



Annual Report for the National Science Foundation ADVANCE Project

Academic Careers in Engineering & Science (ACES)  
Case Western Reserve University

Year 4: September 1, 2006 – August 31, 2007

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Links to reports, posters and presentations: <http://www.case.edu/admin/aces/annualreports.htm>

## Case Western Reserve University Context in AY 2006/2007

This past academic year has been a period of relative stability for Case Western Reserve University under the direction of an interim president, and the selection of a new president, the first female president of the university, Barbara Snyder who starts July 1. The interim deans appointed last year, with the exception of the School of Medicine, have become permanent appointments, all of whom have been actively involved in ACES initiatives. Because the new deans were appointed from within the university, they were already knowledgeable about the programs and engaged as department chairs. One, Cyrus Taylor, had been a member of the ACES Resource Equity Committee (REC). Thus, we feel that there will be uninterrupted progress towards the program's goals.

Under the interim president, plans for a university childcare center have been actualized and a fundraising effort begun. Although the university continues to face budgetary and development challenges, deficits have been reduced and the financial outlook of the university is increasingly positive, which will allow some financial resources to be directed to institutionalization of programs.

### **Section I: Personnel and Financial Report**

#### **A. Budget explanations by areas and major functions for the reporting year and the next year.**

##### Senior Personnel

Dr. Lynn Singer, ACES principal investigator, is Deputy Provost and Vice President of Academic Affairs in the Office of the President and Provost. Dr. Singer participates in decision making at the highest level of the University and is responsible for oversight of the ACES program. Her effort is considered part of her job responsibility. In Year 4, Dr. Singer contributed 20% effort (cost share) to the ACES project without cost to NSF, which will continue for Year 5.

Dr. Mary Barkley, co-PI, Professor of Chemistry, facilitated the ACES project activities in the College of Arts & Sciences (CAS), the School of Medicine (SOM), and in the S&E departments. Dr. Barkley provides oversight for the ACES office. Dr. Barkley contributed 30% effort (direct cost + cost share) to the ACES project, which will continue for Year 5.

Dr. Diana Bilimoria, co-PI, Associate Professor of Organizational Behavior, facilitated ACES project activities in the Weatherhead School of Management (WSOM) and in the S&E departments. Dr. Bilimoria provides oversight for the quantitative and qualitative research evaluation effort of the ACES project. Dr. Bilimoria contributed 30% effort (direct cost + cost share) to the ACES project, which will continue for Year 5.

Dr. Donald Feke, co-PI, professor of Chemical Engineering and Vice Provost, facilitated project activities in the Case School of Engineering (CSE) and in the S&E departments. As an administrator in the Office of the President and Provost, his effort is considered part of his job responsibility. Dr. Feke contributed 5% effort (cost share) to the ACES project without cost to NSF, which will continue for Year 5.

The Resource Equity Committee meets monthly to plan studies and review results for the research and evaluation effort of the project. Dr. Cyrus Taylor was appointed interim dean of the College of Arts & Sciences in July, 2006 and dean in December, 2006. He resigned from the REC in December, 2006. Dr. William Dannefer, Professor and Chair of Sociology, joined the REC in March, 2007. In Year 5,

one month salary is allocated for Drs. Patricia Higgins and Dannefer; and two months salary is allocated for Dr. Nahida Gordon for statistical analysis of faculty salary data.

### **Other Professionals**

Dr. Xiangfen Liang, Senior Research Associate, works with the REC and collects baseline data, assists with the development, administration, and analysis of questionnaires, conducts focus groups, assists with the research and evaluation of other ACES initiatives, and drafts manuscripts to report the research results. She is responsible for the quantitative and qualitative research evaluation effort (data collection, analysis, and reporting) of the project. 100% effort (direct cost) has been allocated for Year 5.

Dr. Jeffrey Turell, Research Associate, worked with the REC in Year 4 to collect baseline data, assist with the development, administration, and analysis of questionnaires, conduct interviews, and assist with the research and evaluation of other ACES initiatives. He will be promoted to Senior Research Associate in Year 5 and 100% effort (direct cost) has been allocated.

### **Graduate Students**

In Year 4, one graduate student with 100% support, and two graduate students with partial support provided assistance with research and evaluation for the ACES project. 100% effort (cost share) of a graduate student at no cost to NSF worked with Dorothy Miller on student training of gender schemas. Graduate student support of \$50,000 (direct cost) has been allocated for Year 5.

### **Other Personnel**

Shelley White, ACES Project Coordinator, contributes 100% effort (direct cost) providing overall staff support for the ACES program. 100% effort has been allocated for Year 5.

A second project coordinator was hired full-time by the ACES Program in September, 2006 to assist with administration of the ACES budget as well as on-going project activities. 50% effort (direct cost) has been allocated for Year 5.

Two student workers created marketing materials, ran errands, photographed ACES events for the website, website maintenance, and assisted with the summer undergraduate research program.

### **Fringe Benefits**

Fringe benefit expenses were calculated at 26% (2006/2007) and 26.5% (2007/2008) for all faculty, professional, and administrative staff.

### **Travel/Domestic**

Travel expenses in Year 4 totaled \$20,935 for travel to ADVANCE and other workshops and conferences. In Year 5, \$11,102 has been allocated for travel.

### **Participants Support Costs**

Funds were used to support distinguished lectureships, professional development and networking events, website development, workshops, NSF Site Visit, the required External Evaluation, and the Provost's Leadership Retreat. Eight ADVANCE Distinguished Lecturers visited eight departments during the 2006/2007 school year. A total of \$61,165 has been expended as of May 30, 2007. For Year 5, \$57,927 has been allocated.

**Other Direct Costs – Materials and Supplies**

In Year 4, expenses included 1 conferencing phone, stationery, office supplies, and books. The total amount expended was \$11, 527. In Year 5, \$10,652 has been allocated to materials and supplies.

**Other Direct Costs – Consultant Services**

Consultant services include fees for external executive coaches and facilitators for strategic planning and climate change. Six external consultants did leadership coaching of 7 department chairs and career-based coaching of 35 women faculty (at all ranks from Instructor to Professor) in 14 departments.

In addition, Dr. Christopher Loving visited the Case campus three times during the year. He worked with deans, department chairs, and faculty to facilitate leadership development, strategic planning and climate change. A total of \$31,500 has been expended as of May 30, 2007. For Year 5, \$53,000 has been allocated for consultant services.

**Indirect Costs**

Indirect costs are calculated at 53%.

**Cost Sharing**

Cost sharing was committed in the amount of \$261,588 for Year 4. A cost sharing report will be submitted to NSF per the cooperative agreement after August 31, 2007, the close of business for Year 4. These funds were used for partial support of PI salaries, graduate student support, and Opportunity Grants. Cost sharing of \$265,366 has been allocated for Year 5.

**B. Estimated unobligated funds at the end of Year 4.**

There are no unobligated funds in Year 4. For Year 5 of the project, funding in the amount of \$700,999 has been allocated to the ACES project. These funds have been assigned to specific categories.

**D. Current other support information for key personnel:**

**Lynn Singer, Ph.D.**

1. Cocaine Exposed Children at School Age  
**Principal Investigator - Lynn Singer, Ph.D.**  
Agency: NIDA      Type: RO1 DA07957      Period: 7/1/94 –09/30/08  
Continuation of a longitudinal, prospective investigation of the medical, environmental, and developmental correlates of fetal cocaine exposure, with the cohort previously seen from birth-2 years, and at 4 and 6 years.

OTHER

Research Supplements for Underrepresented Minorities, Pre-doctoral Fellowship for Teresa Linares

**Sponsor Lynn Singer**

Period: 2003–2006

**Mary D. Barkley, Ph.D.**

1. Subunit Assembly and Substrate Interactions in HIV-1 RT  
**Principal Investigator - Mary D. Barkley**  
Agency: NIH      Type: R01 GM071267      Period: 03/15/2006–02/28/2010  
To study mechanisms of inhibition and drug resistance of reverse transcriptase by NNRTIs using biophysical techniques.  
10% effort

**Donald L. Feke, Ph.D.**

1. Project/Proposal Title: Coalescence, Transport, and Separation of Gas Bubbles in Liquids Using Ultrasonic Processing Techniques  
**Principal Investigator - Donald L. Feke**  
Agency: NASA      Period: 03/21/2005-09/2007  
Person-Months Per Year Committed to the Project. Cal: 1.0 Acad: Sumr:
2. Project/Proposal Title: Acoustically Aided Separation Processes  
**Principal Investigator - Donald L. Feke**  
Source of Support: Nestle R & D      Period: 01/20/04-06/06  
Person-Months Per Year Committed to the Project. Cal: 0.0 Acad: Sumr:

## **Section II: Summary of Project Activities**

### **A. Participants**

Dr. Lynn Singer, ACES principal investigator, is responsible for the oversight of the ACES program. Dr. Singer facilitates departmental initiatives and leads the Provost's Leadership Retreat and other ACES events. She presents the ACES program to the Case Western Reserve University leadership and community. Dr. Singer will continue 20% effort for Year 5.

Dr. Mary Barkley, co-PI, facilitates the ACES project activities in the College of Arts & Sciences (CAS), the School of Medicine (SOM), and in the S&E departments. She is responsible for oversight of the ACES office, the ADVANCE Distinguished Lectureships, the ADVANCE Opportunity Grants, and the Departmental Initiative Grants. Dr. Barkley heads the ACES Team comprised of scientists from different disciplines who serve as an internal advisory board and review proposals and provide recommendations for ACES programs. In addition, Dr. Barkley is responsible for the Fisk Faculty Exchange Program, ACES Minority Summer Undergraduate Research Program, and the partner hiring network which all began in 2004. Dr. Barkley will continue 30% effort for Year 5.

Dr. Diana Bilimoria, co-PI, facilitates ACES project activities in the Weatherhead School of Management (WSOM) and in the S&E departments. She is responsible for oversight of the research and evaluation effort of the ACES program, including the baseline data collection, climate survey, chairs survey, and the space and salary analyses. In addition, Dr. Bilimoria provides oversight and evaluation for the following interventions: leadership coaching for deans and chairs, career-based coaching for women faculty, and mentoring programs for women faculty. Dr. Bilimoria provides resources, assessment tools, workshops, and consultations to faculty, chairs, and departments. Dr. Bilimoria supervises one graduate student, who is undertaking her doctoral dissertation on an ADVANCE related topic. Dr. Bilimoria will continue 30% effort for Year 5.

Dr. Donald Feke, co-PI, is responsible for project activities in the Case School of Engineering (CSE) and in the S&E departments. Dr. Feke will continue 5% effort for Year 5.

Dr. P. Hunter Peckham, Professor of Biomedical Engineering, is committed to the ACES project and participates in ACES meetings, assists with project activities in CSE, and collaborates with ACES senior personnel. We have not requested co-PI status or salary support for Dr. Peckham due to his other commitments.

Dr. Xiangfen Liang, Senior Research Associate, is responsible for the qualitative and quantitative data collection (applying for IRB approval, administering the baseline climate survey, conducting focus groups and interviews). She is responsible for correcting and verifying data, writing of the climate survey reports, creating faculty databases, and collecting the evaluation indicators needed for the year-end report. She also assists in the design, collection, and administration for the data needed for intervention activities such as the coaching and mentoring evaluations. Dr. Liang codes survey responses and enters survey data into the database. She researches and consolidates multiple sources of data, records and prepares the data for analysis, supervises the transcription of focus group tapes, and creates codebooks. Dr. Liang will continue 100 % effort for all or part of Year 5.

Dr. Jeffrey Turell, Research Associate, is responsible for assisting the Senior Research Associate in the conduct, preparation, collection, and analysis of quantitative and qualitative data, specific program evaluation activities, and the preparation of progress reports and presentations. He performs complex quantitative and qualitative analytic procedures, and assists Dr. Liang with data collection. Dr. Turell allocated 100% effort to the ACES project for Year 4. He will be promoted to Senior Research Associate and will continue 100% effort for Year 5.

Beth McGee, Associate Professor of Theater and Faculty Diversity Officer, is responsible for issues concerning Faculty Diversity and for oversight and implementation of entrance and exit interviews and search committee support. She meets with ACES PI Dr. Singer and Provost John Anderson to discuss implementing these initiatives. Ms. McGee will continue 10% of her effort as Faculty Diversity Officer on the ACES Project.

Dr. Dorothy Miller, Director of the Flora Stone Mather Center for Women, provides networking events at the Center for Women and develops training modules for undergraduate and graduate students to eliminate gender bias toward women faculty. She also supervises a graduate student, who assists with the student training. Dr. Miller will continue 10% effort for Year 5.

Amanda Shaffer, Faculty Diversity Specialist, provides training for search committees and faculty recruitment skills. She develops web-based and other tools to assist search committees in diversifying their applicant pools. She is responsible for faculty exit surveys and collects qualitative and quantitative data on recruitment and retention activities and outcomes. Ms. Shaffer develops presentations for faculty meetings, conferences, and workshops. The co-PIs, Faculty Diversity Officer, and department chairs work with her to develop departmental and institutional programs. This position was institutionalized with funding by Case beginning in Year 3.

### **Graduate Students**

In Year 4, three graduate students assisted the ACES Program with research, data collection, evaluation, and mentoring. Continued funding for a graduate student assisting with student training is provided by Case beginning in Year 4.

## **B. Project management system and infrastructure**

### **ACES Core Group**

Project Coordinators, Shelley White and Monica Cunningham, coordinate all activities under the ACES program. In addition to providing administrative support of printing, copying, library searches, and web research, they also schedule all meetings, work on presentations, promotional materials, and the ACES website, and publicize programs and events. They draft correspondence and reports on project activities. They are responsible for managing the NSF ADVANCE Award and Opportunity Grant budgets, and for providing event planning for the Distinguished Lectureships. They also organize the Minority Summer Undergraduate Research Program and the Fisk Faculty Exchange Program.

The ACES co-PIs meet weekly with Mss. McGee and Shaffer, Drs. Miller, Liang, Turell, Higgins, and Dannefer, and Ms. White or Cunningham to discuss current initiatives, assess progress, and plan future activities. Individual Deans and Department Chairs occasionally attend the co-PI meetings to report on progress toward ACES goals in their units, guide the direction of the ACES program, and make recommendations on implementing ACES initiatives.



### **Partners**

The ACES Team comprises the co-PIs and 10 faculty members from various disciplines. The Team serves as an internal advisory board and reviews proposals for Distinguished Lectureships, Opportunity Grants, and Departmental Initiative Grants.

The Resource Equity Committee (REC) meets monthly and assists with the design, implementation, and analyses of data and questionnaires for the ACES program. Attendees in Year 4 included Drs. Bilimoria, Gordon, Higgins, Dannefer, Liang, Turell, and a graduate student. Dr. Bilimoria serves as liaison and provides oversight for the research and evaluation efforts. Drs. Liang and Turell, and the graduate student provide research support to the REC.

### **Internal Collaborators**

Kathryn M. Hall, Assistant Vice President, Institutional Diversity & Equity  
Erica Merritt, Manager of Diversity, Office of Equal Opportunity & Diversity  
Debra Fink, Assistant Director of Student Services, Mandel School of Applied Social Sciences (MSASS)  
Lynda Clark, Director of Community Development, Office of Research & Technology Management  
Eric Cottingham, Associate Vice President for Research, Office of Research & Technology Management  
Ann Boughner, Director of Human Resources & Leadership Development, CSE  
Daniel Anker, Associate Dean of Faculty & Institutional Affairs, SOM  
Daniel Ornt, M.D. Associate Dean for Clinical Affairs, SOM  
Jerold Goldberg, D.D.S., Dean, School of Dental Medicine  
Sarah Taylor, Chair, Newcomers Committee  
Margaret Stager, M.D., Associate Professor, Pediatrics; President, Women Faculty of the School of Medicine  
Megan Linos, Instructional Designer, Instructional Technology & Academic Computing (ITAC), Information Technology Services  
Mano Singham, Sarah Walleck, University Center for Innovation in Teaching and Education (UCITE)  
Kathryn Karipides, Associate Provost, Office of the President and the Provost  
Edgar B. Jackson, Jr. M.D., Senior Advisor to the President and CEO UH/UHCMC Executive Administration  
Richard E. Grant, M.D., the Edgar B. Jackson Chair for Diversity, University Hospitals Case Medical Center  
Mark E. Coticchia, Vice President, Research & Technology Management  
LaRuth McAfee, Executive Director for Education, Center for Layered Polymeric Systems (NSF-STC)

### **Search Procedure Internal Collaborations**

In an ongoing effort to create further alliances, Mss. McGee and Shaffer share their accomplishments and best practices with Kathryn Hall, Assistant Vice President for Institutional Diversity and Equity, and Erica Merritt, Diversity Manager, so that they may be duplicated with staff through human resources. Ms. Shaffer is developing a series of faculty workshops designed to increase communication skills of faculty researchers in order to improve lab productivity and the management of human capital. These workshops will be offered in fall 2007.

The ACES co-PIs and staff worked with Lynda Clark and Eric Cottington, Office of Research & Technology Management, to develop a Speed Mentoring event at the annual Research ShowCase for untenured faculty, postdoctoral fellows, and graduate students.

Efforts to promote best practices in faculty searches has led to quarterly meetings with key diversity personnel at the affiliated teaching hospitals: Drs. Jackson and Grant, University Hospitals Case Medical Center; Dr. Plummer, Cleveland Clinic; and Patricia Gallagher, MetroHealth Hospital, as well as presentations to the Women Faculty of the School of Medicine.

The Chemistry Department in CAS again utilized the faculty diversity specialist for a new search in their department over to facilitate a more equitable and open search process. The final five candidates invited to interview included two women and a Latino man.

The NSF STC Center for Layered Polymeric Systems, Department of Macromolecular Science & Engineering in CSE, continues to utilize campus liaison activities to assist in the recruitment of students of color to their program.

Even though not part of the four ACES college/schools, three professional schools have utilized the Faculty Diversity Specialist throughout the past year. Search committees in the School of Dental Medicine, School of Law, and MSASS all received training that covered the search guidelines, best practices for diversifying the candidate pool, and relevant research about bias.

The SOM is increasing its use of the Faculty Diversity Specialist in part due to collaborations and ongoing meetings with Interim Dean Davis, Associate Dean Daniel Ornt, and Assistant Dean Daniel Anker.

### **External Collaborators**

Susan Freimark, Program Manager in the Center for Nonprofit Policy & Practice, Cleveland State University

Helen Williams, Program Director, The Cleveland Foundation

Kathleen Fitzsimons, Executive Coach and Consultant

Deborah O'Neil, Assistant Professor, Bowling Green State University

Margaret Hopkins, Assistant Professor, Management, University of Toledo

Marion Seelbach, Executive Coach and Leadership Development Trainer

Dr. Christopher J. Loving, Founder and Executive Director, Leadership Institute for Tomorrow (LIFT)

### **Partner Hiring/Retention Collaborations**

Several faculty partners have benefited in the past year from the new Partner Hiring Policy at the university. One partner, hired two years ago in a non-tenure track position using this policy has recently been hired into a tenure track position. An ongoing collaboration with Debra Fink in MSASS help faculty partners network in the non-profit community in greater Cleveland. Ms. Shaffer is in regular contact with external collaborators at Cleveland State University and other local colleges and universities regarding working cooperatively to set up a partner hiring system for academic faculty partners in Northeast Ohio. She is also negotiating an agreement with an outplacement service that will help with non-academic partner job searches in Northeast Ohio. This service will aid in both recruitment and retention of women and minority faculty.

