.0% | 231 | 100.0% |

October 2006 Faculty (Professorial, Instructional, and Research Ranks) by Gender

Data includes STN, FTM and FT1 appointees in each rank

Instructional Ranks include Instructors, Senior Instructors, Lecturers and Senior Lecturers

Research Ranks include Research Associates, Senior Research Associates, and Senior Scientists

(Excluded are Assistants and Research Assistants)

| | Full Prof. | | Assoc Prof. | | Assist. Prof. | | Instruct Ranks | | Res. Ranks | | Total | |
|--------|------------|--------|-------------|--------|---------------|--------|----------------|--------|------------|--------|-------|--------|
| | # | % | # | % | # | % | # | % | # | % | # | % |
| | | 14 | 10.9% | 8 | 17.0% | 22 | 33.3% | 23 | 37.7% | | | |
| Female | 114 | 89.1% | 39 | 83.0% | 44 | 66.7% | 38 | 62.3% | 27 | 47.4% | 94 | 26.2% |
| Male | 128 | 100.0% | 47 | 100.0% | 66 | 100.0% | 61 | 100.0% | 30 | 52.6% | 265 | 73.8% |
| Totals | | | | | | | | | 57 | 100.0% | 359 | 100.0% |

| October 2006 Faculty (Tenured and Tenure-track) by Gender | | | | | | | | |
|--|-----------|--------|---------------------|--------|---------------------|--------|--------|--------|
| Eberly College of Science | | | | | | | | |
| | Professor | | Associate Professor | | Assistant Professor | | Totals | |
| | # | % | # | % | # | % | # | % |
| Female | 14 | 11.0% | 6 | 14.0% | 20 | 34.5% | 40 | 17.5% |
| Male | 113 | 89.0% | 37 | 86.0% | 38 | 65.5% | 188 | 82.5% |
| Totals | 127 | 100.0% | 43 | 100.0% | 58 | 100.0% | 228 | 100.0% |

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

We have been working with the Office of the Registrar to find ways of providing more details on the transcript that depict the specific experiences of ECoS students who have engaged in study abroad.

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.

We are developing an extramural option to be added to every ECOS undergraduate degree program that will include mandatory international and/or co-op experiences.

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.

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 and has very recently signed an agreement with Peking University in Beijing, China.

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.

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 a cultural.

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?

Eberly College of Science October 2006 Academic Administrators by Gender

Data includes STN and FTM

(includes Phil Mohr in BMB, who is a STN Affiliate Professor, and Karin Foley, FTM Assoc Prof technically classed as Academic)

| ECOS | Professor | | Associate Professor | | Totals | |
|--------|-----------|--------|---------------------|--------|--------|--------|
| | # | % | # | % | # | % |
| Female | 0 | 0.0% | 1 | 100.0% | 1 | 9.1% |
| Male | 10 | 100.0% | 0 | 0.0% | 10 | 90.9% |
| Totals | 11 | 100.0% | 1 | 100.0% | 11 | 100.0% |

Eberly College of Science October 2006 Academic Administrators by Ethnicity

| ECOS | Professor | | Associate Professor | | Totals | |
|------------------|-----------|--------------|---------------------|-------------|----------|--------------|
| | # | % | # | % | # | % |
| Nativ Am | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Asian Am | 2 | 20.0% | 0 | 0.0% | 2 | 18.2% |
| Black/Af Am | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Latino | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Subtotals | 2 | 20.0% | 0 | 0.0% | 2 | 18.2% |
| White | 8 | 80.0% | 1 | 100.0% | 9 | 81.8% |
| Totals | 10 | 100.0% | 1 | 100.0% | 11 | 100.0% |

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. The Dean regularly asks the chairs of the search committees or the department heads about minority and female candidates. In the interview process, candidates will be asked for their views on climate and diversity.

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 each case, the women faculty have declined to be considered for the positions, at least at that time.

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 2005 are shown in Appendix III. The data provided by the Office of the Vice Provost for Educational Equity for this report are shown in Appendix IV). Presented above are data from October, 2006.

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 strategic plan.