### **Exit Interview External Collaboration**

The Faculty Exit Survey, using external partner PerceptIS Inc., was launched in September 2005. The second survey was administered in June/July 2006. The third round is being administered May, June, and July of 2007. The online survey can be viewed at <http://eodsurvey.case.edu/exit/exit.htm>

### **Faculty Training and Development**

In fall 2005, Provost John Anderson made faculty attendance at a Cultural Competency Awareness Training mandatory for new faculty within the first fiscal year of hire. The existing diversity training, primarily aimed at newly hired staff, has been redesigned by Ms. Shaffer to focus on faculty-specific situations in the department, lab, and classroom. The new Cultural Competency Awareness Training is a faculty-only session held in the weeks immediately following the start of the semester, and is the first step in the ongoing dialogue about the campus climate for women faculty and faculty of color. The 2006-2007 session took place in September, 2006. The session received positive feedback and was attended by the new chair of Electrical Engineering and Computer Science, Dr. Norman Tien, who is now dean of CSE.

The ongoing development of women faculty websites, created in response to the perception that faculty tend to neglect the maintenance of their websites, has resulted in a total of five new websites, with another five in development. The templates, created by Megan Linos in collaboration with Ms. Shaffer, allow the faculty member to comply with the Case preferred webpage design and learn simple html so that continual updating of information, publications, and CV is less time consuming, and therefore more likely to be completed. A sample website can be viewed here <http://nel-8.case.edu/abramson/index.htm>

Dr. Jonatha M. Gott, Associate Professor in the Center for RNA, who has been identified as an emerging campus leader, was selected by ACES to attend the Leadership Development Conference for STEM Women at UMBC. Dr. Heather Morrison, Professor and Chair of Astronomy, attended the 24th Annual Academic Chairpersons Conference in Orlando, Florida.

## **C. Activities and findings**

### **Vision**

The ACES vision at Case Western Reserve University is for institutional transformation that leads to increased transparency and accountability as well as more equitable practices, policies, procedures, and structures. Our activities and findings for Year 4 are summarized below including the difficulties in implementing proposed activities and alternative approaches to address them.

We had originally planned to work with four test departments in Years 1 and 2 of the ACES project, which we called Phase 1. Because of the exceptional response in the test departments and the large number of departments remaining to work with in Phase 2, we moved up the beginning of Phase 2 to January 2005. Ten more departments, suggested by the deans of the four college/schools received the successful coaching and mentoring interventions: Anthropology, Geological Sciences, Mathematics, and Political Science in CAS; Biomedical Engineering, Chemical Engineering, and Electrical Engineering & Computer Science in CSE; Biochemistry and Molecular Biology & Microbiology in SOM; and Marketing & Policy Studies in WSOM. In January 2006, these interventions were offered to another eight departments: Physics and Psychology in CAS; Macromolecular Science & Engineering and Materials Science & Engineering in CSE; Genetics and Pharmacology in SOM; and Economics and Operations Research in WSOM.

In January 2007, the ACES interventions were offered to the remaining ACES Departments: Astronomy, Biology, Sociology and Statistics in CAS; Civil Engineering in CSE; Anatomy, Neuroscience and Center for RNA in SOM; and Information Systems in WSOM. In addition, a new department in CAS, Cognitive Sciences, was included as well as new women faculty and chairs in the previous departments.

### Coaching

An executive coach has general academic/organizational experience and provides performance-related and career-related advice. The coach helps the coachee to specifically determine career and leadership vision, goals, plans, and actions. They give advice, resources, and feedback on how to best accomplish the identified vision. The ACES executive coaching intervention consists of a 6 session coaching program for women faculty and an 8 session coaching program for deans and chairs. Templates providing session guidelines for coaching of women faculty and chairs are available at <http://www.case.edu/admin/aces/coaching.htm>. Coaches Cohort meetings, which consist of the co-PIs and six coaches, were held approximately every 3 months during Year 4 to debrief and improve our coaching activities. Overall, the positive buzz about executive coaching among women faculty on our campus continues. Earlier skepticism and hesitation about the coaching program has greatly diminished.

Coaching activities for Year 3 coachees (eight departments, January–December 2006) were completed for most participants in December 2006. Final evaluations for 2006 coaching received from participants are reported in [http://www.case.edu/admin/aces/Report\\_Year4/Coaching\\_Eval\\_Summary.pdf](http://www.case.edu/admin/aces/Report_Year4/Coaching_Eval_Summary.pdf) Response rates for these final evaluations were higher than for the previous year since we implemented an IRB-approved change in the method of distribution of final evaluation forms. In summary, the evaluations of executive coaching were extremely positive.

In Year 4, executive coaching was provided to the remaining 10 departments of the original 31 ACES S&E departments, plus the newly created department Cognitive Sciences. In total, executive coaching beginning in January 2007 was initiated with 29 women faculty, 7 chairs, and 1 associate dean. 2 deans (CAS and CSE), who had utilized coaching while they both were previously chairs and interim deans, continued their ACES executive coaching during 2007. In addition, executive coaching was started in spring 2007 for the new woman chair of Electrical Engineering & Computer Science. Coaching of the newly appointed woman chair of Mechanical & Aerospace Engineering will start once she assumes the position.

Hotline coaching for women faculty throughout the Case campus, which was initiated in spring 2006, continued during Year 4. This service provides a hotline for emergency-type coaching that is available to all campus women faculty on an as-needed basis. Hotline coaching allows women faculty facing unique opportunities and challenges to receive short-term and quick-turnaround coaching advice from a professional executive coach to help them optimally address and resolve the emergent issue, opportunity or problem being faced. During Year 4, 11 women faculty have availed of this opportunity, and received 1–3 hotline coaching sessions as needed. Issues for which hotline coaching was sought by women faculty included: (1) negotiations with the dean regarding the possibility of departmental chair, (2) salary negotiations (3) assistance with finding a position after a terminal contract, (4) assistance with seeking a tenure-track position at Case, (5) research funding supervision and budget management issues, (6) developing better interpersonal skills. The coaches used for

Hotline Coaching continued to be the same as those employed in the executive coaching of women faculty in the ACES departments; these are the same professionals who have been working as coaches with S&E women faculty at Case in previous years of the ADVANCE Award.

The process for implementation of ACES Hotline Coaching continues to be informal. Women faculty members request this specific coaching after experiencing some urgent need, and learning about our resource from the ACES website or from others knowledgeable about ACES. Requests are forwarded to ACES co-PI Dr. Bilimoria who organizes the ACES executive coaching program; she then evaluates the request for its merits and coordinates with a coach to work with the person as soon as possible (usually a first contact is made by the coach within 2–3 days of the original request). Evaluation of the ACES Hotline Coaching has been conducted by emails between Dr. Bilimoria and some of the participants after their coaching ended. The evaluations of the hotline coaching experiences have been extremely positive.

### **Mentoring**

The first phase of the mentoring program was introduced in Year 1, when women and minority faculty were encouraged to identify a mentoring committee consisting ideally of three members: (1) one from the department, (2) one external to the department, and (3) one expert in the mentee's research area. In addition, six mentoring workshops were provided to women faculty and their mentors and to individual departments in Years 1 and 2. Subsequent evaluation indicated that this formal mentoring program worked very well for those women who proactively monitored and managed their mentoring, though participation was low. Mentoring workshops that were conducted in departments included the presence of both junior and senior faculty; this format inhibited honest discussion of mentoring. A detailed evaluation of mentoring practices and needs was undertaken in Year 3. From 60 faculty evaluation interviews, it became clear that the existing climate supported an informal mentoring structure. In those departments where a formal structure existed, it was often not implemented, or not consistently. Faculty stated that they feel they receive adequate, although informal, mentoring mostly from their peers, initiated through personal contacts, and not part of a formalized structure.

In Year 4, ACES piloted a variety of more informal mentoring initiatives as follows:

- Discussions among tenured faculty within the four ACES college/schools, facilitated by Dr. Loving, regarding mentoring and retention of junior faculty especially in tough budget times.
- Discussions among department chairs and emerging leaders within CAS, CSE, and WSOM, facilitated by Dr. Loving, regarding communication skills.
- Informal bimonthly lunches were sponsored by ACES but planned by junior faculty within a college/school, with senior faculty members asked to join to discuss relevant developmental issues. These lunches were held during 2007 in WSOM. CSE held a meeting of junior and senior women faculty. Women faculty members have been identified to organize junior faculty lunches in CAS and SOM sponsored by ACES in summer 2007.

In addition, a speed mentoring session at Research ShowCASE was piloted on April 12, 2007. Speed mentoring, which is modeled after speed dating, lets participants interact personally with several mentors within a short period of time. Participants gain quick and varied insights on their academic career development concerns by being matched with volunteer mentors in a structured, time-sensitive environment. Speed mentoring has been used successfully to enliven professional conferences and enhance professional development in university and other settings. Each participant showed his/her C.V. to a mentor, discussed academic career building efforts to date, and received feedback on progress

and development needs for a period of 15 minutes, and then moved to a different mentor. Within this hour and a half event, each participant had the chance to personally interact with several mentors (approximately 4-6 mentors) specifically about his/her own career development. The mentors consisted of 12 senior faculty from a variety of academic disciplines. The event was open to all faculty members, postdoctoral fellows, and graduate students, but women and minorities were especially encouraged to attend; 35 mentees attended, mostly graduate students from S&E fields. The speed mentoring session was enthusiastically received, and will be institutionalized as part of the Annual Research ShowCASE event. A summary of Speedy Mentoring Evaluations can be found here: [http://www.case.edu/admin/aces/Report\\_Year4/Speed\\_Mentoring\\_Evaluation\\_Summary.pdf](http://www.case.edu/admin/aces/Report_Year4/Speed_Mentoring_Evaluation_Summary.pdf)

**Provost’s Leadership Retreat**

The ACES-sponsored annual Provost’s Leadership Retreat was held on the Case campus on November 2, 2006. The Interim President, Provost, deans of CAS, CSE, SOM, WSOM as well as MSASS and the school of Dental Medicine and Law, and chairs of the 31 S&E departments in the ACES program were invited to discuss issues pertinent to the recruitment, retention, advancement, and leadership of women faculty.

The theme for the 2006 retreat was “Leading Change: Creating Tomorrow’s University” (**See attached agenda in Appendix I**). The program started with an informal lunch. Welcome presentations were made by Case’s President Gregory Eastwood, Provost John Anderson, and Deputy Provost and ACES PI Lynn Singer. Following lunch the keynote speech was delivered by Bernice Sandler, Senior Scholar at the Women’s Research and Education Institute in Washington, DC, where she consults with institutions and others about achieving equity for women. Dr. Singer gave an update on the status of ACES in 2006. The department chairs discussed the impact of ACES in their department in break-out groups followed by a presentation from Christopher Loving, Director of LIFT, on communication skills. The Resource Equity Committee gave a presentation on NSF Indicators and the recently completed Salary Equity Study. There were break-out groups, led by the deans, to create action plans for the schools. This was followed by a report out to the entire group, during which a number of issues affecting faculty recruitment and retention were discussed. The meeting concluded with President Eastwood offering two actions: 1) a family friendly university wide policy of scheduling all mandatory meetings between 9:00 am – 4:00 pm; and 2) a personal commitment for fundraising for an on-campus childcare center.

**ADVANCE Opportunity Grants**

\$132,139 was provided in Year 4 (cost share) to women faculty in the S&E departments for projects and activities where funding is difficult to obtain through other sources. We received a total of 16 Proposals and were able to award 10 small grants to maximize chances for success of women faculty at Case.

<b>ADVANCE Opportunity Grant Awards</b>	
<b>Awardee</b>	<b>Department</b>
Cynthia Beall	Anthropology
Melissa Knothe-Tate	Biomedical Engineering
Anna-Liisa Nieminen	Anatomy
Ica Manas Zloczower	Macromolecular Science & Engineering
Cather Simpson	Chemistry

Ramani Pilla	Statistics
Anastasia Dimitropoulos	Psychology
Diana Bergeron	Organizational Behavior
Heather Royer	Economics
Charlotte Ikels	Anthropology

### **ADVANCE Distinguished Lectureships**

Up to 10 ADVANCE Distinguished Lectureships are available annually to bring senior women scientists to Case for a minimum stay of 2 days and a maximum stay of 2 weeks. The distinguished lecturer is selected based on mutual research interests with faculty in the host department. She gives at least 2 lectures and a public lecture followed by a reception. In Year 4, ACES sponsored eight ADVANCE Distinguished Lectureships. The goal of the Distinguished Lectureships is to provide networking opportunities and raise the visibility of S&E women faculty on campus.

<b>ADVANCE Distinguished Lectureships</b>	
<b>ADVANCE Lecturer</b>	<b>Host Department</b>
Sandy Black University of California at Los Angeles	Economics (WSOM)
Diane O'Dowd University of California, Irvine	Biology (CAS)
Anita Hopper Ohio State University	Center for RNA (SOM)
Laura Haas Almaden Research Center (IBM)	Electrical Engineering & Computer Science (CSE)
Zakaya Kafafi Naval Research Laboratory	Physics (CAS)
Mary Katzenstein Cornell University	Political Science (CAS)
Vivian Pinn National Institutes Health	Women Faculty in the School of Medicine
Joanne Ingwall Harvard Medical School	Biomedical Engineering (CSE)

### **Department Initiative Grants (DIGs)**

In Year 3, ACES began a Departmental Initiative Grant Program to promote positive climate change in the departments. DIGS were not originally part of the Case ADVANCE proposal, but were added based on the successful experience at other ADVANCE universities. The ACES DIGS proposals may be submitted by any member of the faculty and must describe faculty input in the planning process. In Year 4, \$43,800 was provided to four S&E departments for projects and activities promoting positive departmental change.

<b>Department Initiative Grants</b>	
<b>Awardee</b>	<b>Department</b>
Gary Murphy	Economics (WSOM)
Sandy Piderit	Organizational Behavior (WSOM)



Noa Noy	Pharmacology (SOM)
James Rebitzer	Economics (WSOM)
Xin Yu	Biomedical Engineering (CSE)

### **Outreach to Departments**

A one-hour presentation about the ACES program was given to the eight Phase IV departments by one or more of the co-PIs (Drs. Singer, Barkley, and Bilimoria) accompanied by one or more ACES core group members (Ms. Shaffer; Drs. Feke, Higgins, and Miller). The presentation covers goals and expectations during the ACES year, research regarding the promotion and status of women in STEM nationally and at Case, the coaching and mentoring programs, funding opportunities, and resources available to the departments, such as workshops and facilitators. These presentations, which strive to ensure buy-in and signal the importance of the ACES activities, often lead to spirited discussions within the department about some of the underlying philosophies of the department.

All chairs, faculty, and department assistants of the 32 ACES departments received regular email updates and flyers about activities, visiting lecturers, networking events, and application deadlines. ACES PI Dr. Singer has also given presentations and updates about ACES at Meetings of the Case Board of Trustees, Faculty Senate, and Deans Council. Dr. Singer provides handouts of the ACES progress report at events and meetings which she attends. Ms. Shaffer continues to make presentations of the search guidelines and procedures to the business managers and department assistants university-wide, as well as providing other bias and diversity training and meeting facilitation by request.

Dr. Loving of LIFT attended the Provost Leadership Retreat in fall 2006 and made two week-long visits in spring 2007 to lead workshops on communication skills, mentoring, and retaining junior faculty. Dr. Loving met with senior faculty and department chairs from all four ACES college/schools, the faculty of one department in CAS and two departments in CSE, the ACES team, and the CAS and CSE deans. Additionally he conducted a day-long retreat for the Frances Payne Bolton School of Nursing, provided personal coaching for individual faculty and small groups of faculty, and facilitated several discussions for women faculty. Dean Taylor has requested that Dr. Loving begin chair school for all chairs in CAS, and Dean Tien will utilize Dr. Loving for a retreat of all faculty and administrators in CSE.

### **Male Faculty Initiative for Increased Faculty Involvement**

In recognition that institutional change requires increased participation of the faculty in promoting ADVANCE objectives, an initiative was launched in Year 3 on a trial basis. This initiative stems from the premise that top-down efforts (from the University administration) can be complemented by grass-roots efforts (from the faculty). A small group of male faculty, each of whom was known to be very aware of, and concerned by, the barriers faced by women faculty in the S&E fields, were invited to meet to discuss what faculty could do to promote ADVANCE objectives. The goal of this group is to increase the number of male faculty actively engaged in climate change activities that increase advancement of women faculty in the S&E fields campus-wide. This group (initially referred to as the Good Guys Committee) has adopted the name Grassroots Climate Change Committee or GrCCC. Convened originally by ACES co-PI's Dr. Feke and Dr. Peckham, the GrCCC contains representatives from multiple S&E departments. Two members are co-chairs of the committee, Dr. James Bruzik, Associate Professor in the RNA Center in SOM, and Dr. Paul Gerhart, Professor of Marketing and Policy Studies in WSOM, have taken over leadership of the group.



In spring 2007 the GrCCC adopted a mission statement, which was included in the advertising for their first public event:

“The Climate Change Committee is a grass roots effort to engage tenured faculty members in advocating for a campus-wide culture of equity and transparency. The Committee is comprised of university-wide faculty members who have familiarized themselves with the recommendations from campus research and focus groups about the state of the campus climate. The Committee is developing activities to improve faculty retention rates and overall faculty satisfaction.”

Co-Chairs: James P. Bruzik and Paul F. Gerhart, Members: James D. Burgess, Fred Collopy, Donald Feke, Atwood Gaines, Susan Helper, Arthur A. Huckelbridge Jr., Lynn Landmesser, John Lewandowski, Kenneth Loparo, P. Hunter Peckham, Neal Rote, and Frank Soennichsen

The public event, “Pre-Tenure Women Faculty Success Lunch”, focused on the question “What do you need to know to be a success here at Case?” Acknowledging that sometimes it is hard to know what you do not know, the event was designed as an informal conversation with tenured members of the GrCCC, and female junior faculty. The goal was to offer multiple perspectives on questions about the tenure process, how to get good mentoring, etc. The event was advertised campus-wide and all senior faculty were requested to forward the invitation to their mentees and untenured colleagues. Seven members of the GrCCC and 16 pre-tenure women faculty attended the event. Topics that were discussed ranged from how to get your mentor to be your advocate rather than your judge, to how to handle the information in your mid-term review. The women discussed details that trouble them like the phrase “trailing spouse” being used about their husbands, or how frustrating it is for a pre-tenure person to be counseled to be “patient” about everything. Several of the GrCCC members were shocked to hear about women writing grant applications in between contractions and the lengths they had to go to in balancing work and home life. There was much animated discussion of how the standards for promotion and tenure should be reexamined to account for the current low success-rates in grant funding and the significant increase in the number of years it takes a new researcher to obtain their first grant. All of the participants found it a valuable event and requested that it be repeated in fall 2007.

The Committee is considering two other possible events during Year 5; (1) holding a campus-wide forum (open to all faculty members) on how male faculty members can help promote ADVANCE objectives, directly supporting ACES events and program, etc., and (2) inviting several of the authors of “Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering” to visit the campus to discuss the report. Planning meetings for 2007/2008 activities will begin in July of 2007.

### **Search Committee Support**

The Faculty Diversity Specialist, Ms. Shaffer, was involved in three internal searches for deans of CAS, CSE, and WSOM. Ms. Shaffer advised the search committees on proper procedure and monitored the process for equity and inclusion. She also presented training to the committee searching for a Vice President for Enrollment. In all, 15 new search committee trainings were presented: six in CAS, one in the School of Dental Medicine, one in the School of Law, one in MSASS, and two in SOM. The two SOM search resulted directly from Interim Dean Davis' encouraging search chairs to utilize the services of the Faculty Diversity Specialist.