Under “Goal 1: Enhance Academic Excellence” we state: “In order to truly be the college of choice for outstanding students, we must be the college of choice for outstanding students from every race, ethnicity, sexual orientation, religion and age. We have a number of programs in place, and more described in this plan under Goal 5, to improve recruitment and retention of all students in the college.”

Under “Goal 2: Improve the range and quality of educational experiences for all students” we describe a number of educational enhancement initiatives, described below, and some specific strategies aimed at diversity, including “work to increase the diversity of our students”, “improve the climate for minority students and other students in the college by seeking improvements in all points of contact”, and “implement meaningful programs to assess student outcomes”.

We are planning a Center for Excellence in Science Education, the overall thrust of which will be the enhancement of the educational experience of all students in the college. The Center would house research and dissemination of pedagogical methods, outcomes assessments, and best practices. The plans will incorporate research on learning and on the parameters for success of underrepresented students with the goal of developing methodologies that will improve the retention and graduation rates of these students.

We are actively working to expand our Trustee Scholarship and Distinguished Graduate Fellowship programs and to establish a program that will enable us to support research opportunities for underrepresented students. Since the Trustee Scholarships address the financial needs of undergraduates, we are expecting that they will help us to address the fiscal needs of deserving minority students. The research scholarship program, by providing opportunities for undergraduates to engage in research with faculty at the bench level, will serve to inspire and motivate students to enter a science career.

We are striving to implement a post-doctoral scholar program for outstanding females, especially in physics and astronomy where we have long struggled to attract qualified female faculty candidates.

Specifically under “Goal 5: Build a more considerate and civil community in the college” we say, “There is significant interplay among the various goals of the college. Climate issues will certainly affect the quality of the educational experience for our students, and climate issues will affect our ability to recruit and retain the very best students, faculty and staff. One important aspect of improving climate for individuals from under-represented groups is to increase the numbers of those individuals at every level in our college and to improve the retention and success of these individuals.”

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 four endowed chairs that are currently held by female faculty members.

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.

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 female and minority faculty is now accepted without the conflict of maintaining academic excellence.

The Climate and Diversity Committees at the departmental level 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.

Least successful: We had planned to have a diversity recruitment coordinator identified in each department to focus on graduate student recruitment. This has not happen 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 overall 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:

- Articulated a minimum acceptable maternity/parental leave policy for graduate students and post-docs; working with OHR to get a policy implemented 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. The tool for anonymous submission of issues to the committee was retained.
- 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, and 2007, 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 highlighting particular issues and imploring all not to blame one and other for problems.
- 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 – Data Comparisons 1997 through 2005

Undergraduate Student Data

Undergraduate Student Enrollment by Ethnicity, 1997/2000/2002/2005
Eberly College of Science, University Park Campus

| Ethnicity | Fall, 1997 | | Fall, 2000 | | Fall, 2002 | | Fall, 2005 | |
|-----------------|------------------|------|------------------|------|------------------|------|------------------|------|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Asian American | 11 | 330 | 9 | 247 | 11 | 267 | 13 | 359 |
| Black American | 3 | 90 | 3 | 91 | 3 | 78 | 4 | 102 |
| Hispanic/Latino | 3 | 75 | 3 | 68 | 3 | 69 | 3.3 | 88 |
| Native American | < 1 ^a | 4 | < 1 ^a | 3 | < 1 ^a | 5 | < 1 ^a | 1 |
| Sub-Total | 17 | 499 | 15 | 409 | 17 | 419 | 20 | 550 |
| International | < 1 ^a | 16 | 1 | 31 | 2 | 48 | 3 | 89 |
| White | 82 | 2375 | 83 | 2190 | 82 | 2059 | 76 | 2062 |
| Total | 99 | 2890 | 99 | 2630 | 101 | 2526 | 100 | 2701 |

Undergraduate Student Enrollment, by Gender, 1997/2000/2002/2005
Eberly College of Science, University Park Campus

| Gender | Fall, 1997 | | Fall, 2000 | | Fall, 2002 | | Fall, 2005 | |
|--------|------------|------|------------|------|------------|------|------------|------|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Female | 47 | 1364 | 52 | 1356 | 52 | 1312 | 49 | 1316 |
| Male | 53 | 1526 | 48 | 1274 | 48 | 1214 | 51 | 1385 |
| Total | 100 | 2890 | 100 | 2630 | 100 | 2526 | 100 | 2701 |

^a <1 indicates less than 1 percent

¹ Percentages may not sum to 100 percent due to rounding

Student Data

Retention and Graduation Rates, 1994-2004, Eberly College of Science

The following tables provide retention and graduation rates for baccalaureate regular admit students for each fall semester from fall 1994 through fall 2001.* The data are for 1) multicultural students (African/Black American, American Indian/Alaskan Native, Asian and Pacific American, and Latino/Hispanic American) and 2) white students. Retention data indicate the percentage of students retained at any Penn State location within any Penn State College (excluding Penn College). Graduation data indicate the percentage of students who graduated from any Penn State location with any Penn State degree, including students who started as baccalaureate degree candidates and changed to associate degree status and graduated with associate degrees (excluding Penn College).

Multicultural Students

| Admit Semester | No. of Students | University Park | | | | | |
|----------------|-----------------|-----------------|---------|---------|-----------------|---------|---------|
| | | % Retained | | | % Graduated PSU | | |
| | | + 1 yr | + 2 yrs | + 3 yrs | + 4 yrs | + 5 yrs | + 6 yrs |
| FA 94 | 104 | 88.4 | 79.8 | 71.1 | 43.2 | 62.5 | 64.4 |
| FA 95 | 121 | 86.7 | 80.1 | 77.6 | 45.4 | 69.4 | 72.7 |
| FA 96 | 125 | 85.6 | 80 | 74.4 | 53.6 | 75.2 | 76 |
| FA 97 | 115 | 92.1 | 88.6 | 83.4 | 61.7 | 80 | 80.8 |
| FA 98 | 102 | 94.1 | 84.3 | 82.3 | 54.9 | 77.4 | 79.4 |
| FA 99 | 75 | 94.6 | 92 | 82.6 | 64 | 80 | 82.6 |
| FA 00 | 86 | 90.6 | 82.5 | 76.7 | 69.7 | 75.5 | |
| FA 01 | 106 | 88.6 | 79.2 | 68.8 | 57.5 | | |
| FA 02 | 111 | 86.4 | 81.9 | 72.9 | | | |
| FA 03 | 127 | 90.5 | 83.4 | | | | |
| FA 04 | 124 | 95.9 | | | | | |

White Students

| Admit Semester | No. of Students | University Park | | | | | |
|----------------|-----------------|-----------------|---------|---------|-----------------|---------|---------|
| | | % Retained | | | % Graduated PSU | | |
| | | + 1 yr | + 2 yrs | + 3 yrs | + 4 yrs | + 5 yrs | + 6 yrs |
| FA 94 | 454 | 94.2 | 89.6 | 85.6 | 65.6 | 81.9 | 85 |
| FA 95 | 501 | 94.4 | 89 | 86.2 | 68.8 | 82.4 | 85 |
| FA 96 | 413 | 93.9 | 89.1 | 84 | 68.2 | 83.5 | 84.9 |
| FA 97 | 450 | 95.5 | 92.2 | 89.3 | 73.5 | 86.7 | 87.8 |
| FA 98 | 428 | 95 | 92.7 | 89.4 | 69.8 | 86.9 | 89 |
| FA 99 | 359 | 93.5 | 91.5 | 86.5 | 72.9 | 83.2 | 84.9 |
| FA 00 | 370 | 96.4 | 91 | 85.9 | 80.8 | 89.4 | |
| FA 01 | 401 | 91.7 | 89 | 83.2 | 71.8 | | |
| FA 02 | 392 | 93.1 | 89 | 83.4 | | | |
| FA 03 | 379 | 93.4 | 90.7 | | | | |
| FA 04 | 334 | 94 | | | | | |

*These data are taken from the University database using the Integrated Student Information System (ISIS) AIDAE-RPM data extraction tool. Retention data for students admitted in fall 2002 are not available in the University database until December 2003; graduation data are only available through fall 1998. "Regular admit" excludes advanced standing, provisional, non-degree and non-degree to degree, readmit, and reinstate statuses.