Ms. Shaffer continues to conduct one-on-one meetings with search committee chairs prior to their initiating a faculty search to identify areas for improvement in their process. This policy allows for search training to be customized to each search and avoids a “one-size-fits-all” mentality that can increase resistance to implementing the proposed changes. Accountability for the diversity of the candidate pool on the part of the deans has been incorporated into the process with a form that requires the dean to sign off on the applicant pool before any candidates can be invited to interview. The search committee training has been split into three 45-minute sessions: (1) Reviewing the Search Guidelines, (2) Best Practices for Evaluating Candidates and, (3) Interviewing and the Campus Visit. Web tools have been developed to assist with self-training and to increase dissemination of the information. The website is at <http://www.cwru.edu/president/aaction/aeeo.html>

Additionally, Welcome Packets have been created for faculty candidates that explain the ACES program and resources available, such as lactation centers, partner hiring networks, and relocation services. Also included are maps of the area, brochures of museums and attractions, visitor guides, and an assortment of free weekly newspapers, including minority and special interest newspapers such as the Jewish News, Hispanic Times, Call & Post, Gay People’s Chronicle, and Sport News. In the spirit of transparency, Ms. Shaffer is available to offer candid information about child care/elder care options, domestic partner benefits for LGBT, and any other issues that a candidate may be hesitant to discuss with a search committee or host. Much of this information is also available on the Faculty Diversity website. This service has been reported to be very useful by candidates.

A network of women faculty and faculty of color has been created to meet with candidates to discuss climate issues and their experience of being a woman (or faculty of color) scientist at Case. Most especially ACES PI Dr. Singer rearranges her calendar in order to speak personally with candidates. We have received positive feedback from several candidates, who were subsequently hired into S&E departments, that Case was the only university that made efforts to openly address climate issues with them and schedule interviews with senior women scientists.

The results from the new voluntary online Affirmative Action Tracking Form will be reported to the President, Provost, and Faculty Senate in October 2007. This online form will allow better tracking of the applicant pool beyond the hand tally included in the final candidate list. This confidential database is housed in the Office of Equal Opportunity and Diversity and will only be accessed by the Faculty Diversity Officer and the Faculty Diversity Specialist for reporting purposes. We anticipate increased compliance in Year 5 of the NSF ADVANCE award, and have engaged in dissemination activities throughout the university to increase awareness and facilitate compliance.

### **Minority Pipeline**

Funding for the ACES Minority Summer Undergraduate Research Program was institutionalized in Year 3 through a HHMI grant to the Department of Biology, which committed support for five minority undergraduate women students each summer, with supplemental funding for these students from the Office of the Provost. In Year 4, two students came from Fisk University, building on our university collaboration with Fisk. The other three students were from Edinboro University in Pennsylvania, and the University of Puerto Rico Ponce in Puerto Rico. All ACES fellows are placed with Case faculty mentors and spend 10 weeks conducting research in an area of interest. In addition, they participate in activities sponsored by other summer research programs. The goal of the summer program is to encourage minority women students to pursue academic careers in S&E.

<b>ACES Summer Undergraduate Research Program</b>	
<b>ACES Fellow</b>	<b>Faculty Mentor/Department</b>
Maylin Rodriguez Leon University of Puerto Rico at Ponce	Dr. Massood Tabib-Azar Electrical Engineering & Computer Sciences
Joyann A. Marks Fisk University	Dr. Vivien Yee Biochemistry
Betsy Ruiz Alvarado University of Puerto Rico at Ponce	Dr. Timothy Nilsen Center for RNA
Andrea Gray Edinboro University	Dr. Harihara Baskaran Chemical Engineering
Edwina Clarke Fisk University	Dr. Christopher Cullis Biology

Due to ongoing financial problems at Fisk University, the faculty are not able to make extended visits to Case during the academic year. Moreover, Fisk S&E faculty also teach during the summer semester, so they are only available for short visits during the time between semesters. Efforts to organize visits of Case Faculty to Fisk have likewise not been fruitful. However, Dr. Sheila Peters, Associate Provost for Student Affairs and Interim Director of the Race Relations Institute at Fisk, is scheduled to come in summer 2007. Dr. Peters' visit to Case will be supported by the Office of the Provost.

### Networking Events

ACES hosted the Third Annual Theatre Party at the Cleveland Playhouse in October 2006 for 31 ACES departments to socialize and increase networking across departments and college/schools. A total of 17 women faculty, 16 male faculty, and their spouses/partners attended.

The Flora Stone Mather Center for Women held two networking and faculty development events in Year 4, which were attended by 63 women faculty. Both were rated either as “Extremely worthwhile” or “worthwhile” by more than 85 % of respondents. As reported in the past, feedback on these workshops has been very positive, with the only “negatives” being requests for more of them. A typical remark was: “Provided excellent strategies and concrete examples for typical problems and situations” and “Very timely- totally needed this!!”

- In fall 2006, Dr. Bernice Sandler conducted a workshop on “Success and Survival Strategies.” Dr. Sandler is Senior Scholar at the Women’s Research and Education Institute in Washington, DC, where she consults with institutions and others about achieving equity for women. She is well-known for her expertise in women’s educational equity in general as well as in sexual harassment, the chilly classroom climate, and her knowledge of policies, programs and strategies concerning women on campus. Dr. Sandler also met with the ACES core group, delivered a breakfast talk for senior women faculty on “Increasing Your Influence on Committees”, met with the Athletic Department to discuss “Title IX – Then and Now”, and had a breakfast discussion for UCITE on “Improving the Chilly Climate for Students.”
- In spring 2006, ACES co-PI Dr. Bilimoria conducted a workshop on “Emotional Intelligence in the Academic Workplace: A Primer for Women Faculty.” Dr. Bilimoria is the co-author of the 2007 edited volume, *The Handbook on Women in Business and Management*.

In Year 4, the Flora Stone Mather Center held the second annual “Spotlight Series Prize Awards” to recognize the contributions of women faculty. Each college/school was asked to choose an outstanding

woman faculty scholar to receive the award. Interim President Eastwood opened the event and most of the deans presented the awards for their nominee. Attendance in Year 4 was double that of Year 3. The following faculty received awards: Dr. Bilimoria, Associate Professor of Organizational Behavior, WSOM; Dr. Eva Kahana, Robson Professor of Humanities, Sociology, Medicine and Nursing, CAS; Dr. Lenore A. Kola, Ph.D., Associate Professor, MSASS; Jacqueline Lipton, Professor, School of Law; Dr. Diana Lynn Morris, Associate Professor of Nursing, School of Nursing; Dr. Meral Özsoyoğlu, Professor of Computer Science, CSE; Dr. Marsha A. Pyle, Associate Dean for Education and Associate Professor of Oral Diagnosis and Radiology, School of Dental Medicine; Dr. Susan Redline, Professor of Pediatrics, Medicine, and Epidemiology and Biostatistics, SOM.

The Flora Stone Mather Center presented the annual Spotlight Series on Women's Scholarship, a lecture series by women faculty intended to showcase their work, promote networking, and provide meaningful campus-wide interaction between faculty and students. The faculty member presents a lecture to an academic audience, but not necessarily from her field, and also shares her experiences as a woman in her field. In Year 4, the Spotlight Series featured three luncheon talks:

- Dr. Cheryl Toman, Assistant Professor of French and Programs in Women's Studies and Ethnic Studies, CAS. Her topic was "The Second Sex in an African Context: Perspectives on 'Othering'."
- Dr. Karen Beckwith, Flora Stone Mather Professor of Political Science, CAS. Her topic was her research on women in politics "Women, Politics and Political Science."
- Dr. Susan Helper, Professor of Economics, WSOM. Her topic was "Global Production and Local Prosperity: Can they Co-exist in Cleveland?"

In conjunction with ACES, the Flora Stone Mather Center held the third annual Women of Achievement Luncheon, honoring women faculty and administrators who had received tenure, promotion, endowed chairs, or awards in Year 3. This annual recognition luncheon has been institutionalized through the Office of the Provost and the Flora Stone Mather Center for Women.

### **Undergraduate and Graduate Student Training**

Building upon evaluations and feedback from former sessions, The Flora Stone Mather Center for Women re-designed their gender awareness workshops as part of a series about diversity and career planning, working with the Case Career Center and various graduate student groups, departments, and college/schools. A typical series included sessions with a successful woman scientist in industry, a gender awareness presentation by either Dr. Miller or the graduate student assistant, and a panel of faculty and administrators giving career advice to S&E field graduate students. Co-sponsors included the Career Center, CSE, the Graduate Student Senate, and the graduate student groups in the Departments of Electrical Engineering & Computer Science, Macromolecular Science & Engineering, and Physics. Evaluations of these sessions were high (averaging above 4 on a scale of 1 to 5), with ratings of the presenter and how worthwhile participants found the session. Asked to rate the degree to which the series affected how they think about gender in academia, the average rating was above 3. The majority of students attending (and in some cases all of them) indicated their conviction that the series would influence their behavior in the future.

The Flora Stone Mather Center also co-sponsored a Phi Beta Kappa lecture by Dr. Jean Taylor, talking about her career as a woman scientist in biology. Outside speakers included Dr. Ka-Pi Hoh, a manager at Lubrizol Corporation and a graduate of CSE. In addition, Dr. Miller gave two lectures on the wage gap to economics classes in WSOM.

### **Institutionalization**

A summary of the brainstorming meetings, conducted in summer 2006 of Year 3 and chaired by Dr. Clare Rimnac, Professor of Mechanical & Aerospace Engineering, CSE and Ms. Shaffer, on the topic of Institutionalizing ACES initiatives was generated. The results were compiled and presented to two groups of mixed gender faculty from across the university who were asked to distill the 20 major ideas into priorities for campus-wide activities to transform the climate at Case. Consideration was given to which ideas were most essential and/or feasible. The recommendations in the report closely align with those of the 2004 Faculty Climate Survey. The report, titled “Institutionalizing ACES: Campus Climate Transformation at Case Summary Report and Recommendations on Brainstorming Sessions” can be found at this link. <http://www.case.edu/admin/aces/annualreports.htm> The report was submitted to the ACES core group in October 2006 and is receiving consideration from decision-making committees across the campus.

Diversity training for faculty prior to 2006 was comprised of faculty attending a 90-minute session along with staff to learn about Case policies regarding sexual harassment, discrimination, and what it means to contribute and flourish in a respectful, diverse workplace. The new Cultural Competency Training, inaugurated in September 2006, changed the focus of the class to the faculty experience at Case including how to create a respectful and equitable environment in the lab, the classroom, and the department. The training raises awareness about the impact of various kinds of bias on the campus climate, as well as on the success and retention of women and minority faculty, staff, and students. An updated training will be offered in September 2007.

In the past year, resources established by ACES have enhanced equity and diversity initiatives at Case, including:

- The Board of Trustees appointed Barbara Snyder to be the first woman president of the University.
- Dean Norman Tien appointed two women chairs in CSE. These are the first two women chairs in the history of the engineering school.
- The faculty diversity website was expanded with additional resources for search committees.
- Interim Dean Pamela Davis has created a diversity plan for SOM. Action items include establishing an Office of Academic Career Development and Diversity. A number of initiatives are designed to increase the number of women and minority faculty, particularly at the higher ranks in leadership positions.
- Interim President Greg Eastwood and his wife Lynne hosted a fund raising event at their home to support the Flora Stone Mather Center for Women, a campus child care center, endowed chairs for women faculty, and scholarships for women students.
- All new faculty are required by the Office of the Provost to attend the Cultural Competency Awareness class before the end of their first fiscal year on campus. This class is designed for faculty to achieve a better understanding of gender, racial, and ethnic differences, in an effort to improve the campus climate.
- Faculty Exit Interviews and a New Faculty Satisfaction Survey were created to provide data that may be used to establish retention activities within the colleges and schools.
- A university-wide diversity statement was adopted by the President in March 2007.

- A film exploring racism in the United States, “The Color of Fear”, was presented three times during the academic year followed by facilitated discussion. A Conversation Series on Race and Gender, organized and facilitated by the Faculty Diversity Specialist, is scheduled for Fall 2007

ACES has also promoted policy change in the area of family friendly policies:

- In recognition of the family obligations facing many faculty, an Automatic Pre-Tenure Extension Policy is now available to untenured men and women in cases of family emergencies and/or childbirth or adoption upon notification to the Provost. Faculty may apply for tenure on the original or the extended schedule at their discretion.
- Work Load Release Policy provides eligible faculty members with a period of time in which to adjust to the demands of parenting. Faculty may be granted a release from teaching and service duties for one academic semester following each live birth or each adoption of a child under the age of six.

### **NSF Site Visit and External Evaluation**

The NSF site visit of the ACES program occurred on September 14-15, 2006. The site visit comprised a full day and a half of meetings of the six-person NSF site visit team with the ACES core group, the REC, Case administrators and deans, department chairs, and both men and women faculty. ACES received the site visit evaluation on November 2, 2007. Although the evaluation was generally positive, it contained several helpful recommendations that stimulated renewed efforts in Year 4. First, ACES increased its outreach to SOM with better success. Interim Dean Davis met with the ACES team to present a diversity plan and plans for creating a faculty development office in SOM. She also directed SOM faculty to seek search committee training from Ms. Shaffer to comply with the new guidelines for faculty searches. Dr. Loving facilitated two mentoring discussions for senior SOM faculty, one of which led to a series of meetings of senior basic science faculty about communicating the needs and input of the research faculty to the search committee for the dean of SOM. Second, Interim President Eastwood, who is also a member of the Case Board of Trustees, launched a fund raising initiative with a \$1,000,000 challenge for programs concerning women faculty, including endowed chairs in S&E fields and a campus day care center. Third, the Office of Institutional Research hired a second staff person, who will work with the ACES REC to set up the data collection and analysis previously done by ACES. This will allow the REC to focus on completing numerous research activities in Year 5. Finally, the number of ADVANCE Distinguished Lectureships rose to eight for Year 4 from the three that were scheduled at the time of the site visit. The same number of Lectureships was sponsored in Year 3, despite expanded eligibility to all departments at Case in Year 4.

As required by NSF, the ACES program had an external summative evaluation on January 23-24, 2007. The evaluation comprised one full day of meetings of two external evaluators, Drs. Lisa Frehill and Mary Wright, with the ACES core group, Case administrators, and a subset of other participants in the NSF site visit. ACES received the external evaluators' report on February 21, 2007. This report too was laudatory, but contained an ambitious list of key recommendations for expansion and institutionalization of ACES. Some of the recommended actions are already underway, while others, though desirable, are simply unfeasible given the current fiscal limitations of Case. A very useful recommendation was the suggestion to apply for a PAID award from NSF. Toward this end, we are planning to develop and pilot a model for group-based executive coaching of S&E faculty to spur departmental climate change in Year 5. We hope to expand the group coaching model to regional universities through a PAID proposal in the future.

### **Presentations at Refereed Conferences**

- (1) Bilimoria, Diana, Hopkins, Margaret M., O'Neil Deborah A., and Perry Susan R. (April 2007). *Executive coaching: An effective strategy for faculty development*, panel paper presented at American Educational Research Association Annual Meeting, Chicago, IL
- (2) Perry, Susan R., Liang, Xiangfen, Joy, Simy, Higgins, Patricia, Stoller, Eleanor P., Bilimoria, Diana, Gordon, Nahida, & Taylor, Cyrus C. (August 2006). How do Graduate Students Pick Advisors? Focus Group Study from a Mid-Western University, American Psychological Association, New Orleans.

### **Posters and Presentations at Non-refereed Conferences and Meetings**

- (1) Liang, Xiangfen, Joy, Simy, Higgins, Patricia, Bilimoria, Diana, Turell, Jeffrey & Gordon Nahida (May 2007). *Advisor-Advisee Selection in STEM Fields: Findings from Focus Group Interviews*. Poster presented at NSF Advance PI Meeting, Washington, D.C.
- (2) Liang Xiangfen, Turell, Jeff, Baker, Allison, Bilimoria Diana (May 2007). *Gender Effects on Faculty Work Experiences by Career Stage*. Poster presented at NSF Advance PI Meeting, Washington, D.C.
- (3) Shaffer, Amanda, (April 2007) *Recruitment, Retention, Advancement, and Satisfaction: A Four-fold Approach to Increasing Faculty Diversity and Climate Change*, Keeping Our Faculties of Color Symposium, University of Minnesota, MN.
- (4) Liang, Xiangfen, Turell, Jeff, Baker, Allison & Bilimoria, Diana (April 2007). *Gender Effects on Faculty Work Experiences by Career Stage*. Poster presented at Annual Research ShowCASE, Case Western Reserve University, Cleveland, OH.
- (5) Liang, Xiangfen, Joy, Simy, Higgins, Patricia, Bilimoria, Diana, Turell, Jeff, & Gordon, Nahida. (April 2007). *Advisor-Advisee Selection in STEM Fields: Findings from Focus Group Interviews*. Poster presented at Annual Research ShowCASE, Case Western Reserve University, Cleveland, OH.
- (6) Jordan, C. Greer. & Bilimoria, Diana (February 2007). *Creating a Productive and Inclusive Academic Work Environment*. Panel paper presented at American Council on Education Annual Meeting, Washington, D.C.

## **D. Publications and products**

### **Research Publications and Reports**

- (1) Bilimoria, Diana, Hopkins, Margaret M., O'Neil, Deborah A., & Perry, Susan (In Press). Executive Coaching: An Effective Strategy for Faculty Development, in Stewart, Abigail J., Janet Malley, and Danielle LaVaquer-Manty (Eds.), Transforming Science and Engineering: Advancing Academic Women, Ann Arbor: University of Michigan Press.
- (2) Jordan, C. Greer & Bilimoria, Diana (In Press). Creating a Productive and Inclusive Academic Work Environment, in Stewart, Abigail J., Janet Malley, and Danielle LaVaquer-Manty (Eds.), Transforming Science and Engineering: Advancing Academic Women, Ann Arbor: University of Michigan Press.
- (3) Liang, Xiangfen & Bilimoria, Diana (In Press) The Representation and Experience of Women Faculty in STEM Fields, in Burke, Ronald & Mattis, Mary (Eds.) Women and Minorities in Science, Technology, Engineering and Mathematics: Opening the Pipeline, Northhampton, MA: Edward Elgar Publishing.

### **Manuscripts in Progress**

- (1) Bilimoria, Diana, Liang, Xiangfen & Joy, Simy. The Role of Research in Institutional Change: Evidence from NSF ADVANCE Institutions (under 2<sup>nd</sup> review at Human Resources Management).
- (2) Bergeron, Diane, Liang, Xiangfen & Bilimoria, Diana. Thriving in the Academy: A Model of Faculty Career Success (conceptual paper in final writing stage; targeted for Academy of Management Review; draft manuscript available).
- (3) Liang, Xiangfen, Turell, Jeff, Baker, Allison & Bilimoria, Diana. Faculty in Early, Middle and Late Career Stages: Gender Effects on Academic Work Experiences (quantitative study in final writing stage; targeted for Review of Higher Education; draft manuscript available).
- (4) Jordan, C. Greer & Bilimoria, Diana. Linking Gender Diversity and Productive Work Outcomes: The Social-Psychological Processes of a Cooperative and Inclusive Work Culture (qualitative case study in final writing stage; targeted for Journal of Management; draft manuscript available).
- (5) Higgins, Patricia A., Stoller, Eleanor P., Taylor, Cyrus, Robson, Linda, Bilimoria, Diana & Perry, Susan. Drawing on Supply-side and Demand-side Discourses: A Case Study of Faculty Perceptions of Gender and Academic Careers, (qualitative study; draft manuscript available).
- (6) Liang, Xiangfen, Bergeron, Diane & Bilimoria, Diana. Predicting Academic Career Success from Individual, Organizational, and Academic Process Variables: Does Gender Matter? (in data analysis stage).
- (7) Bergeron, Diane, Liang, Xiangfen, Jordan, Cheryl G., & Bilimoria, Diana. The Outcomes of Gender Diversity in Academic Departments (in data collection and analysis stages)
- (8) Liang, Xiangfen, Joy, Simy, Higgins, Patricia, Bilimoria, Diana, Turell, Jeffrey & Gordon, Nahida. The Relationship Between Faculty and Graduate Students in Academic Science and Engineering (qualitative study; in manuscript preparation stage)
- (9) Turell, Jeffrey, Gordon, Nahida, Liang, Xiangfen, Bilimoria, Diana, Higgins, Patricia, Dannefer, Dale & Baker, Allison. Applicant Pools in Science and Engineering Searches (in data analysis stage).