Graduate Student Data

Graduate Student Enrollment, by Ethnicity, 1997/2000/2002/2005
Eberly College of Science, University Park Campus

| Ethnicity | Fall, 1997 | | Fall, 2000 | | Fall, 2002 | | Fall, 2005 | |
|-----------------|------------------|-----|------------------|-----|------------------|-----|------------------|-----|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Asian American | 3 | 17 | 3 | 16 | 3 | 18 | 3 | 21 |
| Black American | 2 | 13 | 2 | 12 | 2 | 11 | 1.3 | 9 |
| Hispanic/Latino | 2 | 12 | 2 | 11 | 2 | 10 | 2.4 | 17 |
| Native American | < 1 ^a | 2 | < 1 ^a | 0 | < 1 ^a | 0 | < 1 ^a | 0 |
| Sub-Total | 7 | 44 | 7 | 39 | 7 | 39 | 6.6 | 47 |
| International | 35 | 194 | 39 | 234 | 40 | 259 | 46 | 326 |
| White | 57 | 312 | 55 | 327 | 54 | 351 | 47 | 338 |
| Total | 99 | 550 | 101 | 600 | 101 | 649 | 100 | 711 |

Graduate Student Enrollment, by Gender, 1997/2000/2002/2005
Eberly College of Science, University Park Campus

| Gender | Fall, 1997 | | Fall, 2000 | | Fall, 2002 | | Fall, 2005 | |
|--------|------------|-----|------------|-----|------------|-----|------------|-----|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Female | 38 | 208 | 34 | 204 | 33 | 216 | 35 | 246 |
| Male | 62 | 342 | 66 | 396 | 67 | 433 | 65 | 465 |
| Total | 100 | 550 | 100 | 600 | 100 | 649 | 100 | 711 |

^a <1 indicates less than 1 percent

¹ Percentages may not sum to 100 percent due to rounding

Faculty Data

Faculty Employment, by Rank ¹, by Ethnicity, 1997/2000/2002/2005
 Eberly College of Science

FALL 1997

| Ethnicity | Professor | | Associate Professor | | Assistant Professor | | Instructor | |
|-----------------|-----------|-----|---------------------|-----|---------------------|-----|------------|-----|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Asian American | 12 | 14 | 13 | 7 | 25 | 17 | 13 | 8 |
| Black American | 1 | 1 | 0 | 0 | 3 | 2 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 2 | 1 | 1 | 1 | 2 | 1 |
| Native American | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 |
| Sub-Total | 13 | 15 | 15 | 8 | 29 | 20 | 17 | 10 |
| White | 88 | 106 | 85 | 46 | 71 | 49 | 83 | 50 |
| Total | 101 | 121 | 100 | 54 | 100 | 69 | 100 | 60 |

FALL 2000

| Ethnicity | Professor | | Associate Professor | | Assistant Professor | | Instructor | |
|-----------------|-----------|-----|---------------------|-----|---------------------|-----|------------|-----|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Asian American | 12 | 14 | 24 | 15 | 30 | 22 | 10 | 6 |
| Black American | 1 | 1 | 0 | 0 | 4 | 3 | 0 | 0 |
| Hispanic/Latino | 2 | 2 | 0 | 0 | 1 | 1 | 2 | 1 |
| Native American | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 |
| Sub-Total | 15 | 17 | 24 | 15 | 35 | 26 | 14 | 8 |
| White | 86 | 101 | 76 | 47 | 64 | 47 | 89 | 67 |
| Total | 101 | 118 | 100 | 62 | 99 | 73 | 103 | 75 |

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 | 16.7 | 20 | 12.3 | 7 | 23.0 | 23 | 17.8 | 21 |
| Black American | 3.3 | 4 | 1.8 | 1 | 3.0 | 3 | 0.8 | 1 |
| Hispanic/Latino | 1.7 | 2 | 1.8 | 1 | 0.0 | 0 | 0.8 | 1 |
| Native American | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.8 | 1 |
| Sub-Total | 21.7 | 26 | 15.8 | 9 | 26.0 | 26 | 20.3 | 24 |
| White | 78.3 | 94 | 84.2 | 48 | 74.0 | 74 | 79.7 | 94 |
| Total | 100.0 | 120 | 100.0 | 57 | 100.0 | 100 | 100.0 | 118 |

Faculty Employment, by Rank ¹, by Gender, 1997/2000/2002/2005
Eberly College of Science

FALL 1997

| Gender | Professor | | Associate Professor | | Assistant Professor | | Instructor | |
|--------|-----------|-----|---------------------|-----|---------------------|-----|------------|-----|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Female | 8 | 10 | 11 | 6 | 25 | 17 | 55 | 33 |
| Male | 92 | 111 | 89 | 48 | 75 | 52 | 45 | 27 |
| Total | 100 | 121 | 100 | 54 | 100 | 69 | 100 | 60 |

FALL 2000

| Gender | Professor | | Associate Professor | | Assistant Professor | | Instructor | |
|--------|-----------|-----|---------------------|-----|---------------------|-----|------------|-----|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Female | 9 | 10 | 16 | 10 | 32 | 23 | 49 | 37 |
| Male | 91 | 108 | 84 | 52 | 68 | 50 | 51 | 38 |
| Total | 100 | 118 | 100 | 62 | 100 | 73 | 100 | 75 |

FALL 2002

| Gender | Professor | | Associate Professor | | Assistant Professor | | Instructor | |
|--------|-----------|-----|---------------------|-----|---------------------|-----|------------|-----|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Female | 9 | 11 | 21 | 12 | 32 | 28 | 43 | 38 |
| Male | 91 | 107 | 79 | 45 | 68 | 61 | 57 | 51 |
| Total | 100 | 118 | 100 | 57 | 100 | 89 | 100 | 89 |

FALL 2005

| Gender | Professor | | Associate Professor | | Assistant Professor | | Instructor | |
|--------|-----------|-----|---------------------|-----|---------------------|-----|------------|-----|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Female | 11.6 | 15 | 24.6 | 14 | 38.0 | 38 | 48.5 | 48 |
| Male | 88.4 | 114 | 75.4 | 43 | 62.0 | 62 | 51.5 | 51 |
| Total | 100.0 | 129 | 100.0 | 57 | 100.0 | 100 | 100.0 | 99 |

¹ Professor Rank - includes Senior Scientists

Associate Professor Rank - includes Senior Research Associates

Instructor Rank - includes Lecturer and Senior Lecturer

Academic Administrator Data

Academic Administrator Employment, by Ethnicity, 1997/2000/2002/2005
Eberly College of Science

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

Academic Administrator Employment, by Gender, 1997/2000/2002/2005
Eberly College of Science

| Gender | Fall, 1997 | | Fall, 2000 | | Fall, 2002 | | Fall, 2005 | |
|--------|------------|-----|------------|-----|------------|-----|------------|-----|
| | % | (N) | % | (N) | % | (N) | % | (N) |
| Female | 9 | 1 | 8 | 1 | 0 | 0 | 0 | 0 |
| Male | 91 | 10 | 92 | 11 | 100 | 11 | 100 | 10 |
| Total | 100 | 11 | 100 | 12 | 100 | 11 | 100 | 10 |

Staff Data ¹

Staff Employment, by Grade, by Ethnicity, 1997/2000/2002/2005
 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 |

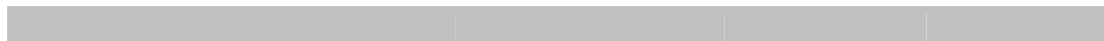
FALL 2002

| 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 | 0.0 | 0 |
| Black American | 0.0 | 0 | 4.7 | 2 | 0.0 | 0 |
| Hispanic/Latino | 1.6 | 2 | 0.0 | 0 | 0.0 | 0 |
| Native American | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 |
| Sub-Total | 2.4 | 3 | 4.7 | 2 | 0.0 | 0 |
| White | 97.6 | 122 | 95.3 | 41 | 100.0 | 1 |
| Total | 100.0 | 125 | 100.0 | 43 | 100.0 | 1 |