### **Section III: Research and Evaluation**

The Research and Evaluation Section consists of three parts. In Part A, we report the NSF-ADVANCE Indicators pertaining to Academic Year (AY) 2006-2007. In Part B, we present Temporal Trends of Indicators from Year 1 (AY2003-2004) to Year 4 (AY2006-2007). In one instance, we present data 5 years prior to the ACES program. In Part C, we present the indicators as graphs.

#### **Part A. Report on Research and Evaluation – Year 4**

##### **Baseline Data Collection**

The purpose of this year's report is to summarize ongoing evaluation of the impact of interventions occurring at the university on institutional transformation. Both quantitative and qualitative data are utilized in all 4 phases' evaluation. The various components of this evaluation are described in more detail below.

##### **Data Sources**

Data for assessing institutional transformation are obtained mainly from the university's Institutional Research Office and Provost Office, with some data obtained from Deans' offices and individual department administrators. Additional data were obtained from both the salary equity study and the candidate pool study, offer letters for incoming faculty, and evaluation of both the coaching intervention and opportunity grants. The details of this additional data collection appear in the "Other Data Collection and Analyses" section of this report.

##### **Case Faculty Composition**

There are three different categories of faculty appointments to the University Faculty: (1) tenured or tenure-track appointments; (2) non-tenure-track appointments; and (3) special appointments. Appointments in categories (1) and (2) are full-time and must be approved by the Board of Trustees. These faculty are appointed at the rank of professor, associate professor, assistant professor, senior instructor, or instructor, without any modifier (e.g., "visiting," "clinical") to the title. They have full voting rights as members of the University Faculty. Appointments in category (3), special faculty, may be either full-time or part-time. These faculty are not appointed by the Board of Trustees, and their titles include a modifier to traditional ranks that reflects the nature of the appointment (e.g., visiting, adjunct, clinical). Special faculty members are not voting members of the University Faculty, but may be entitled to vote on matters coming before the constituent faculties in which they are appointed, depending on the by-laws of their constituent faculties.

Full-time faculty in categories (1) and (2) above may be paid through Case Western Reserve University, or may be paid through an affiliated hospital. The source of their pay does not determine their faculty status or their voting rights.

## Women Faculty

### (A. # and % of women in S&E departments)

S&E refers to the 31 NSF-fundable Science and Engineering departments as defined in the grant. The data reported include both board approved and special faculty by gender and tenure status.

As shown in Tables 3A-1 and 3A-2, the percentage of full-time tenured and tenure-track women faculty is 20% in the S&E departments, less than for the whole university (28.3%), and the percentage of other full-time women faculty is 37.4%, less than the percentage for the whole university (47.8%). In both S&E departments and the university as a whole, women are under-represented in full-time tenured and tenure-track positions.

**Table 3A-1**

### Number and Percent of Women Faculty in all S&E Departments for AY2006-07

S&E Departments in AY2006-07	Female Faculty		Male Faculty		Total	
	N	%	N	%	N	%
<b>Full-Time Tenured/Tenure-Track (1)</b>	77	20%	307	80%	384	68.1%
<b>Other Full-Time (2)</b>	37	37.4%	62	62.6%	99	17.6%
<b>Part-Time/Adjunct (3)</b>	20	24.7%	61*	75.3%	81	14.3%
<b>Total</b>	<b>134</b>	<b>23.8%</b>	<b>430</b>	<b>76.2%</b>	<b>564</b>	<b>100%</b>

\* Include 3 tenured male faculty with part-time status.

**Table 3A-2**

### Number and Percent of Women Faculty in all University Departments for AY2006-07

University (including S&E) in AY2006-07*	Female Faculty		Male Faculty		Total	
	N	%	N	%	N	%
<b>Full-Time Tenured/Tenure-Track (1)</b>	248	28.3%	627	71.7%	875	50.3%
<b>Other Full-Time (2)</b>	283	47.8%	309	52.2%	592	34%
<b>Part-Time/Adjunct (3)</b>	108	39.6%	165	60.4%	273	15.7%
<b>Total</b>	<b>639</b>	<b>35.7%</b>	<b>1101</b>	<b>64.3%</b>	<b>1740</b>	<b>100%</b>

\* Report Case-paid Faculty Only.

(1) Appointments approved by the Board of Trustees.

(2) Including fulltime non-tenure-track faculty approved by Board of Trustees, and fulltime special faculty that are not Board-approved (such as visiting faculty, professors for the practice, full-time lecturers).

(3) Special faculty, appointments not Board-approved; includes adjuncts, part-time lecturers.

Below is the gender distribution of full-time and part-time faculty broken down by department:

**Table 3A-3  
Number of Women Faculty in each S&E Department for AY2006-07**

S&E Full-Time Faculty for AY2006-07		Full-Time				Part-Time /Adjunct		Total
		Tenured and Tenure-Track		Other Full-Time		Female	Male	
School	Department	Female	Male	Female	Male			Female
Arts & Sciences	Anthropology	5	5	0	0	3	2	15
	Astronomy	2	2	0	0	0	1	5
	Biology	4	12	3	3	0	1	23
	Chemistry	3	15	1	1	0	1	21
	Geological Sciences	1	6	0	0	0	0	7
	Mathematics	2	12	1	5	0	2	22
	Physics	2	18	1	3	0	2	26
	Political Science	3	5	0	0	2	4	14
	Psychology	6	6	2	0	3	4	21
	Sociology	2	3	1	0	2	0	8
Statistics	2	2	3	1	0	2	10	
<b>Total Arts &amp; Sciences</b>		<b>32</b>	<b>86</b>	<b>12</b>	<b>13</b>	<b>10</b>	<b>19</b>	<b>172</b>
<b>Percent by Gender</b>		<b>27%</b>	<b>73%</b>	<b>48%</b>	<b>52%</b>	<b>35%</b>	<b>65%</b>	
Engineering	Biomedical Engineering	4	17	1	0	0	2	24
	Chemical Engineering	1	12	0	1	0	2	16
	Civil Engineering	1	7	0	0	0	3*	11
	Electrical Engineering & Computer Science	2	32	0	0	0	8	42
	Macromolecular Science	3	9	0	0	0	1	13
	Materials Science & Engineering	0	11	0	2	0	2	15
	Mechanical and Aerospace Engineering	2	13	0	5	0	1	21
<b>Total Engineering</b>		<b>13</b>	<b>101</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>19</b>	<b>142</b>
<b>Percent by Gender</b>		<b>11%</b>	<b>89%</b>	<b>11%</b>	<b>89%</b>	<b>0%</b>	<b>100%</b>	
Management	Economics	3	10	0	1	2	4	20
	Management Info.	1	4	0	0	0	1	6
	Operations Research	0	6	0	0	0	3	9
	Organizational Behavior	4	4	0	1	4	4*	17
	MAPS	2	11	0	3	4	8	28
<b>Total Management</b>		<b>10</b>	<b>35</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>20</b>	<b>80</b>
<b>Percent by Gender</b>		<b>22%</b>	<b>78%</b>	<b>0%</b>	<b>100%</b>	<b>33%</b>	<b>67%</b>	
Medicine	Anatomy	2	8	2	3	0	2	17

S&E Full-Time Faculty for AY2006-07		Full-Time				Part-Time /Adjunct		Total
		Tenured and Tenure-Track		Other Full-Time		Female	Male	
School	Department	Female	Male	Female	Male	Female	Male	N
	Biochemistry	1	14	4	16	0	0	35
	Genetics	6	13	6	8	0	0	33
	Microbiology and Molecular Biology	3	8	1	2	0	0	14
	Neurosciences	4	11	3	1	0	0	19
	Pharmacology	4	6	3	3	0	0	16
	Physiology and Biophysics	1	18	4	3	0	1*	27
	RNA	1	7	1	0	0	0	9
<b>Total Medicine</b>		<b>22</b>	<b>85</b>	<b>24</b>	<b>36</b>	<b>0</b>	<b>3</b>	<b>170</b>
<b>Percent by Gender</b>		<b>21%</b>	<b>79%</b>	<b>40%</b>	<b>60%</b>	<b>0%</b>	<b>100%</b>	
<b>Overall S&amp;E</b>		<b>77</b>	<b>307</b>	<b>37</b>	<b>62</b>	<b>20</b>	<b>61</b>	<b>564</b>
<b>Percent by Gender</b>		<b>20%</b>	<b>80%</b>	<b>37%</b>	<b>63%</b>	<b>25%</b>	<b>75%</b>	

\* Tenured male faculty with part-time status.

**ADVANCE Objectives: Equitable Faculty Recruitment Patterns**

From Year 4, we start to report the number of new hires in non-tenure track, in addition to new hires in tenure track. As indicated in Table 3A-4, only 2 new hires of non-tenure-track positions are S&E faculty, which is significantly fewer than that in other university departments (n=196). For the tenure track, 25% (13 out of 53) of all university tenure-track new hires are in S&E departments. Of the S&E tenure-track new hires, 46% are women, and 54% are men, a greater proportion of women hired to tenure-track positions than in other university departments (30%) and university-wide (34%).

**Table 3A-4  
Faculty Hired by Rank and Gender for AY2006-2007\***

Faculty Hires by Tenure Status, Rank and Gender		31 S&E Departments			Other University Departments			University Total		
		Female	Male	Total	Female	Male	Total	Female	Male	Total
Non-Tenure-Track	(Sr.) Instructor	1	1	2	30	40	70	31	41	72
	Assistant Professor	0	0	0	25	59	84	25	59	84
	Associate Professor	0	0	0	7	17	24	7	17	24
	Professor	0	0	0	3	15	18	3	15	18
	Total # of New Hires	1	1	2	65	131	196	66	132	198
	% of New Hires	50%	50%	100%	33%	67%	100%	33%	67%	100%
Tenured and Tenure-Track	Instructor TBC**	0	2	2	--	--	--	0	2	2
	Assistant Professor	3	5	8	11	18	29	14	23	37
	Associate Professor	0	0	0	0	7	7	0	7	7
	Professor	3	0	3	1	3	4	4	3	7
	Total # of New Hires	6	7	13	12	28	40	18	35	53
	% of New Hires	46%	54%	100%	30%	70%	100%	34%	66%	100%
Total	# of New Hires	7	8	15	77	159	236	84	167	251
	% of New Hires	47%	53%	100%	33%	67%	100%	34%	66%	100%

\* Report only Board approved faculty.

\*\*Appointment to be converted from instructor to tenure track assistant professor upon completion of terminal degree.

## **Promotion and Retention of Women**

### **Rank Information for AY 2005-2006**

#### ***(D. Years in rank by gender)***

Table 3A-5 describes years in rank for AY 2006-07. Median years in rank will be discussed here. Assistant professors in all schools except engineering closed the gap, resulting in male and female assistant professors with equal years in rank in 2006-07. In School of Engineering, female faculty continued to serve 2 more years in rank at the assistant professor level. Female associate professors in all schools except medicine have spent fewer years in rank than their male counterparts. In School of Medicine, female faculty closed the gap in years in rank, resulting in male and female associate professors with equal years in rank in 2006-07. Female professors in all schools have served fewer years in rank than male professors, although the difference in School of Engineering is small.

**Table 3A-5**  
**Years in Rank of S&E Faculty by Gender in AY2006-2007**

Years in Rank of S&E Faculty			AY2006-07	
			Female	Male
Arts & Sciences	Assistant Professor	Median	4	4
		Mean	4	3
		Range	1-6	1-5
	Associate Professor	Median	2	6
		Mean	5	9
		Range	1-14	1-27
	Professor	Median	6	13
		Mean	9	16
		Range	1-23	1-41
Engineering	Assistant Professor	Median	5	3
		Mean	4	3
		Range	2-7	1-7
	Associate Professor*	Median	3	7
		Mean	3	9
		Range	2-3	1-25
	Professor	Median	14	15
		Mean	14	15
		Range	2-24	1-43
Management	Assistant Professor	Median	4	4
		Mean	4	3
		Range	1-8	1-5
	Associate Professor	Median	11	19
		Mean	10	17
		Range	1-19	1-30
	Professor**	Median	5	12
		Mean	5	16
		Range	5	3-38
Medicine	Assistant Professor	Median	4	4
		Mean	5	4
		Range	1-10	1-8
	Associate Professor	Median	6	6
		Mean	6	11
		Range	4-8	4-42
	Professor	Median	7	13
		Mean	11	17
		Range	3-36	2-39

Note. We only report Tenured and Tenure-Track faculty here.

\* Include two female faculty; \*\* Include only one female faculty.

**Tenure Status for AY2006-2007**

*(B. # and % of women in tenure-track positions by rank and department)*

The composition of full-time, tenure-track faculty in S&E departments by gender is 20% female (77 of 387) and 80% male (310 of 387). Based on these figures, women are overrepresented at the Assistant professor rank (30%), at an appropriate proportion at Associate Professor level (24%), but underrepresented in the Professor rank (13%). The School of Management has only 5% female full professors, and School of Engineering has 7% female full professors, while College of Arts and Sciences has the highest percentage of female full professors at 18%.



**Table 3A-6  
Number and Percent of Faculty in Tenure-Track Positions by Rank and Department  
for AY2006-07**

S&E Tenure-Stream Faculty		Assistant Professor		Associate Professor		Professor	
School	Department	Female	Male	Female	Male	Female	Male
<b>Arts &amp; Sciences</b>							
<i>Mathematical and Biophysical Sciences</i>	Astronomy	1	0	0	0	1	2
	Biology	4	2	0	3	0	7
	Chemistry	0	2	2	2	1	11
	Geological Sciences	0	2	1	2	0	2
	Mathematics	0	2	0	0	2	10
	Physics	1	0	0	3	1	15
	Statistics	1	0	0	0	1	2
<i>Social and Behavioral Sciences</i>	Anthropology	1	1	1	1	3	3
	Political Science	1	2	1	1	1	2
	Psychology	1	1	3	1	2	4
	Sociology	0	1	1	0	1	2
<b>Total Arts &amp; Sciences</b>		<b>10</b>	<b>13</b>	<b>9</b>	<b>13</b>	<b>13</b>	<b>60</b>
<b>% within Rank by Gender</b>		<b>43%</b>	<b>57%</b>	<b>41%</b>	<b>59%</b>	<b>18%</b>	<b>82%</b>
<b>Engineering</b>	Biomedical Engineering	2	8	2	3	0	6
	Chemical Engineering	1	2	0	0	0	10
	Civil Engineering	1	1	0	1	0	6
	Electrical Engineering & Computer Science	1	6	0	14	1	12
	Macromolecular Science	1	0	0	4	2	5
	Materials Science & Engineering	0	0	0	3	0	8
	Mechanical and Aerospace Engineering	1	1	0	2	1	10
<b>Total Engineering</b>		<b>7</b>	<b>18</b>	<b>2</b>	<b>27</b>	<b>4</b>	<b>57</b>
<b>% within Rank by Gender</b>		<b>28%</b>	<b>72%</b>	<b>7%</b>	<b>93%</b>	<b>7%</b>	<b>93%</b>
Table continued on next page							
<b>Management</b>	Economics	1	3	1	3	1	4
	Management Info.	0	1	1	0	0	3

<b>S&amp;E Tenure-Stream Faculty</b>		<b>Assistant Professor</b>		<b>Associate Professor</b>		<b>Professor</b>	
<b>School</b>	<b>Department</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>
	<b>Operations Research</b>	0	0	0	4	0	2
	<b>Organizational Behavior</b>	1	0	3	1	0	4
	<b>MAPS</b>	2	1	0	4	0	6
<b>Total Management</b>		<b>4</b>	<b>5</b>	<b>5</b>	<b>12</b>	<b>1</b>	<b>19</b>
<b>% within Rank by Gender</b>		<b>44%</b>	<b>56%</b>	<b>29%</b>	<b>71%</b>	<b>5%</b>	<b>95%</b>
<b>Medicine</b>	<b>Anatomy</b>	0	3	1	3	1	2
	<b>Biochemistry</b>	0	4	1	3	0	7
	<b>Genetics</b>	3	6	1	3	2	4
	<b>Microbiology</b>	1	5	1	1	1	2
	<b>Neurosciences</b>	1	2	1	3	2	6
	<b>Pharmacology</b>	2	1	0	1	2	4
	<b>Physiology &amp; Biophysics</b>	0	5	0	3	1	11
	<b>RNA</b>	0	3	1	2	0	2
<b>Total Medicine</b>		<b>7</b>	<b>29</b>	<b>6</b>	<b>19</b>	<b>9</b>	<b>38</b>
<b>% within rank by gender</b>		<b>19%</b>	<b>81%</b>	<b>24%</b>	<b>76%</b>	<b>19%</b>	<b>81%</b>
<b>Overall S&amp;E</b>		<b>28</b>	<b>65</b>	<b>22</b>	<b>71</b>	<b>27</b>	<b>174</b>
<b>% within Rank by Gender</b>		<b>30%</b>	<b>70%</b>	<b>24%</b>	<b>76%</b>	<b>13%</b>	<b>87%</b>

## Tenure-track Status

*(F. # and % of women in non-tenure-track positions – teaching and research)*

Table 3A-7 refers to tenure-track status of faculty serving in S&E departments. Of the 104 board-approved female faculty in S&E, 74% (77 out of 104) are tenured or in tenure-track positions, and 26% (27 out of 104) are in non-tenure track. Of the 348 board-approved male faculty in S&E, 89% (310 out of 348) are tenured or in tenure-track positions, and 11% (38 out of 348) are in the non-tenure track. As shown in Table 3A-7, 84% of the tenured positions in S&E are held by male faculty, and 69% of tenure-track positions are held by male faculty. Thus, female faculty hold 16% of tenured positions and 31% of tenure-track positions in S&E departments. Female faculty hold 42% of the non-tenure-track positions in S&E departments.

**Table 3A-7**

**Number and Percent of Faculty by Tenure Status and Gender for AY2006-07**

S&E* AY2006-07	Tenured		Tenure-track		Tenured and tenure-track		Non-tenure- track**		Total	
	N	%	N	%	N	%	N	%	N	%
<b>Female</b>	45	16%	32	31%	77	20%	27	42%	<b>104</b>	<b>23%</b>
<b>Male</b>	239	84%	71	69%	310	80%	38	58%	<b>348</b>	<b>77%</b>
<b>Total</b>	<b>284</b>	<b>100%</b>	<b>103</b>	<b>100%</b>	<b>387</b>	<b>100%</b>	<b>65</b>	<b>100%</b>	<b>452</b>	<b>100%</b>

\* Board approved employees.

\*\* Include instructors who are tenure-track not applicable and faculty who are not in track.

**Promotion and Tenure Information for AY2006-2007**

***(C. Tenure promotion outcome by gender)***

The tenure and promotion outcomes reported here underwent full higher review, meaning the application for tenure is reviewed by the school’s committee(s), the dean, the provost and president. The university’s trustees award promotion or tenure based on the recommendation of the president.

As shown in Table 3A-8, in AY 2006-07 female faculty in S&E departments comprised 17% (1 of 6) of the tenure applications, while female faculty in other university departments made up 42% (5 of 12) of tenure applications. Across the whole university, a total of 6 women (33%) and 12 men (67%) were considered for tenure. Of these 18 faculty members, there were 17 successful candidates for tenure: 5 women (29% of all tenure awards) and 12 men (71% of all tenure awards). Of all candidates, 100% of men who were applied for tenure were awarded it (12 out of 12), whereas 83% of women up for tenure were awarded it (5 out of 6). For S&E departments, 1 woman faculty and all 5 male faculty who applied for tenure were awarded it. In the other university departments, 4 of 5 women faculty and all 7 male faculty who applied for tenure were awarded it.

**Table 3A-8  
Tenure Outcomes by Gender in S&E and Other Departments for AY2006-2007**

Tenure Awards for AY2006-07*	S&E Departments					Other University Departments				
	Female		Male		Total	Female		Male		Total
	N	%	N	%		N	%	N	%	N
<b>Tenure Awards</b>	1	17%	5	83%	6	4	36%	7	64%	11
<b>Tenure Applications*</b>	1	17%	5	83%	6	5	42%	7	58%	12
<b>% Awarded within gender</b>	100%		100%		100%	80%		100%		92%

Note. The numbers reported here are for full higher review.

Table 3A-9 describes outcomes for promotion to full professor. Of all the 15 tenure-track faculty reviewed for promotion to full professor in the university as a whole, 5 were women (33%) and 10 were men (67%). For S&E faculty, both of the 2 men who were considered for promotion to full professor were promoted. No female faculty in S&E departments applied for promotion to full professor. In the other university departments, all 5 women and 7 of 8 men who applied for full professor were promoted.

**Table 3A-9**  
**Promotion Outcomes by Gender in S&E and Other Departments for AY2006-2007**

<b>Promotion to Full Professor for AY2006-07</b>	<b>S&amp;E Departments</b>					<b>Other University Departments</b>				
	<b>Female</b>		<b>Male</b>		<b>Total</b>	<b>Female</b>		<b>Male</b>		<b>Total</b>
	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>N</b>	<b>%</b>	<b>N</b>	<b>%</b>	<b>N</b>
<b>Promotion to Full Professor</b>	0	0	2	100%	2	5	42%	7	58%	12
<b>Application for Promotion</b>	0	0	2	100%	2	5	38%	8	62%	13
<b>% Promoted within Gender</b>	--		100%		100%	100%		88%		92%

Note. The numbers reported here are for full higher review.

**Attrition Statistics for AY2006-2007**  
*(E. Time at institution and attrition by gender)*

According to Table 3A-10, for the university as a whole, 32 female faculty and 72 male faculty left the university. Men constituted a larger percentage (69%) of faculty leaving the university than did women (31%). For S&E faculty, 4 women (14%) with an average of 7.4 years at institution and 24 men (86%) with an average of 13.5 years at institution left the university.

**Table 3A-10**  
**Attrition by Gender in S&E and University for AY2006-2007**

Attrition and Years at Institution		AY2006-07		
		N	%	Average years at Institution
<b>S&amp;E</b>	<b>Female</b>	4	14%	7.4
	<b>Male</b>	24	86%	13.5
	<b>Total</b>	<b>28</b>	<b>100%</b>	<b>12.6</b>
<b>University* (including S&amp;E)</b>	<b>Female</b>	32	31%	9.7**
	<b>Male</b>	72	69%	12.6***
	<b>Total</b>	<b>104</b>	<b>100%</b>	<b>11.8</b>

\* Clinical departments are included into the University level data.

\*\* 2 women faculty are excluded from the calculation of average years at institution, because of the absence of hiring date. Thus, n = 30.

\*\*\* 2 male faculty are excluded from the calculation of average years at institution, because of the absence of hiring date. Thus, n = 70.

Table 3A-11 describes faculty attrition in S&E departments. Retirements accounted for 18% (5 out of 28) of S&E faculty attrition, occurring exclusively by men. This attrition pattern results in men having a higher average number of years at the university and in rank. Of the women who left in S&E, 100% of them resigned, after an average of 7.4 years at the university and 5.2 years in their present rank.

**Table 3A-11**  
**Attrition in S&E by Gender, Tenure Status, and Reason for Departure for AY2006-2007**

S&E Faculty Departures for AY2006-07	Female				Male			
	Tenured and Tenure Track		Non Tenure-Track		Tenured/ Tenure Track		Non Tenure-Track	
	Retired	Resigned	Retired	Resigned	Retired	Resigned	Retired	Resigned
<b>Instructor</b>	0	0	0	0	0	0	0	1
<b>Assistant professor</b>	0	3	0	0	0	7	0	1
<b>Associate professor</b>	0	1	0	0	1	3	0	0
<b>Professor</b>	0	0	0	0	3	5	1	2
<b>Total</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>15</b>	<b>1</b>	<b>4</b>
<b>Average Yrs at Current Rank<sup>a</sup></b>	--	5.2	--	--	24.8	9.7	NA <sup>c</sup>	4.4
<b>Average Yrs at Institution<sup>b</sup></b>	--	7.4	--	--	32.1	11.2	9.8	4.4

a. Years at Current Rank = (Effective date of departure – Appointment date to current rank)/365 days;

b. Years at Institution = (Effective date of departure – Hire date to this institution)/365 days;

c. This faculty's appointment date to current rank is not available.

## **Greater Representation of Women in Leadership Positions**

As seen in Table 3A-12, women held a lower percentage of leadership positions than did men in AY 2006-07. For the Case-paid faculty as a whole, women made up 16.7% of tenured full professors, 17.7% of full professors, 13.6% of department heads in College of Arts and Science, 14.3% of department heads in School of Engineering, 6.3% of department heads in School of Medicine, 22.2% of deans, 44.4% associate deans, 40.5% of center directors, and 26.3% of president, vice-presidents, provost and vice-provost, and 21.1% of endowed chairs. There are no female department heads in School of Management.

For S&E departments, women composed 12.8% of tenured full professors, 12.6% of full professors, 18.2% of department heads in College of Arts and Science, 14.3% of department heads in School of Engineering, 25% of department heads in School of Medicine, 25% of deans, 34.8% associate deans, 17.6% of center directors, and 19.2% of endowed chairs.

### **Endowed Chairs/Professorships**

*(H. # and % of women S&E faculty in named chairs)*

In S&E Departments 19.2% (14 out of 73) of all endowed chairs are women, compared with 21.1% (36 out of 171) of all women with endowed chairs in the university.

### **Participation in Promotion and Tenure Committees**

*(I. # and % of women S&E faculty on promotion and tenure committees)*

In College of Arts and Science, 33% of Promotion and Tenure Committee members (2 out of 6) are women, and 67% are men. In School of Management, 22% of Promotion and Tenure Committee members (2 out of 9) are women, and 78% are men. There are no female faculty members on the Promotion and Tenure Committees in Case School of Engineering or in School of Medicine.

### **Administrative Positions**

*(G. # of women scientists and engineers in administrative positions)*

Powerful Committees have been identified at each school and include: Executive committee in College of Arts & Sciences and School of Engineering; Faculty Council at Weatherhead School of Management and School of Medicine; and Faculty Council Steering Committee and Admissions Committee at School of Medicine. As shown in Table 3A-12, women are underrepresented in the powerful committees in each school.



**Table 3A-12  
Faculty Leadership Positions for AY2006-2007**

Women in Leadership Positions	All			31 S&E Departments		
	All	Women	%	All	Women	%
<b>Case-paid Faculty Only</b>						
<b>Tenured Full Professors</b>	414	69	16.7%	196	25	12.8%
<b>Full Professors</b>	474	84	17.7%	199	25	12.6%
<b>Department Heads – Total S&amp;E</b>						
CAS	22	3	13.6%	11		18.2%
CSE	7	1	14.3%	7		14.3%
WSOM	7	0	0%	5		0%
SOM	32	2	6.3%	8*		25%
<b>Deans</b>	9	2	22.2%	4	1**	25%
<b>Associate Deans</b>	36	16	44.4%	23	8	34.8%
<b>Center Directors</b>	37	15	40.5%	17	3	17.6%
<b>President, Vice-Presidents, Provost, Vice-Provosts</b>	19	5	26.3%	--	--	--
<b>Endowed/Named Chairs</b>	171	36	21.1%	73	14	19.2%
<b>Promotion &amp; Tenure Committees</b>						
CAS	10	4	40%	6	2	33%
CSE	5	0	0%	5	0	0%
WSOM***	11	2	18%	9	2	22%
SOM	22	4	18%	3	0	0%
Total	48	10	21%	23	4	17%
<b>Executive Committee</b>						
CAS****	16	5	31%	10	3	30%
CSE	8	0	0%	8	0	0%
<b>Faculty Council</b>						
WSOM***	10	2	20%	9	2	22%
<b>Admissions Committee</b>						
SOM	10	3	30%	2	0	0%
<b>Faculty Council</b>						
SOM	49	17	35%	8	1	12.5%
<b>Faculty Council Steering Committee</b>						
SOM*****	7	3	43%	0	0	--

\* Includes a director of RNA center, which is one of the 31 S&E departments.

\*\* Interim dean.

\*\*\* Includes 1 ex-officio member.

\*\*\*\* Includes 1 ex-officio and 6 non-voting committee members.

\*\*\*\*\* According to School of Medicine by-laws, Faculty Council Steering Committee members also serve on the larger Faculty Council. Thus, faculty members who serve on both committees are counted twice in this table.

## **Equitable Allocation of Resources**

### **Compensation**

#### ***(J. Salary of S&E faculty by gender, controlling for dept. rank, and years in rank)***

Since salary information is held confidential in our private university and often the number of women faculty in a department is small (i.e., 1 or 2), we have chosen to report salary information by school.

Table 3A -13 describes female faculty salary as a percentage of male salary. In Table 3A-13, for the whole S&E faculty, women typically had higher salaries at the Assistant Professor level. With the increase in rank, women typically had lower salaries than their male counterparts. Overall, female Assistant Professors earn 1% more than male Assistant Professors, while female Associate Professors and Professors earn 92.6% and 87.8% of male Associate Professors and Professor salaries, respectively. Among Assistant Professors, female faculty in College of Arts and Sciences and School of Management earn 5.6% and 1.9% more than male faculty, respectively, while female faculty in School of Engineering and School of Medicine earn 97.8% and 97.5% of male faculty salary, respectively. Among Associate Professors, in all schools female faculty earn less than male faculty except in School of Medicine, where female faculty earn 0.9% more than male faculty. At the Professor level, in all schools female faculty earn less than male faculty except in School of Engineering, where female faculty earn 0.3% more than male faculty.

**Table 3A-13**  
**Base Salary by Gender and Rank for AY2006-2007**

<b>Base Salary for AY2006-07</b>	<b>Rank</b>	<b>Female</b>	<b>Male</b>	<b>Female Salary as a % of Male Salary</b>
<b>Arts &amp; Sciences</b>	<b>Assistant Professor</b>	\$60,826	\$57,604	105.6%
	<b>Associate Professor</b>	\$64,740	\$71,088	91.1%
	<b>Professor</b>	\$92,740	\$96,165	96.4%
<b>Engineering</b>	<b>Assistant Professor</b>	\$76,482	\$78,197	97.8%
	<b>Associate Professor</b>	*	\$85,499	--
	<b>Professor</b>	\$117,757	\$117,414	100.3%
<b>Management</b>	<b>Assistant Professor</b>	\$101,567	\$99,689	101.9%
	<b>Associate Professor</b>	\$105,777	\$110,451	95.8%
	<b>Professor</b>	*	\$150,832	--
<b>Medicine</b>	<b>Assistant Professor</b>	\$63,576	\$65,239	97.5%
	<b>Associate Professor</b>	\$77,233	\$76,565	100.9%
	<b>Professor</b>	\$113,437	\$134,216	84.5%
<b>Overall S&amp;E</b>	<b>Assistant Professor</b>	\$67,335	\$66,679	101.0%
	<b>Associate Professor</b>	\$75,912	\$81,982	92.6%
	<b>Professor</b>	\$100,876	\$114,882	87.8%
	<b>Combined Ranks</b>	\$79,258	\$96,203	82.4%

Note. Salary, standardized to a 9 month scale.

9-month salary is unmodified; Transform the 12-month salary by multiple 9/11.

\* Not report here because of the small number of women faculty.

## **Other Data Collection and Analyses**

### ***Candidate Pool Study***

Candidate pools reflect the applicants considered for new faculty hires, and represent an opportunity to promote diversity in the hiring of new faculty. With the advent of the ACES/ADVANCE program at Case Western Reserve University, a policy was implemented mandating the dean of each school to assess and approve the lists of candidates for each faculty search for diversity during the recruitment stage prior to entering the selection stage.

All faculty searches for full-time faculty conducted in 31 S&E departments at Case Western Reserve University from 2000-01 to 2005-06 were included. Searches were excluded from the study if they were for visiting faculty, lecturers, research-only faculty, or if a full search was not done due to promotion of an internal candidate. Paper files housed in the university's Office of Equal Opportunity and Diversity were reviewed for each eligible search. Information collected included the school, department, and year of the search, as well as the number of candidates in the total search and short list by gender, and the gender of hire. The presentation is available at: [http://www.case.edu/admin/aces/Report\\_Year4/Candidate\\_Pool\\_Presentation.pdf](http://www.case.edu/admin/aces/Report_Year4/Candidate_Pool_Presentation.pdf)

### ***Salary Equity Study***

We obtained data for the salary and survival study in July 2006 from the university's Office of the Provost and Office of Institutional Research. However, the data were in extremely poor condition. Professor Nahida Gordon, of the ACES Research and Evaluation Team, led the clean-up and analysis of the data. We assess salary equity, which involve a multivariable analysis of possible gender bias in current rank and in faculty salaries. The presentation is available at: [http://www.case.edu/admin/aces/Report\\_Year4/Salary\\_Equity.pdf](http://www.case.edu/admin/aces/Report_Year4/Salary_Equity.pdf)

### ***Opportunity Grants Evaluation***

In summer 2006, ACES conducted evaluation interviews with recipients of the opportunity grants. The evaluation report is available at: [http://www.case.edu/admin/aces/Report\\_Year4/Grant\\_Recipient\\_Interviews\\_2006.pdf](http://www.case.edu/admin/aces/Report_Year4/Grant_Recipient_Interviews_2006.pdf)

### ***Coaching Update***

We have included an update on the Phase III coaching, including coach evaluations and open-ended comments from participants. A total of 17 participants completed and returned the coaching evaluation forms. This information can be found here: [http://www.case.edu/admin/aces/Report\\_Year4/Coaching\\_Eval\\_Summary.pdf](http://www.case.edu/admin/aces/Report_Year4/Coaching_Eval_Summary.pdf)

### ***Offer Letter Analysis***

This report summarizes findings from Year 4 of a 5-year study assessing initial resources offered to new faculty. These data are obtained from 22 offer letters issued to incoming faculty of ACES departments, collected in Academic Year 2006-2007. Some offer letters were not available at the time of this report, but will be added to the analysis of the next round. The report can be found here: [http://www.case.edu/admin/aces/Report\\_Year4/Offer\\_Letter\\_Summary.pdf](http://www.case.edu/admin/aces/Report_Year4/Offer_Letter_Summary.pdf)

## **Research and Evaluation Plan for Year 5 (2007-2008)**

- (1) Complete working with 10 departments during January – December 2007:
  - Administration of post-intervention evaluations for all interventions as a group (comparisons with baseline data for women faculty and chairs) – January-February 2008
  - Administration of end-intervention evaluation of coaching (women faculty and chairs) – January-February 2008
- (2) Event preparation and evaluation: As Occurring during 2007-08
  - Dissemination of information at and evaluation of specific ACES events (e.g., Provost's retreat, networking seminars, mentoring workshops)
- (3) Start-up Packages (Offer Letter Analysis) – Summer 2008
  - As we have done in previous years, we will review and analyze the start-up packages/offer letters of all 2007-08 incoming faculty by rank and gender.
- (5) Ongoing Salary Analysis – Fall 2007/Spring 2008
  - Using updated data, we plan to continue performing a salary equity study.
- (6) Survival Analysis – Fall 2007/Spring 2008
  - We plan to undertake analysis of the survival rate of faculty members. This longitudinal analysis utilizes data about the presence/absence of each faculty member, rank, and gender. It will allow us to draw conclusions about whether female faculty are disproportionately leaving the system or held in rank longer compared to male faculty.
- (7) Exit Interviews – Spring 2008
  - We will continue to administer our annual exit survey. The information will be used by the Faculty Diversity Office to identify areas for improvement and trends in attrition.
- (8) Continued evaluation of Candidate Pools for S&E Faculty Searches Study – Fall 2007-Spring 2008
  - We will continue to update and analyze our database about faculty search candidate pools, including new data for searches conducted during the academic year ending June 30, 2007.
- (9) Move pending manuscripts into the journal review process – Ongoing in 2007-08.

**Part B. Temporal Trends of Indicators**

**Table 3B-1  
Number and Percentage of Women in S&E Departments from AY2003-04 to AY2006-07**

S&E Departments		AY2003-04		AY2004-05		AY2005-06		AY2006-07	
		N	%	N	%	N	%	N	%
<b>Full-Time</b>	<b>Female</b>	111	22%	98	22%	97	22%	114	24%
	<b>Male</b>	400	78%	354	78%	344	78%	369	76%
	<b>Total</b>	511	100%	452	100%	441	100%	483	100%
<b>Part-Time/Adjunct</b>	<b>Female</b>	27	33%	9	33%	12	38%	20	25%
	<b>Male</b>	56	67%	18	67%	20	62%	61	75%
	<b>Total</b>	83	100%	27	100%	32	100%	81	100%
<b>Total</b>	<b>N</b>	594		479		473		564	

**Table 3B-2  
Number and Percentage of Women Faculty in all University Departments from AY2003-04 to AY2006-07**

University (including S&E)		AY2003-04*		AY2004-05		AY2005-06		AY2006-07	
		N	%	N	%	N	%	N	%
<b>Full-Time</b>	<b>Female</b>	727	31%	509	34%	460	34%	531	36%
	<b>Male</b>	1616	69%	983	66%	888	66%	936	64%
	<b>Total</b>	2343	100%	1492	100%	1348	100%	1467	100%
<b>Part-Time/Adjunct</b>	<b>Female</b>	508	33%	127	48%	88	43%	108	40%
	<b>Male</b>	1029	67%	139	52%	115	57%	165	60%
	<b>Total</b>	1537	100%	266	100%	203	100%	273	100%
<b>Total</b>	<b>N</b>	3880		1758		1551		1740	

\* Included both Case-Paid faculty and Non-Case-Paid faculty in the annual report of AY2003-04.

As indicated in Tables 3B-1 and 3B-2, female faculty experienced marginal increases in percentage of full-time faculty positions in S&E departments and the University; however, these figures represent the highest levels they have been during this 4-year time period, reaching 24% and 36% female, respectively. Part-time female faculty indicated a decrease in percentage of part-time faculty positions, decreasing in both S&E departments and the entire university.

**Table 3B-3**

**Number and Percentage of Women Faculty in S&E Departments by School from AY2003-04 to AY2006-07**

S&E Faculty			AY2003-04		AY2004-05		AY2005-06		AY2006-07	
			N	%	N	%	N	%	N	%
Arts & Sciences	Full-time	Female	39	26%	33	25%	34	27%	44	31%
		Male	112	74%	99	75%	92	73%	99	69%
	Part-time/Adjunct	Female	10	56%	9	45%	7	37%	10	34%
		Male	8	44%	11	55%	12	63%	19	66%
	Total Arts & Sciences		169		152		145		172	
Engineering	Full-time	Female	10	8%	12	11%	13	11%	14	11%
		Male	109	92%	98	89%	102	89%	109	89%
	Part-time/Adjunct	Female	2	10%	0	0%	3	38%	0	0%
		Male	19	90%	5	100%	5	62%	19	100%
	Total Engineering		140		115		123		142	
Management	Full-time	Female	17	24%	14	23%	12	24%	10	20%
		Male	55	76%	46	77%	37	76%	40	80%
	Part-time/Adjunct	Female	7	30%	0	0%	0	0%	10	33%
		Male	16	70%	1	100%	1	100%	20	67%
	Total Management		95		61		50		80	
Medicine	Full-time	Female	45	27%	39	27%	38	25%	46	28%
		Male	124	73%	108	73%	113	75%	121	72%
	Part-time/Adjunct	Female	8	38%	0	0%	2	50%	0	0%
		Male	13	62%	1	100%	2	50%	3	100%
	Total Medicine		190		148		155		170	
Total S&E	Full-time	Female	111	22%	98	22%	97	22%	114	24%
		Male	400	78%	351	78%	344	78%	369	76%
	Part-time/Adjunct	Female	27	33%	9	33%	12	37%	20	25%
		Male	56	67%	18	67%	20	63%	61	75%
	Total S&E		594		476		473		564	

Table 3B-3 provides a look at the percentage of female faculty in S&E departments by school during the four years of the NSF ADVANCE award. In College of Arts and Sciences and School of Medicine, the percentage of female full time faculty in S&E departments has increased to the highest levels during this 4-year period, to 31% and 28%, respectively. Engineering remains unchanged at 11% female full time faculty, while School of Management has decreased to 20% female full time faculty, its lowest level in the last four years.