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



Staff Employment, by Grade, by Gender, 1997/2000/2002/2005

Eberly College of Science

FALL 1997

| Gender | 19 and Below | | 20 - 25 | | 26 and Above | |
|--------|--------------|-----|---------|-----|--------------|-----|
| | % | (N) | % | (N) | % | (N) |
| Female | 87 | 117 | 38 | 12 | 0 | 0 |
| Male | 13 | 18 | 62 | 20 | 100 | 1 |
| Total | 100 | 135 | 100 | 32 | 100 | 1 |

FALL 2000

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

FALL 2002

| Gender | 19 and Below | | 20 - 25 | | 26 and Above | |
|--------|--------------|-----|---------|-----|--------------|-----|
| | % | (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

| Gender | 19 and Below | | 20 - 25 | | 26 and Above | |
|--------|--------------|-----|---------|-----|--------------|-----|
| | % | (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 |

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

Technical Service Data

Technical Service Employment, by Grade, by Ethnicity, 1997/2000/2002/2005
Eberly College of Science

| Ethnicity | Fall, 1997 | | | | Fall, 2000 | | | | Fall, 2002 | | | | Fall, 2005 | | | |
|-----------------|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|
| | 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) | % | (N) | % | (N) | % | (N) | % | (N) | % | (N) | % | (N) | % | (N) |
| Asian American | 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 |
| Hisp./Latino | 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 |
| Sub-Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 100 | 21 | 100 | 1 | 100 | 23 | 100 | 1 | 100 | 20 | 100 | 1 | 100 | 19 | 100 | 1 |
| Total | 100 | 21 | 100 | 1 | 100 | 23 | 100 | 1 | 100 | 20 | 100 | 1 | 100 | 19 | 100 | 1 |

Technical Service Employment, by Grade, by Gender, 1997/2000/2002/2005
Eberly College of Science

| Gender | Fall, 1997 | | | | Fall, 2000 | | | | Fall, 2002 | | | | Fall, 2005 | | | |
|--------|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------------|-----|
| | 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) | % | (N) | % | (N) | % | (N) | % | (N) | % | (N) | % | (N) | % | (N) |
| Female | 5 | 1 | 0 | 0 | 4 | 1 | 0 | 0 | 5 | 1 | 0 | 0 | 10.5 | 2 | 0 | 0 |
| Male | 95 | 20 | 100 | 1 | 96 | 22 | 100 | 1 | 95 | 19 | 100 | 1 | 89.5 | 17 | 100 | 1 |
| Total | 100 | 21 | 100 | 1 | 100 | 23 | 100 | 1 | 100 | 20 | 100 | 1 | 100.0 | 19 | 100 | 1 |

Competency Data

Competency employees by Gender, 1997/2000/2002/2005
Eberly College of Science

| Gender | Fall, 2005 | |
|--------|------------|-----|
| | % | (N) |
| Female | 32 | 8 |
| Male | 68 | 17 |
| Total | 100 | 25 |

Competency employees by Ethnicity, 1997/2000/2002/2005
Eberly College of Science

| Ethnicity | Fall, 2005 | |
|-----------------|------------|-----|
| | % | (N) |
| Asian American | 0 | 0 |
| Black American | 4 | 1 |
| Hispanic/Latino | 4 | 1 |
| Native American | 0 | 0 |
| Sub-Total | 8 | 2 |
| White | 92 | 23 |
| Total | 100 | 25 |

Appendix IV: Official Data provided by the Office of the Vice Provost for Educational Equity for preparation of the 12.15.06 Framework Update

Undergraduate Students:

The following tables provide retention and graduation rates for successive cohorts of baccalaureate regular admit students for each fall semester from fall 1997 through fall 2004. The data are for 1) multicultural students (African/Black American, American Indian/Alaskan Native, Asian and Pacific American, and Latino/Hispanic American) and 2) white students. Retention data indicate the percentage of students retained at any Penn State location within any Penn State college (excluding Penn College). Graduation data indicate the percentage of students who graduated from any Penn State location with any Penn State degree, including students who change to associate degree status and graduate with associate degrees (excluding Penn College).