**Table 3B-4**

**Faculty Hired by Gender from AY2003-04 to AY2006-07**

Faculty Hires by Gender	Gender	AY2003-04		AY2004-05		AY2005-06*		AY2006-07	
		N	%	N	%	N	%	N	%
<b>S&amp;E Departments</b>	<b>Female</b>	17	37%	8	40%	6	28%	7	47%
	<b>Male</b>	29	63%	12	60%	15.5*	72%	8	53%
	<b>Total</b>	<b>46</b>	<b>100%</b>	<b>20</b>	<b>100%</b>	<b>21.5</b>	<b>100%</b>	<b>15</b>	<b>100%</b>
<b>Other University Departments</b>	<b>Female</b>	53	40%	55	32%	17	49%	77	33%
	<b>Male</b>	81	60%	117	68%	18	51%	159	67%
	<b>Total</b>	<b>134</b>	<b>100%</b>	<b>172</b>	<b>100%</b>	<b>35</b>	<b>100%</b>	<b>236</b>	<b>100%</b>
<b>Overall Faculty Hires</b>	<b>Female</b>	70	39%	63	33%	23	41%	84	33%
	<b>Male</b>	110	61%	129	67%	33.5	59%	167	67%
	<b>Total</b>	<b>180</b>	<b>100%</b>	<b>192</b>	<b>100%</b>	<b>56.5</b>	<b>100%</b>	<b>251</b>	<b>100%</b>

\* Included a 50/50 joint appointment with no designated primary department in AY 2005-06.

Faculty hiring trends in S&E Departments have differed from Other University Departments over the last four years. In S&E Departments, female faculty made up 47% of the hires this year, the highest they have been during this 4-year period, and a sharp turnaround from the low of 28% female faculty hired last year. Other University Departments experienced a sharp drop in percentage female faculty hired compared to virtually equal hiring levels last year, to 33% from 49%. The percentage of female faculty hired in Other University Departments is near the 4-year low of 32% from 2004-05. Due to the large numbers of hires in Other University Departments compared to S&E Departments, faculty hires for the entire university correlate closely with that of Other University Departments.



**Table 3B-5  
Years in Rank of S&E Faculty by Gender from AY2003-04 to AY2006-07**

Years in Rank of S&E Faculty			AY2003-04		AY2004-05		AY2005-06		AY2006-07	
			Female	Male	Female	Male	Female	Male	Female	Male
Arts & Sciences	Assistant Professor	Median	--	--	--	--	4	3	4	4
		Mean	4	4	3	2	3	4	4	3
		Range	0-8	1-24	0-8	0-5	1-6	1-7	1-6	1-5
	Associate Professor	Median	--	--	--	--	2	6	2	6
		Mean	7	9	7	7	5	9	5	9
		Range	2-12	2-32	0-12	0-24	1-13	2-26	1-14	1-27
	Professor	Median	--	--	--	--	6	12	6	13
		Mean	8	16	7	14	9	15	9	16
		Range	2-20	0-38	0-20	0-38	1-22	1-40	1-23	1-41
Engineering	Assistant Professor	Median	--	--	--	--	4	2	5	3
		Mean	2	4	2	2	4	3	4	3
		Range	1-4	0-7	1-4	0-6	1-6	1-8	2-7	1-7
	Associate Professor*	Median	--	--	--	--	2	6	3	7
		Mean	5	10	3	10	2	8	3	9
		Range	2-8	1-34	0-8	0-27	1-2	1-24	2-3	1-25
	Professor	Median	--	--	--	--	13	14	14	15
		Mean	14	16	17	15	13	15	14	15
		Range	10-21	1-44	12-21	0-44	1-23	1-42	2-24	1-43
Management	Assistant Professor	Median	--	--	--	--	5	4	4	4
		Mean	4	3	3	3	6	5	4	3
		Range	2-6	1-6	0-5	1-4	4-7	3-6	1-8	1-5
	Associate Professor	Median	--	--	--	--	11	16	11	19
		Mean	9	14	8	7	12	15	10	17
		Range	5-16	1-26	5-10	0-20	7-18	2-29	1-19	1-30
	Professor*	Median	--	--	--	--	4	11	5	12
		Mean	2	16	2	9	4	16	5	16
		Range	2	1-36	2	1-34	--	2-38	5	3-38
Medicine	Assistant Professor	Median	--	--	--	--	3	4	4	4
		Mean	4	5	3	3	4	4	5	4
		Range	0-8	0-43	0-10	0-12	0-9	0-12	1-10	1-8
	Associate Professor	Median	--	--	--	--	5	6	6	6
		Mean	4	8	3	9	5	11	6	11
		Range	1-17	0-39	1-5	0-39	3-7	3-41	4-8	4-42
	Professor	Median	--	--	--	--	6	13	7	13
		Mean	10	15	8	10	10	16	11	17
		Range	1-33	1-36	0-33	0-36	2-35	1-39	3-36	2-39

Note. We only include tenured or tenure-track faculty here.

\* Include only 1 or 2 women faculty members.

-- Medians were not reported in AY2003-04 and AY2004-05.

Table 3B-5 refers to years in rank by school and gender. Median, mean, and range are reported. Mean years in rank will be discussed here. At the Assistant Professor level, mean years in rank

has been fairly equal, with either no difference or 1 year mean difference between male and female faculty except in School of Engineering, where there was a 2 year mean difference in years in rank in 2003-04. In general, over the past 4 years the difference in years in rank between male and female associate professors is greater than that for assistant professors. In School of Medicine and School of Engineering, the difference of years in rank for male and female associate professors is no smaller than 4 and 5 years, respectively. However, in College of Arts and Science and School of Management, this difference was as small as 0 and 1 years, respectively, in AY 2004-05. That year represented the smallest aggregate difference in mean years in rank across all schools by gender at 4 years. Professors have the greatest difference in mean years in rank by gender over the past 4 years in School of Management and College of Arts and Science. However, in School of Engineering, the within-school aggregate difference in years in rank by gender over the past 4 years is actually lower for Professors than for Associate Professors.

**Table 3B-6-1**

**Tenure-Track Faculty Positions by School, Rank and Gender from AY1998-99 to AY2006-07**

S&E Tenure-Stream Faculty			AY1998-99		AY1999-2000		AY2000-01		AY2001-02		AY2002-03		AY2003-04		AY2004-05		AY2005-06		AY2006-07	
School	Rank		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Arts & Sciences	Assistant professor	Female	8	42%	8	40%	9	43%	9	47%	12	50%	12	43%	12	46%	11	41%	10	43%
		Male	11	58%	12	60%	12	57%	10	53%	12	50%	16	57%	14	54%	16	59%	13	57%
		<b>Total</b>	<b>19</b>	<b>100%</b>	<b>20</b>	<b>100%</b>	<b>21</b>	<b>100%</b>	<b>19</b>	<b>100%</b>	<b>24</b>	<b>100%</b>	<b>28</b>	<b>100%</b>	<b>26</b>	<b>100%</b>	<b>27</b>	<b>100%</b>	<b>23</b>	<b>100%</b>
	Associate professor	Female	9	29%	9	35%	7	33%	6	27%	6	25%	5	23%	5	24%	7	35%	9	41%
		Male	22	71%	17	65%	14	67%	16	73%	18	75%	17	77%	16	76%	13	65%	13	59%
		<b>Total</b>	<b>31</b>	<b>100%</b>	<b>26</b>	<b>100%</b>	<b>21</b>	<b>100%</b>	<b>22</b>	<b>100%</b>	<b>24</b>	<b>100%</b>	<b>22</b>	<b>100%</b>	<b>21</b>	<b>100%</b>	<b>20</b>	<b>100%</b>	<b>22</b>	<b>100%</b>
	Professor	Female	9	12%	8	10%	10	13%	16	20%	14	18%	10	14%	13	16%	13	17%	13	18%
		Male	66	88%	69	90%	67	87%	65	80%	63	82%	61	86%	66	84%	62	83%	60	82%
		<b>Total</b>	<b>75</b>	<b>100%</b>	<b>77</b>	<b>100%</b>	<b>77</b>	<b>100%</b>	<b>81</b>	<b>100%</b>	<b>77</b>	<b>100%</b>	<b>71</b>	<b>100%</b>	<b>79</b>	<b>100%</b>	<b>75</b>	<b>100%</b>	<b>73</b>	<b>100%</b>
<b>Total Arts &amp; Sciences</b>	<b>Female</b>	<b>26</b>	<b>21%</b>	<b>25</b>	<b>20%</b>	<b>26</b>	<b>22%</b>	<b>31</b>	<b>25%</b>	<b>32</b>	<b>26%</b>	<b>27</b>	<b>22%</b>	<b>30</b>	<b>24%</b>	<b>31</b>	<b>25%</b>	<b>32</b>	<b>27%</b>	
	<b>Male</b>	<b>99</b>	<b>79%</b>	<b>98</b>	<b>80%</b>	<b>93</b>	<b>78%</b>	<b>91</b>	<b>75%</b>	<b>93</b>	<b>74%</b>	<b>94</b>	<b>78%</b>	<b>96</b>	<b>76%</b>	<b>91</b>	<b>75%</b>	<b>86</b>	<b>73%</b>	
	<b>Total</b>	<b>125</b>	<b>100%</b>	<b>123</b>	<b>100%</b>	<b>119</b>	<b>100%</b>	<b>122</b>	<b>100%</b>	<b>125</b>	<b>100%</b>	<b>121</b>	<b>100%</b>	<b>126</b>	<b>100%</b>	<b>122</b>	<b>100%</b>	<b>118</b>	<b>100%</b>	
Engineering	Assistant professor	Female	1	7%	1	6%	2	10%	2	12%	4	22%	4	27%	6	29%	7	27%	7	28%
		Male	14	93%	15	94%	18	90%	15	88%	14	78%	11	73%	15	71%	19	73%	18	72%
		<b>Total</b>	<b>15</b>	<b>100%</b>	<b>16</b>	<b>100%</b>	<b>20</b>	<b>100%</b>	<b>17</b>	<b>100%</b>	<b>18</b>	<b>100%</b>	<b>15</b>	<b>100%</b>	<b>21</b>	<b>100%</b>	<b>26</b>	<b>100%</b>	<b>25</b>	<b>100%</b>
	Associate professor	Female	2	9%	1	4%	1	4%	1	4%	2	6%	2	7%	3	10%	2	7%	2	7%
		Male	21	91%	26	96%	26	96%	26	96%	29	94%	27	93%	26	90%	26	93%	27	93%
		<b>Total</b>	<b>23</b>	<b>100%</b>	<b>27</b>	<b>100%</b>	<b>27</b>	<b>100%</b>	<b>27</b>	<b>100%</b>	<b>31</b>	<b>100%</b>	<b>29</b>	<b>100%</b>	<b>29</b>	<b>100%</b>	<b>28</b>	<b>100%</b>	<b>29</b>	<b>100%</b>
	Professor	Female	3	4%	3	5%	3	5%	3	5%	3	5%	3	5%	3	5%	4	6%	4	7%
		Male	64	96%	62	95%	63	95%	61	95%	61	95%	60	95%	58	95%	60	94%	57	93%
		<b>Total</b>	<b>67</b>	<b>100%</b>	<b>65</b>	<b>100%</b>	<b>66</b>	<b>100%</b>	<b>64</b>	<b>100%</b>	<b>64</b>	<b>100%</b>	<b>63</b>	<b>100%</b>	<b>61</b>	<b>100%</b>	<b>64</b>	<b>100%</b>	<b>61</b>	<b>100%</b>
<b>Total Engineering</b>	<b>Female</b>	<b>6</b>	<b>6%</b>	<b>5</b>	<b>5%</b>	<b>6</b>	<b>5%</b>	<b>6</b>	<b>6%</b>	<b>9</b>	<b>8%</b>	<b>9</b>	<b>8%</b>	<b>12</b>	<b>11%</b>	<b>13</b>	<b>11%</b>	<b>13</b>	<b>11%</b>	
	<b>Male</b>	<b>99</b>	<b>94%</b>	<b>103</b>	<b>95%</b>	<b>107</b>	<b>95%</b>	<b>102</b>	<b>94%</b>	<b>104</b>	<b>92%</b>	<b>98</b>	<b>92%</b>	<b>99</b>	<b>89%</b>	<b>105</b>	<b>89%</b>	<b>102</b>	<b>89%</b>	
	<b>Total</b>	<b>105</b>	<b>100%</b>	<b>108</b>	<b>100%</b>	<b>113</b>	<b>100%</b>	<b>108</b>	<b>100%</b>	<b>113</b>	<b>100%</b>	<b>107</b>	<b>100%</b>	<b>111</b>	<b>100%</b>	<b>118</b>	<b>100%</b>	<b>115</b>	<b>100%</b>	

S&E Tenure-Stream Faculty			AY1998-99		AY1999-2000		AY2000-01		AY2001-02		AY2002-03		AY2003-04		AY2004-05		AY2005-06		AY2006-07	
School	Rank		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Management	Assistant professor	Female	8	40%	8	38%	7	32%	7	37%	8	32%	9	41%	8	50%	7	54%	4	44%
		Male	12	60%	13	62%	15	68%	12	63%	17	68%	13	59%	8	50%	6	46%	5	56%
		Total	20	100%	21	100%	22	100%	19	100%	25	100%	22	100%	16	100%	13	100%	9	100%
	Associate professor	Female	5	22%	6	29%	6	30%	6	33%	6	38%	5	26%	5	24%	4	22%	5	29%
		Male	18	78%	15	71%	14	70%	12	67%	10	62%	14	74%	16	76%	14	78%	12	71%
		Total	23	100%	21	100%	20	100%	18	100%	16	100%	19	100%	21	100%	18	100%	17	100%
	Professor	Female	0	0%	0	0%	0	0%	0	0%	1	4%	1	4%	1	4%	1	5%	1	5%
		Male	22	100%	24	100%	22	100%	20	100%	22	96%	25	96%	22	96%	20	95%	19	95%
		Total	22	100%	24	100%	22	100%	20	100%	23	100%	26	100%	23	100%	21	100%	20	100%
Total Management		Female	13	20%	14	21%	13	20%	13	23%	15	23%	15	22%	14	23%	12	23%	10	22%
		Male	52	80%	52	79%	51	80%	44	77%	49	77%	52	78%	46	77%	40	77%	36	78%
		Total	65	100%	66	100%	64	100%	57	100%	64	100%	67	100%	60	100%	52	100%	46	100%
Medicine (Basic Science Departments Only)	Assistant professor	Female	8	24%	7	21%	9	27%	6	20%	6	21%	5	19%	10	29%	10	24%	7	19%
		Male	26	76%	27	79%	24	73%	24	80%	22	79%	21	81%	25	71%	32	76%	29	81%
		Total	34	100%	34	100%	33	100%	30	100%	28	100%	26	100%	35	100%	42	100%	36	100%
	Associate professor	Female	7	25%	7	26%	6	22%	9	25%	8	23%	8	24%	7	23%	6	22%	6	24%
		Male	21	75%	20	74%	21	78%	27	75%	27	77%	26	76%	24	77%	21	78%	19	76%
		Total	28	100%	27	100%	27	100%	36	100%	35	100%	34	100%	31	100%	27	100%	25	100%
	Professor	Female	5	12%	5	12%	6	14%	6	14%	6	14%	8	19%	9	19%	8	17%	9	19%
		Male	36	88%	37	88%	37	86%	37	86%	37	86%	35	81%	39	81%	39	83%	38	81%
		Total	41	100%	42	100%	43	100%	43	100%	43	100%	43	100%	48	100%	47	100%	47	100%
Total Medicine (Basic Science Departments)		Female	20	19%	19	18%	21	20%	21	19%	20	19%	21	20%	26	23%	24	21%	22	20%
		Male	83	81%	84	82%	82	80%	88	81%	86	81%	82	80%	88	77%	92	79%	86	80%
		Total	103	100%	103	100%	103	100%	109	100%	106	100%	103	100%	114	100%	116	100%	108	100%

S&E Tenure-Stream Faculty			AY1998-99		AY1999-2000		AY2000-01		AY2001-02		AY2002-03		AY2003-04		AY2004-05		AY2005-06		AY2006-07	
School	Rank		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Overall S&E	Assistant professor	Female	25	28%	24	26%	27	28%	24	28%	30	32%	30	33%	36	37%	35	32%	28	30%
		Male	63	72%	67	74%	69	72%	61	72%	65	68%	61	67%	62	63%	73	68%	65	70%
		Total	88	100%	91	100%	96	100%	85	100%	95	100%	91	100%	98	100%	108	100%	93	100%
	Associate professor	Female	23	22%	23	23%	20	21%	22	21%	22	21%	20	19%	20	20%	19	20%	22	24%
		Male	82	78%	78	77%	75	79%	81	79%	84	79%	84	81%	82	80%	74	80%	71	76%
		Total	105	100%	101	100%	95	100%	103	100%	106	100%	104	100%	102	100%	93	100%	93	100%
	Professor	Female	17	8%	16	8%	19	9%	25	12%	24	12%	22	11%	26	12%	26	13%	27	13%
		Male	188	92%	192	92%	189	91%	183	88%	183	88%	181	89%	185	88%	181	87%	174	87%
		Total	205	100%	208	100%	208	100%	208	100%	207	100%	203	100%	211	100%	207	100%	201	100%
	All ranks	Female	<b>65</b>	<b>16%</b>	<b>63</b>	<b>16%</b>	<b>66</b>	<b>17%</b>	<b>71</b>	<b>18%</b>	<b>76</b>	<b>19%</b>	<b>72</b>	<b>18%</b>	<b>82</b>	<b>20%</b>	<b>80</b>	<b>20%</b>	<b>77</b>	<b>20%</b>
		Male	<b>333</b>	<b>84%</b>	<b>337</b>	<b>84%</b>	<b>333</b>	<b>83%</b>	<b>325</b>	<b>82%</b>	<b>332</b>	<b>81%</b>	<b>326</b>	<b>82%</b>	<b>329</b>	<b>80%</b>	<b>328</b>	<b>80%</b>	<b>310</b>	<b>80%</b>
		Total	<b>398</b>	<b>100%</b>	<b>400</b>	<b>100%</b>	<b>399</b>	<b>100%</b>	<b>396</b>	<b>100%</b>	<b>408</b>	<b>100%</b>	<b>398</b>	<b>100%</b>	<b>411</b>	<b>100%</b>	<b>408</b>	<b>100%</b>	<b>387</b>	<b>100%</b>

Table 3B-6-1 displays 9 years of data on tenure-track faculty by school, rank, and gender. The percentage of female faculty at each school and rank has been calculated and will be discussed here. Overall, the percentage of female Assistant Professors in AY 2006-07, 30%, is below the maximum of 37% in AY 2004-05. The percentages of both female Associate Professors and female Professors are currently at their highest historical levels, 24% and 13%, respectively. At the assistant professor level, School of Management had the highest percentage of females at 44% this year, while School of Medicine had the lowest at 19%. At the associate professor level, College of Arts and Sciences had the highest percentage of females at 41% in AY 2006-07. For College of Arts and Sciences, this is the highest percentage of female associate professors in the last 9 years. At the professor level, School of Medicine had the highest percentage of female professors at 19%, while School of Management had the lowest percentage of female professors at 5%. For School of Medicine, this equals the highest percentage of female professors over the last 9 years. Regarding School of Management, it should be noted that while this represents the highest percentage of female professors over the last 9 years, it corresponds to only 1 female professor out of 20 full professors at the school.

**Table 3B-6-2**

**Tenure-Track Faculty Positions by School, Rank, Gender from AY2003-04 to AY2006-07**

S&E Tenure-Stream Faculty			AY2003-04		AY2004-05		AY2005-06		AY2006-07		Increase of the % of women faculty in AY2006-07 over the baseline % in AY2003-04
School	Rank		N	%	N	%	N	%	N	%	
Arts & Sciences	Assistant professor	Female	12	42.86%	12	46.15%	11	40.74%	10	43.48%	1%
		Male	16	57.14%	14	53.85%	16	59.26%	13	56.52%	-1%
		Total	28	100.00%	26	100.00%	27	100.00%	23	100.00%	
	Associate professor	Female	5	22.73%	5	23.81%	7	35.00%	9	40.91%	80%
		Male	17	77.27%	16	76.19%	13	65.00%	13	59.09%	-24%
		Total	22	100.00%	21	100.00%	20	100.00%	22	100.00%	
	Professor	Female	10	14.08%	13	16.46%	13	17.33%	13	17.81%	26%
		Male	61	85.92%	66	83.54%	62	82.67%	60	82.19%	-4%
		Total	71	100.00%	79	100.00%	75	100.00%	73	100.00%	
Total Arts & Sciences		<b>Female</b>	<b>27</b>	<b>22.31%</b>	<b>30</b>	<b>23.81%</b>	<b>31</b>	<b>25.41%</b>	<b>32</b>	<b>27.12%</b>	<b>22%</b>
		<b>Male</b>	<b>94</b>	<b>77.69%</b>	<b>96</b>	<b>76.19%</b>	<b>91</b>	<b>74.59%</b>	<b>86</b>	<b>72.88%</b>	<b>-6%</b>
		<b>Total</b>	<b>121</b>	<b>100%</b>	<b>126</b>	<b>100%</b>	<b>122</b>	<b>100%</b>	<b>118</b>	<b>100%</b>	
Engineering	Assistant professor	Female	4	26.67%	6	28.57%	7	26.92%	7	28.00%	5%
		Male	11	73.33%	15	71.43%	19	73.08%	18	72.00%	-2%
		Total	15	100.00%	21	100.00%	26	100.00%	25	100.00%	
	Associate professor	Female	2	6.90%	3	10.34%	2	7.14%	2	6.90%	0%
		Male	27	93.10%	26	89.66%	26	92.86%	27	93.10%	0%
		Total	29	100.00%	29	100.00%	28	100.00%	29	100.00%	
	Professor	Female	3	4.76%	3	4.92%	4	6.25%	4	6.56%	38%
		Male	60	95.24%	58	95.08%	60	93.75%	57	93.44%	-2%
		Total	63	100.00%	61	100.00%	64	100.00%	61	100.00%	
Total Engineering		<b>Female</b>	<b>9</b>	<b>8.41%</b>	<b>12</b>	<b>10.81%</b>	<b>13</b>	<b>11.02%</b>	<b>13</b>	<b>11.30%</b>	<b>34%</b>
		<b>Male</b>	<b>98</b>	<b>91.59%</b>	<b>99</b>	<b>89.19%</b>	<b>105</b>	<b>88.98%</b>	<b>102</b>	<b>88.70%</b>	<b>-3%</b>
		<b>Total</b>	<b>107</b>	<b>100%</b>	<b>111</b>	<b>100%</b>	<b>118</b>	<b>100%</b>	<b>115</b>	<b>100%</b>	

S&E Tenure-Stream Faculty			AY2003-04		AY2004-05		AY2005-06		AY2006-07		Increase of the % of women faculty in AY2006-07 over the baseline % in AY2003-04
School	Rank		N	%	N	%	N	%	N	%	
Management	Assistant professor	Female	9	40.91%	8	50.00%	7	53.85%	4	44.44%	9%
		Male	13	59.09%	8	50.00%	6	46.15%	5	55.56%	-6%
		Total	22	100.00%	16	100.00%	13	100.00%	9	100.00%	
	Associate professor	Female	5	26.32%	5	23.81%	4	22.22%	5	29.41%	12%
		Male	14	73.68%	16	76.19%	14	77.78%	12	70.59%	-4%
		Total	19	100.00%	21	100.00%	18	100.00%	17	100.00%	
	Professor	Female	1	4.00%	1	4.35%	1	4.76%	1	5.00%	25%
		Male	25	96.00%	22	95.65%	20	95.24%	19	95.00%	-1%
		Total	26	100.00%	23	100.00%	21	100.00%	20	100.00%	
Total Management		<b>Female</b>	<b>15</b>	<b>22.39%</b>	<b>14</b>	<b>23.33%</b>	<b>12</b>	<b>23.08%</b>	<b>10</b>	<b>21.74%</b>	<b>-3%</b>
		<b>Male</b>	<b>52</b>	<b>77.61%</b>	<b>46</b>	<b>76.67%</b>	<b>40</b>	<b>76.92%</b>	<b>36</b>	<b>78.26%</b>	<b>1%</b>
		<b>Total</b>	<b>67</b>	<b>100%</b>	<b>60</b>	<b>100%</b>	<b>52</b>	<b>100%</b>	<b>46</b>	<b>100%</b>	
Medicine (Basic Science Departments Only)	Assistant professor	Female	5	19.23%	10	28.57%	10	23.81%	7	19.44%	1%
		Male	21	80.77%	25	71.43%	32	76.19%	29	80.56%	0%
		Total	26	100.00%	35	100.00%	42	100.00%	36	100.00%	
	Associate professor	Female	8	23.53%	7	22.58%	6	22.22%	6	24.00%	2%
		Male	26	76.47%	24	77.42%	21	77.78%	19	76.00%	-1%
		Total	34	100.00%	31	100.00%	27	100.00%	25	100.00%	
	Professor	Female	8	18.60%	9	18.75%	8	17.02%	9	19.15%	3%
		Male	35	81.40%	39	81.25%	39	82.98%	38	80.85%	-1%
		Total	43	100.00%	48	100.00%	47	100.00%	47	100.00%	
Total Medicine		<b>Female</b>	<b>21</b>	<b>20.39%</b>	<b>26</b>	<b>22.81%</b>	<b>24</b>	<b>20.69%</b>	<b>22</b>	<b>20.37%</b>	<b>0%</b>
		<b>Male</b>	<b>82</b>	<b>79.61%</b>	<b>88</b>	<b>77.19%</b>	<b>92</b>	<b>79.31%</b>	<b>86</b>	<b>79.63%</b>	<b>0%</b>
		<b>Total</b>	<b>103</b>	<b>100%</b>	<b>114</b>	<b>100%</b>	<b>116</b>	<b>100%</b>	<b>108</b>	<b>100%</b>	
Overall S&E	Assistant professor	Female	30	32.97%	36	36.73%	35	32.41%	28	30.11%	-9%
		Male	61	67.03%	62	63.27%	73	67.59%	65	69.89%	4%

S&E Tenure-Stream Faculty			AY2003-04		AY2004-05		AY2005-06		AY2006-07		Increase of the % of women faculty in AY2006-07 over the baseline % in AY2003-04
School	Rank		N	%	N	%	N	%	N	%	
		Total	91	100.00%	98	100.00%	108	100.00%	93	100.00%	
	Associate professor	Female	20	19.23%	20	19.61%	19	20.43%	22	23.66%	23%
		Male	84	80.77%	82	80.39%	74	79.57%	71	76.34%	-5%
		Total	104	100.00%	102	100.00%	93	100.00%	93	100.00%	
	Professor	Female	22	10.84%	26	12.32%	26	12.56%	27	13.43%	24%
		Male	181	89.16%	185	87.68%	181	87.44%	174	86.57%	-3%
		Total	203	100.00%	211	100.00%	207	100.00%	201	100.00%	
	All ranks	Female	<b>72</b>	<b>18.09%</b>	<b>82</b>	<b>19.95%</b>	<b>80</b>	<b>19.61%</b>	<b>77</b>	<b>19.90%</b>	<b>10%</b>
		Male	<b>326</b>	<b>81.91%</b>	<b>329</b>	<b>80.05%</b>	<b>328</b>	<b>80.39%</b>	<b>310</b>	<b>80.10%</b>	<b>-2%</b>
		Total	<b>398</b>	<b>100%</b>	<b>411</b>	<b>100%</b>	<b>408</b>	<b>100%</b>	<b>387</b>	<b>100%</b>	

Note. Two decimals are kept for the percentage, in order to show the percentage increase over the baseline.



To take a close look at the tenure status change by gender from AY2003-04 to AY2006-07, we present Table 3B-6-2 which displays 4 years of data on tenure-track faculty by school, rank, and gender. In the past four years, there is an overall 10% increase of the percentage of tenure stream women faculty over the baseline percentage in AY2003-04, up from 18% to 20% for women faculty in the S&E departments. At the Associate Professor level, there is a 23% increase of the percentage of tenure-stream women faculty over the baseline percentage in AY2003-04, up from 19.23% to 23.66%. At the Professor level, there is a 24% increase in the percentage of tenured and tenure-track faculty over the baseline percentage in AY2003-04, up from 10.84% to 13.43%. However, at the Assistant Professor level, there is a 9% decrease in the percentage of tenure-stream women faculty over the baseline percentage, decreasing from 32.97% to 30.11%.

In School of Arts and Sciences, there is an overall 22% increase of the percentage of tenure-stream women faculty in AY2006-07 over the baseline in AY2003-04, up from 22.31% to 27.12%. Especially, at the Associate Professor level, there is 80% increase of the percentage of tenure-stream women faculty over the baseline in AY2003-04, up from 22.73% to 40.91%. At the Professor level, there is a 26% increase of the percentage of tenure-stream women faculty over the baseline in AY2003-04, up from 14.08% to 17.81%.

In Case School of Engineering, there is an overall 34% increase of the percentage of tenured and tenure-track women faculty over the baseline in AY2003-04, up from 8.41% to 11.30%. At the Professor level, there is a 38% increase of the percentage of tenured and tenure-track women faculty over the baseline, up from 4.76% in AY2003-04 to 6.56% in AY2006-07. At the Assistant Professor level, there is a 5% increase in the percentage of tenure-stream women faculty in S&E over the baseline in AY2003-04.

In School of Management, there is an overall 3% decrease of the percentage of women faculty over the baseline in AY2003-04, because the decrease of the total number of faculty. However, at each rank, there is an increase of percentage women over the baseline. At the Assistant Professor level, there is 9% increase of percentage of women faculty over the baseline percentage in AY2003-04, up from 40.91% to 44.44%; at the Associate Professor level, there is a 12% increase of percentage of women over the baseline, up from 26.32% to 29.41%. At the Professor level, there is a 25% increase of percentage of women faculty over the baseline in AY2003-04, up from 4% to 5%, while in both years there was only 1 female professor.

In School of Medicine, the percentage of women faculty in AY2006-07 remains almost the same as that in AY2003-04.

### Tenure-track Status

(F. Number and percentage of women in non-tenure-track positions – teaching and research)

**Table 3B-7**

**Number and Percentage of S&E Faculty by Tenure Status from AY2003-04 to AY2006-07**

S&E Departments*		AY2003-04		AY2004-05		AY2005-06		AY2006-07	
Tenure status		N	%	N	%	N	%	N	%
<b>Tenured</b>	Female	37	13%	50	15%	41	15%	45	16%
	Male	246	87%	279	85%	239	85%	239	84%
	<b>Total</b>	<b>283</b>	<b>100%</b>	<b>329</b>	<b>100%</b>	<b>280</b>	<b>100%</b>	<b>284</b>	<b>100%</b>
<b>Tenure-Track</b>	Female	37	30%	32	40%	39	32%	32	31%
	Male	86	70%	49	60%	82	68%	71	69%
	<b>Total</b>	<b>123</b>	<b>100%</b>	<b>81</b>	<b>100%</b>	<b>121</b>	<b>100%</b>	<b>103</b>	<b>100%</b>
<b>Tenured and Tenure-Track</b>	Female	74	18%	82	20%	80	20%	77	20%
	Male	332	82%	328	80%	321	80%	310	80%
	<b>Total</b>	<b>406</b>	<b>100%</b>	<b>410</b>	<b>100%</b>	<b>401</b>	<b>100%</b>	<b>387</b>	<b>100%</b>
<b>Non Tenure-Track**</b>	Female	15	42%	16	41%	17	42%	27	42%
	Male	21	58%	23	59%	23	58%	38	58%
	<b>Total</b>	<b>36</b>	<b>100%</b>	<b>39</b>	<b>100%</b>	<b>40</b>	<b>100%</b>	<b>65</b>	<b>100%</b>
<b>Overall S&amp;E</b>	Female	89	20%	98	22%	97	22%	104	23%
	Male	353	80%	351	78%	344	78%	348	77%
	<b>Total</b>	<b>442</b>	<b>100%</b>	<b>449</b>	<b>100%</b>	<b>441</b>	<b>100%</b>	<b>452</b>	<b>100%</b>

\* Board approved employees.

\*\* Includes instructors who are tenure-track not applicable and faculty who are not in track.

As indicated in table 3B-7, the overall percentage of female faculty in S&E Departments has been increasing from 20% in AY2003-04 to 23% in AY2006-07. For AY 2006-07, females comprise 16% of the tenured faculty in S&E Departments, the highest level over the past 4 years. The percentage of female non-tenure-track faculty in AY 2006-07 has remained consistent with earlier years at 42%.

**Table 3B-8**

**Tenure Outcomes by Gender in S&E and Other University Departments  
from AY2003-04 to AY2006-07**

Tenure Awards by Gender			AY2003-04		AY2004-05		AY2005-06		AY2006-07	
			N	%	N	%	N	%	N	%
<b>S&amp;E Departments</b>	<b>Tenure Awards</b>	Female	1	7%	4	36%	2	18%	1	17%
		Male	13	93%	7	64%	9	82%	5	83%
		<b>Total</b>	<b>14</b>	<b>100%</b>	<b>11</b>	<b>100%</b>	<b>11</b>	<b>100%</b>	<b>6</b>	<b>100%</b>
	<b>Tenure Applications</b>	Female	1	7%	4	31%	4	31%	1	17%
		Male	14	93%	9	69%	9	69%	5	83%
		<b>Total</b>	<b>15</b>	<b>100%</b>	<b>13</b>	<b>100%</b>	<b>13</b>	<b>100%</b>	<b>6</b>	<b>100%</b>
	<b>% Awarded within Gender</b>	Female		<b>100%</b>		<b>100%</b>		<b>50%</b>		<b>100%</b>
		Male		<b>93%</b>		<b>78%</b>		<b>100%</b>		<b>100%</b>
	<b>Other University Departments</b>	<b>Tenure Awards</b>	Female	4	33%	10	32%	8	53%	4
Male			8	67%	21	68%	7	47%	7	64%
<b>Total</b>			<b>12</b>	<b>100%</b>	<b>31</b>	<b>100%</b>	<b>15</b>	<b>100%</b>	<b>11</b>	<b>100%</b>
<b>Tenure Applications</b>		Female	5	42%	10	32%	8	50%	5	42%
		Male	8	58%	21	68%	8	50%	7	58%
		<b>Total</b>	<b>13</b>	<b>100%</b>	<b>31</b>	<b>100%</b>	<b>16</b>	<b>100%</b>	<b>12</b>	<b>100%</b>
<b>% Awarded within Gender</b>		Female		<b>80%</b>		<b>100%</b>		<b>100%</b>		<b>80%</b>
		Male		<b>100%</b>		<b>100%</b>		<b>88%</b>		<b>100%</b>

Note. The numbers reported here are the tenure recommendations submitted to the provost and president for decisions in the cycle of each academic year. Percentages rounded to nearest whole number.

As seen in Table 3B-8, while women faculty generally make up a lower percentage of the tenure applications than male faculty, women faculty in S&E Departments comprise a lower percentage of tenure applications than women faculty in Other University Departments, a trend which has persisted over the last four years.

**Table 3B-9  
Promotion Outcomes by Gender in S&E and Other University Departments  
from AY2003-04 to AY2006-07**

Promotion to Full Professor			AY2003-04		AY2004-05*		AY2005-06		AY2006-07	
			N	%	N	%	N	%	N	%
<b>S&amp;E Departments</b>	<b>Promotion to Full Professor</b>	<b>Female</b>	2	20%	2	33%	1	20%	0	0%
		<b>Male</b>	8	80%	4	67%	4	80%	2	100%
		<b>Total</b>	<b>10</b>	<b>100%</b>	<b>6</b>	<b>100%</b>	<b>5</b>	<b>100%</b>	<b>2</b>	<b>100%</b>
	<b>Application for Promotion</b>	<b>Female</b>	--	--	3	43%	1	12.5%	0	0%
		<b>Male</b>	--	--	4	57%	7	87.5%	2	100%
		<b>Total</b>	--	--	<b>7</b>	<b>100%</b>	<b>8</b>	<b>100%</b>	<b>2</b>	<b>100%</b>
	<b>% Promoted with Gender</b>	<b>Female</b>		--		<b>67%</b>		<b>100%</b>		<b>NA</b>
		<b>Male</b>		--		<b>100%</b>		<b>57%</b>		<b>100%</b>
	<b>Other University Departments</b>	<b>Promotion to Full Professor</b>	<b>Female</b>	8	33%	2	29%	6	50%	5
<b>Male</b>			16	67%	5	71%	6	50%	7	58%
<b>Total</b>			<b>24</b>	<b>100%</b>	<b>7</b>	<b>100%</b>	<b>12</b>	<b>100%</b>	<b>12</b>	<b>100%</b>
<b>Application for Promotion</b>		<b>Female</b>	--	--	2	25%	8	53%	5	38%
		<b>Male</b>	--	--	6	75%	7	47%	8	62%
		<b>Total</b>	--	--	<b>8</b>	<b>100%</b>	<b>15</b>	<b>100%</b>	<b>13</b>	<b>100%</b>
<b>% Promoted with Gender</b>		<b>Female</b>		--		<b>100%</b>		<b>75%</b>		<b>100%</b>
		<b>Male</b>		--		<b>83%</b>		<b>86%</b>		<b>88%</b>

Note. The numbers reported here are the promotion recommendations submitted to the provost and president for decisions in the cycle of each academic year.

\* Promotions in Non-Tenure-Track are not reported here for AY2004-05.

-- Not reported in AY 2003-04.

Table 3B-9 refers to promotion to full professor in the university over the past 4 years. AY 2006-07 represents the first time in the last 4 years that no applications were made for promotion to full professor by a female faculty member from any of the S&E Departments. Meanwhile, there were 5 applications for promotion to full professor submitted by female faculty from Other University Departments, comprising 38% of the applications for promotion. Of those who applied, all female faculty from Other University Departments were promoted to full professor.

**Table 3B-10****Attrition and Time at Institution by Gender in S&E and all University Departments from AY2003-04 to AY2006-07**

Faculty Departures		AY2003-04			AY2004-05			AY2005-06			AY2006-07*		
		N	%	Average years at Institution	N	%	Average years at Institution	N	%	Average years at Institution	N	%	Average years at Institution
<b>S&amp;E</b>	<b>Female</b>	2	22%	6	3	15%	8	6	30%	7	4	14%	7
	<b>Male</b>	7	78%	16	17	85%	23	14	70%	15	24	86%	14
	<b>Total</b>	<b>9</b>	<b>100%</b>	<b>14</b>	<b>20</b>	<b>100%</b>	<b>21</b>	<b>20</b>	<b>100%</b>	<b>13</b>	<b>28</b>	<b>100%</b>	<b>13</b>
<b>University (including S&amp;E)</b>	<b>Female</b>	13	30%	6	9	29%	9	8	28%	6	32	31%	10
	<b>Male</b>	30	70%	10	22	71%	22	21	72%	14	72	69%	13
	<b>Total</b>	<b>43</b>	<b>100%</b>	<b>9</b>	<b>31</b>	<b>100%</b>	<b>18</b>	<b>29</b>	<b>100%</b>	<b>12</b>	<b>104</b>	<b>100%</b>	<b>12</b>

Table 3B-10 refers to faculty attrition and years at institution. Overall, female faculty have lower attrition and fewer years at institution than male faculty. Of the faculty who left in AY 2006-07, there was a lower attrition rate of female faculty in S&E Departments than in All University Departments, 14% versus 31%, respectively. Of those who left, female faculty in S&E Departments spent fewer years at institution on average than female faculty in All University Departments, 7 versus 10 years, respectively. The difference in average years at institution in All University Departments between departing female and male faculty narrowed to 3 years in AY 2006-07.