| Multicultural Students | | | | | | | | |
|-------------------------------|------|------|------|------|------|------|------|------|
| <i>University Park</i> | | | | | | | | |
| ADMIT SEMESTER | FA97 | FA98 | FA99 | FA00 | FA01 | FA02 | FA03 | FA04 |
| NUMBER OF STUDENTS | 115 | 102 | 75 | 86 | 106 | 111 | 127 | 124 |
| % RETAINED | | | | | | | | |
| AFTER 1 YEAR | 92.1 | 94.1 | 94.6 | 90.6 | 88.6 | 86.4 | 90.5 | 95.9 |
| AFTER 2 YEARS | 88.6 | 84.3 | 92.0 | 82.5 | 79.2 | 81.9 | 83.4 | |
| AFTER 3 YEARS | 83.4 | 82.3 | 82.6 | 76.7 | 68.8 | 72.9 | | |
| % GRADUATED | | | | | | | | |
| AFTER 4 YEARS | 61.7 | 54.9 | 64.0 | 69.7 | 57.5 | | | |
| AFTER 5 YEARS | 80.0 | 77.4 | 80.0 | 75.5 | | | | |
| AFTER 6 YEARS | 80.8 | 79.4 | 82.6 | | | | | |

*These data are taken from the University database using the AIDAE-RPM utility. Retention data for students admitted in fall 2005 are not available at this point in the data cycle; graduation data are available through the fall 2001 cohort. "Regular admit" excludes advanced standing, provisional, non-degree and non-degree to degree, readmit, and reinstate statuses.

| White Students | | | | | | | | |
|------------------------|------|------|------|------|------|------|------|------|
| <i>University Park</i> | | | | | | | | |
| ADMIT SEMESTER | FA97 | FA98 | FA99 | FA00 | FA01 | FA02 | FA03 | FA04 |
| NUMBER OF STUDENTS | 452 | 428 | 359 | 370 | 401 | 392 | 379 | 334 |
| % RETAINED | | | | | | | | |
| AFTER 1 YEAR | 95.5 | 94.8 | 93.5 | 96.4 | 91.7 | 93.1 | 93.4 | 94.0 |
| AFTER 2 YEARS | 92.2 | 92.7 | 90.5 | 91.0 | 89.0 | 89.0 | 90.7 | |
| AFTER 3 YEARS | 89.3 | 89.4 | 86.6 | 85.9 | 83.2 | 83.4 | | |
| % GRADUATED | | | | | | | | |
| AFTER 4 YEARS | 73.4 | 69.8 | 72.9 | 80.8 | 71.8 | | | |
| AFTER 5 YEARS | 86.7 | 86.9 | 83.2 | 89.4 | | | | |
| AFTER 6 YEARS | 87.8 | 89.0 | 84.9 | | | | | |

Fall 2005 Undergraduate Student Enrollments by Ethnicity

| | Am Ind/ Ala Nat | | Blk/ Af Am | | As/Pac Am | | Hisp | | Multicultural Student Subtotal | | White/ Not Reported | | Inter- National | | Totals |
|-----------|--------------------|------|---------------|------|--------------|-------|------|------|--------------------------------------|-------|------------------------|-------|--------------------|------|-------------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # |
| Sc | 1 | 0.0% | 102 | 3.8% | 359 | 13.3% | 88 | 3.3% | 550 | 20.4% | 2062 | 76.3% | 89 | 3.3% | 2701 |

Fall 2005 Undergraduate Student Enrollments by Gender

| | Female | | Male | | Totals |
|-----------|--------|-------|------|-------|-------------|
| | # | % | # | % | # |
| Sc | 1316 | 48.7% | 1385 | 51.3% | 2701 |

Fall 2005 Graduate Student Enrollments by Ethnicity

| | Am Ind/ Ala Nat | | Blk/ Af Am | | As/Pac Am | | Hisp | | Multicultural Student Subtotal | | White/ Not Reported | | Inter- National | | Totals |
|-----------|--------------------|------|---------------|------|--------------|------|------|------|--------------------------------------|------|------------------------|-------|--------------------|-------|------------|
| | # | % | # | % | # | % | # | % | # | % | # | % | # | % | # |
| Sc | 0 | 0.0% | 9 | 1.3% | 21 | 3.0% | 17 | 2.4% | 47 | 6.6% | 338 | 47.5% | 326 | 45.9% | 711 |

Fall 2005 Graduate Student Enrollments by Gender

| | Female | | Male | | Totals |
|-----------|--------|-------|------|-------|------------|
| | # | % | # | % | # |
| Sc | 246 | 34.6% | 465 | 65.4% | 711 |

Fall 2005 Faculty by Ethnicity

| | Eberly College of 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% |

Fall 2005 Faculty by Gender

| | Eberly College of 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% |

Fall 2005 - Executives, Academic Administrators, Staff, and Tech Service - by Ethnicity

| College | Class | Grd | Am Ind/ Ala Nat | Blk/ Af Am | | As/Pac Am | | Hisp | | Multicultural Subtotal | | White | | Totals |
|---------|----------------------|-------|--------------------------|---------------|------|--------------|-------|------|------|---------------------------|-------|-------|--------|--------|
| | | | | | | | | | | | | | | |
| Science | EXEC | | | | | | | | | | | 1 | 100.0% | 1 |
| | <i>EXEC SbT</i> | | | | | | | | | | | 1 | 100.0% | 1 |
| | ACAM | | | | | 2 | 20.0% | | | 2 | 20.0% | 8 | 80.0% | 10 |
| | <i>ACAM SbT</i> | | | | | 2 | 20.0% | | | 2 | 20.0% | 8 | 80.0% | 10 |
| | STAFF | 26-32 | | | | | | | | | | 1 | 100.0% | 1 |
| | | 20-25 | | 2 | 4.7% | | | | | 2 | 4.7% | 41 | 95.3% | 43 |
| | | 11-19 | | | | 1 | 0.8% | 2 | 1.6% | 3 | 2.4% | 122 | 97.6% | 125 |
| | | Comp | | 1 | 4.0% | | | 1 | 4.0% | 2 | 8.0% | 23 | 92.0% | 25 |
| | <i>STAFF SbT</i> | | | 3 | 1.5% | 1 | 0.5% | 3 | 1.5% | 7 | 3.6% | 187 | 96.4% | 194 |
| | TECH | 8-12 | | | | | | | | | | 1 | 100.0% | 1 |
| | | 1-7 | | | | | | | | | | 19 | 100.0% | 19 |
| | <i>TECH SbT</i> | | | | | | | | | | | 20 | 100.0% | 20 |
| Totals | | | | 3 | 1.3% | 3 | 1.3% | 3 | 1.3% | 9 | 4.0% | 216 | 96.0% | 225 |

Fall 2005 - Executives, Academic Administrators, Staff, and Tech Service - by Gender

| College | Class | Grd | Female | | Male | | Totals |
|---------|----------------------|-------|--------|-------|------|--------|--------|
| | | | # | % | # | % | |
| Science | EXEC | | | | 1 | 100.0% | 1 |
| | <i>EXEC SbT</i> | | | | 1 | 100.0% | 1 |
| | ACAM | | | | 10 | 100.0% | 10 |
| | <i>ACAM SbT</i> | | | | 10 | 100.0% | 10 |
| | STAFF | 26-32 | | | 1 | 100.0% | 1 |
| | | 20-25 | 22 | 51.2% | 21 | 48.8% | 43 |
| | | 11-19 | 109 | 87.2% | 16 | 12.8% | 125 |
| | | Comp | 8 | 32.0% | 17 | 68.0% | 25 |
| | <i>STAFF SbT</i> | | 139 | 71.6% | 55 | 28.4% | 194 |
| | TECH | 8-12 | | | 1 | 100.0% | 1 |
| | | 1-7 | 2 | 10.5% | 17 | 89.5% | 19 |
| | <i>TECH SbT</i> | | 2 | 10.0% | 18 | 90.0% | 20 |
| Totals | | | 141 | 62.7% | 84 | 37.3% | 225 |