**Table 3B-11****Number and Percentage of Women holding Endowed Chairs/Serving on Promotion and Tenure Committees from AY2003-04 to AY2006-07**

S&E Leadership		AY2003-04		AY2004-05		AY2005-06		AY2006-07	
		N	%	N	%	N	%	N	%
Endowed Chair	Female	8	14%	9	14%	12	19%	14	19%
	Male	49	86%	54	86%	50	81%	59	81%
	<b>Total</b>	<b>57</b>	<b>100%</b>	<b>63</b>	<b>100%</b>	<b>62</b>	<b>100%</b>	<b>73</b>	<b>100%</b>
Appointment, Tenure and Promotion Committee	Female	17	22%	11	23%	6	32%	4	17%
	Male	59	78%	37	77%	13	68%	19	83%
	<b>Total</b>	<b>76*</b>	<b>100%</b>	<b>48*</b>	<b>100%</b>	<b>19**</b>	<b>100%</b>	<b>23</b>	<b>100%</b>

\* Appointment, Tenure, and Promotion Committees at the departmental level were counted in AY2003-04 and AY2004-05.

\*\* The number of S&E faculty on the Appointment, Tenure, and Promotion Committee at SOM in AY2005-06 was 0.

Table 3B-11 refers to leadership positions in S&E Departments over the past four academic years. Female faculty in AY 2006-07 hold 19% of the endowed chairs in S&E Departments, tied with AY 2005-06 for the highest percentage of female faculty holding endowed chairs in S&E Departments during this four-year period. Counter to this trend, the percentage of female faculty in S&E Departments serving on Appointment, Tenure, and Promotion Committees in AY 2006-07 is 17%, the lowest level over the past four years.

**Table 3B-12**  
**Female Base Salary as a Percentage of Male Base Salary in S&E Departments**  
**by School and Rank from AY2003-04 to AY2006-07**

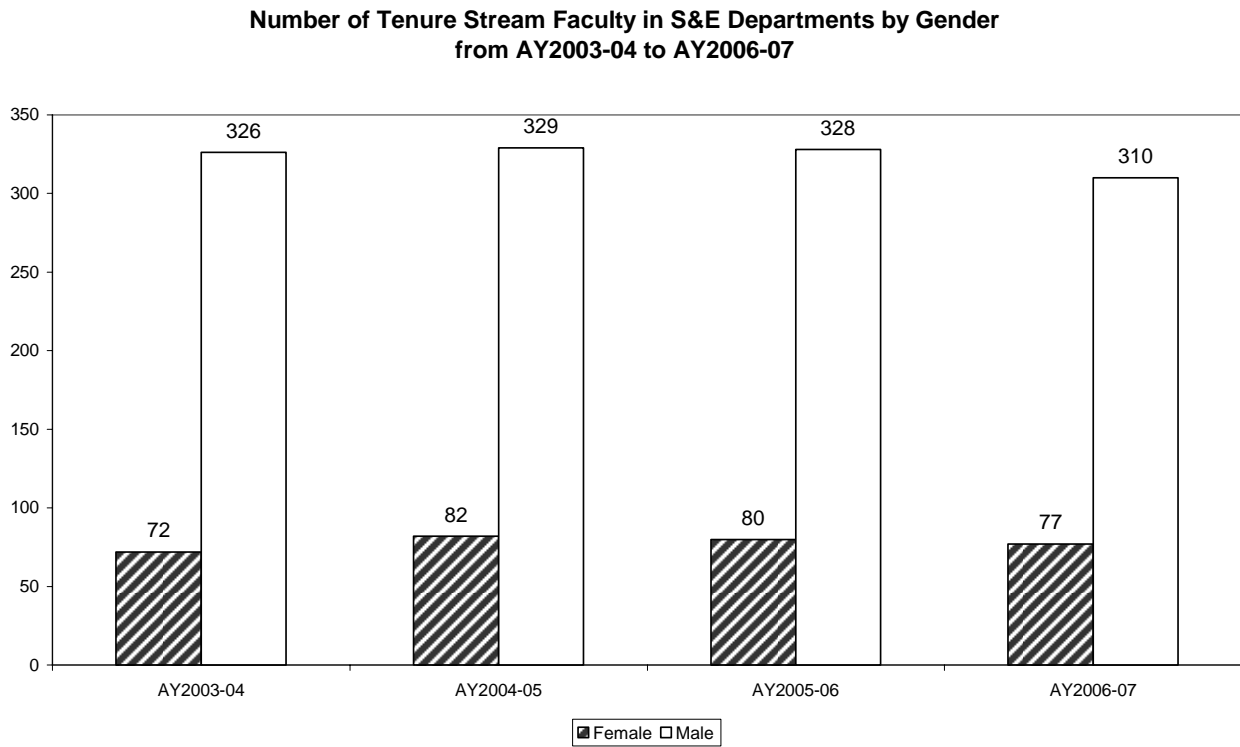
Base Salary	Rank	Female Salary as a % of Male Salary			
		AY2003-04	AY2004-05	AY2005-06	AY2006-07
<b>Arts &amp; Sciences</b>	Assistant Professor	101.1%	106.6%	104.2%	105.6%
	Associate Professor	99.1%	93.4%	91.1%	91.1%
	Professor	97.0%	97.7%	95.7%	96.4%
<b>Engineering</b>	Assistant Professor	96.2%	102.3%	100.7%	97.8%
	Associate Professor	100.0%	94.8%	*	90.2%
	Professor	96.3%	101.4%	100.4%	100.3%
<b>Management</b>	Assistant Professor	104.0%	105.4%	109.6%	101.9%
	Associate Professor	96.8%	98.4%	92.9%	95.8%
	Professor	76.6%	*	*	*
<b>Medicine</b>	Assistant Professor	85.6%	91.6%	89.2%	97.5%
	Associate Professor	99.5%	108.5%	116.0%	100.9%
	Professor	81.1%	80.3%	85.8%	84.5%
<b>Overall</b>	Assistant Professor	98.9%	99.4%	101.7%	101.0%
	Associate Professor	97.7%	100.0%	88.3%	92.6%
	Professor	86.0%	87.4%	88.3%	87.8%
	Combined Ranks	81.0%	82.0%	84.8%	82.4%

\* Only 1 or 2 female faculty members

Table 3B-12 details female salary as a percentage of male salary for each school and rank from AY2003-04 to the present. Over the past 4 years, salaries of female Assistant Professors have been equivalent to or higher than the salary of male Assistant Professors. The only exception in this regard occurs in School of Medicine, where female assistant professors have earned from 85.6% to 97.5% of male assistant professors. With Associate Professors, the picture is different. Over the past 4 years, female Associate Professors in College of Arts and Sciences and School of Management have earned consistently lower levels than their male counterparts. A similar pattern appears for School of Engineering, except in AY 2003-04 female Associate Professors earned equal that of male Associate Professors. They have earned less than male Associate Professors in all other years, earning as low as 90.2% in AY 2006-07. Female Associate Professors in School of Medicine over the past 4 years have actually earned equal to or more than their male counterparts, earning as much as 116% of male Associate Professors in 2005-06. Yet a different earnings picture emerges for Professors over this 4-year period. In College of Arts and Science and School of Medicine, female professors earn consistently less than their male counterparts. While in College of Arts and Science this difference has always been less than 5%, in School of Medicine female Professors have never earned even 86% of male Professors, as low as 80.3% of males Professors in AY 2004-05. Salary ratios in School of Engineering have improved since AY 2003-04, when females earned 96.3% of male Professors, and have been equal or better over the last 3 years. Earning ratios in School of Management are not reported due to the fact that there is only one female Professor there.

## Part C. Graphic Representation of Indicators

Figure 3C-0-1



Note. Tenure-stream faculty members at the levels of assistant, associate and full professors are reported in figures from 3C-0-1 to 3C-10.

Figure 3C-0-2

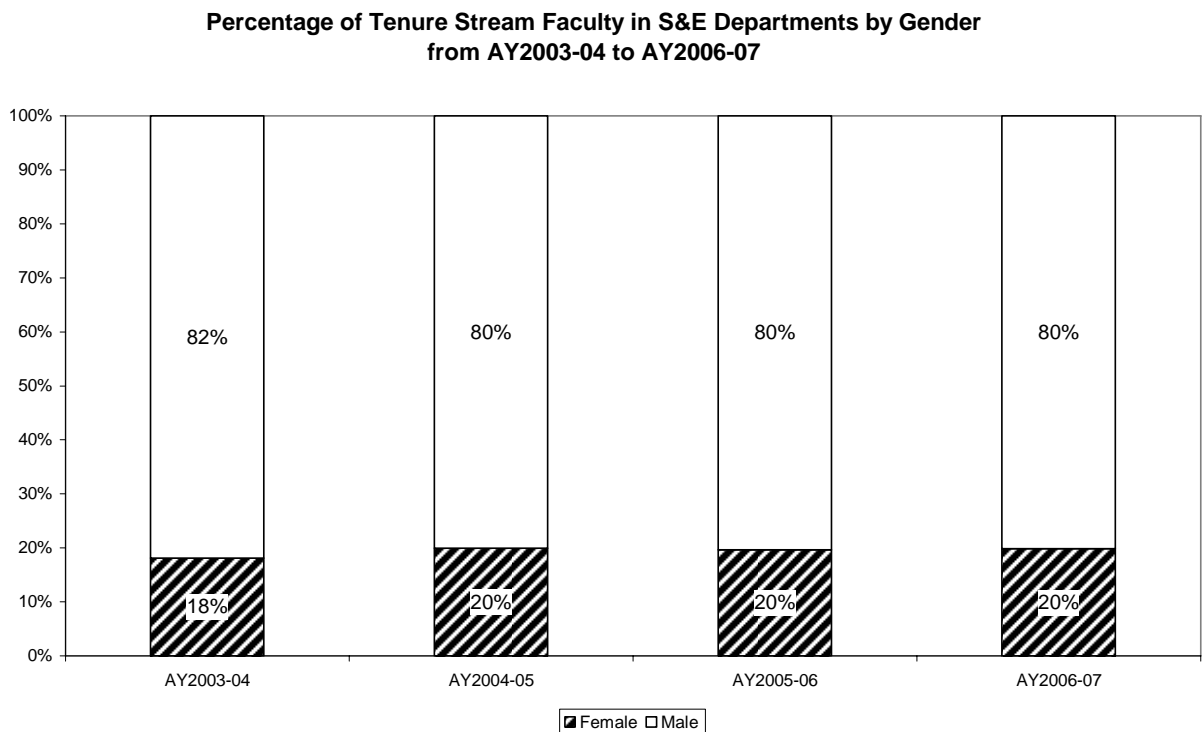


Figure 3C-0-3



**Number of Tenure Stream Faculty by Gender in S&E Departments of CAS  
from AY2003-04 to AY2006-07**

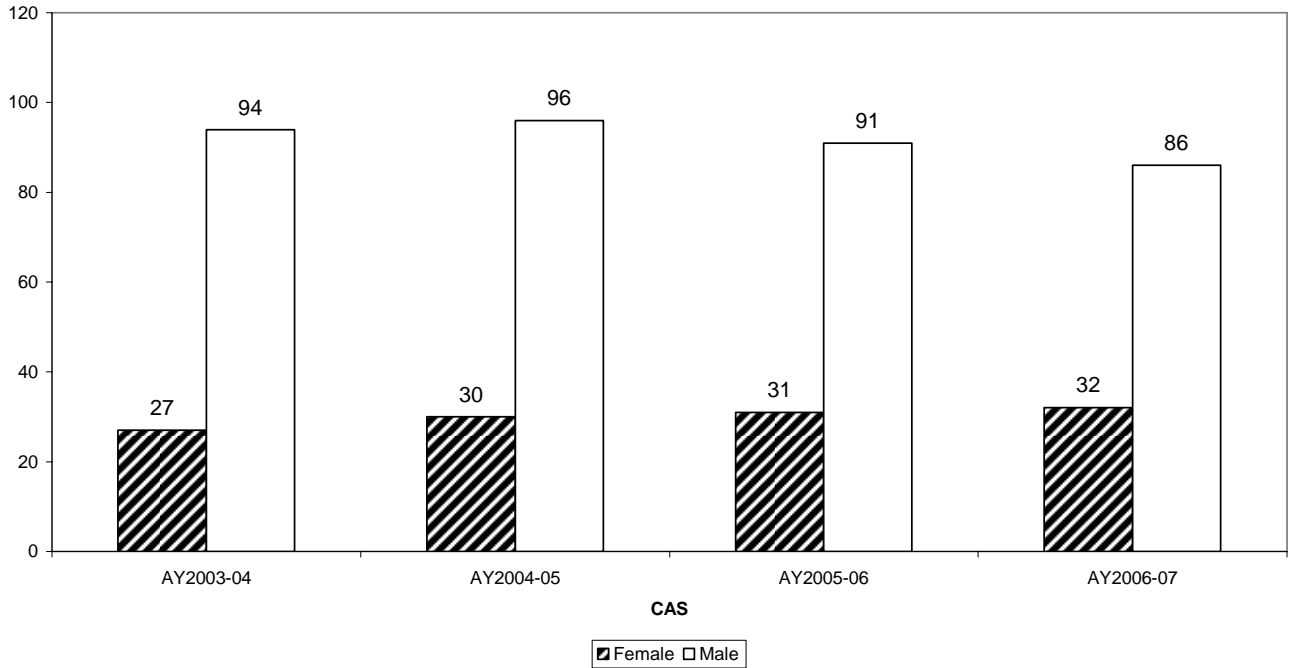


Figure 3C-0-4

**Percentage of Tenure Stream Faculty by Gender in S&E Departments of CAS  
from AY2003-04 to AY2006-07**

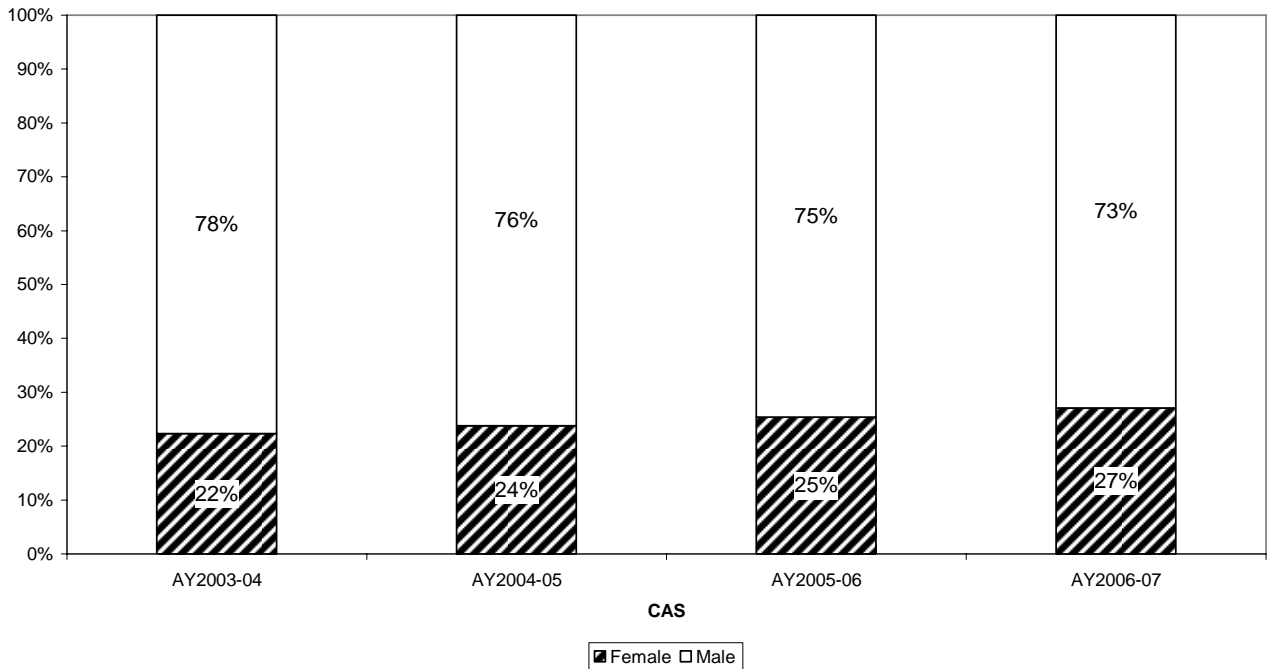


Figure 3C-0-5

**Number of Tenure Stream Faculty by Gender in S&E Departments of CSE from AY2003-04 to AY2006-07**

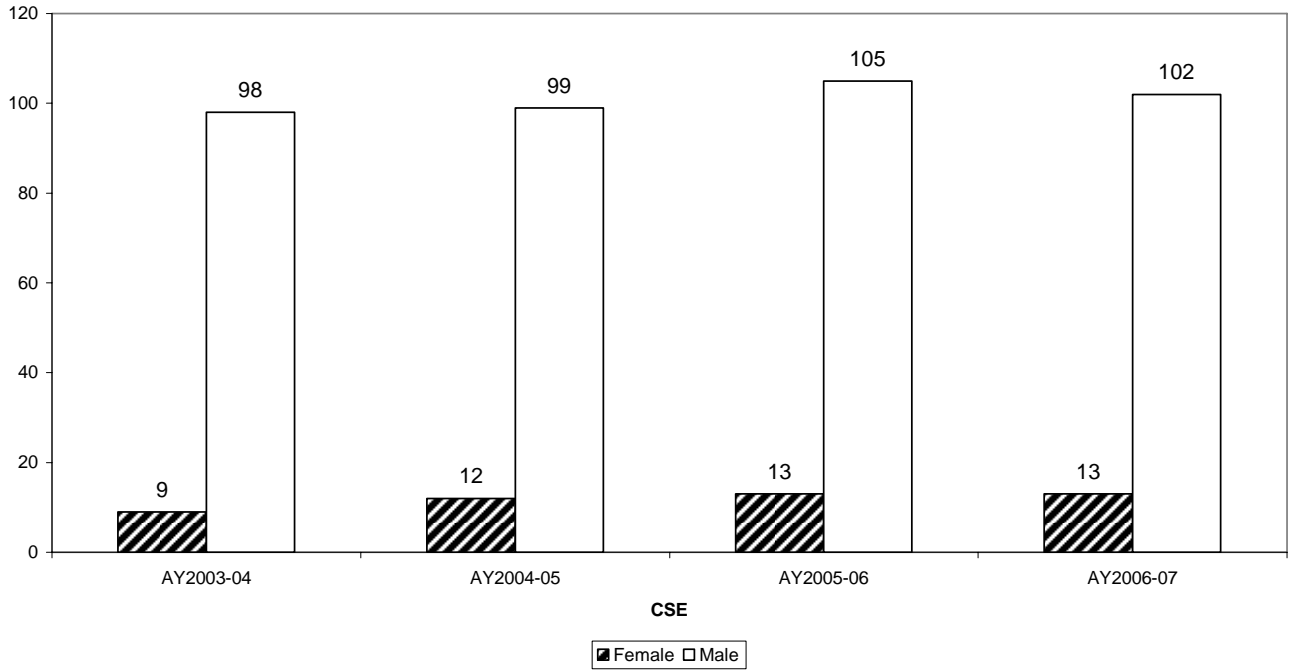


Figure 3C-0-6

**Percentage of Tenure Stream Faculty by Gender in S&E Departments of CSE from AY2003-04 to AY2006-07**

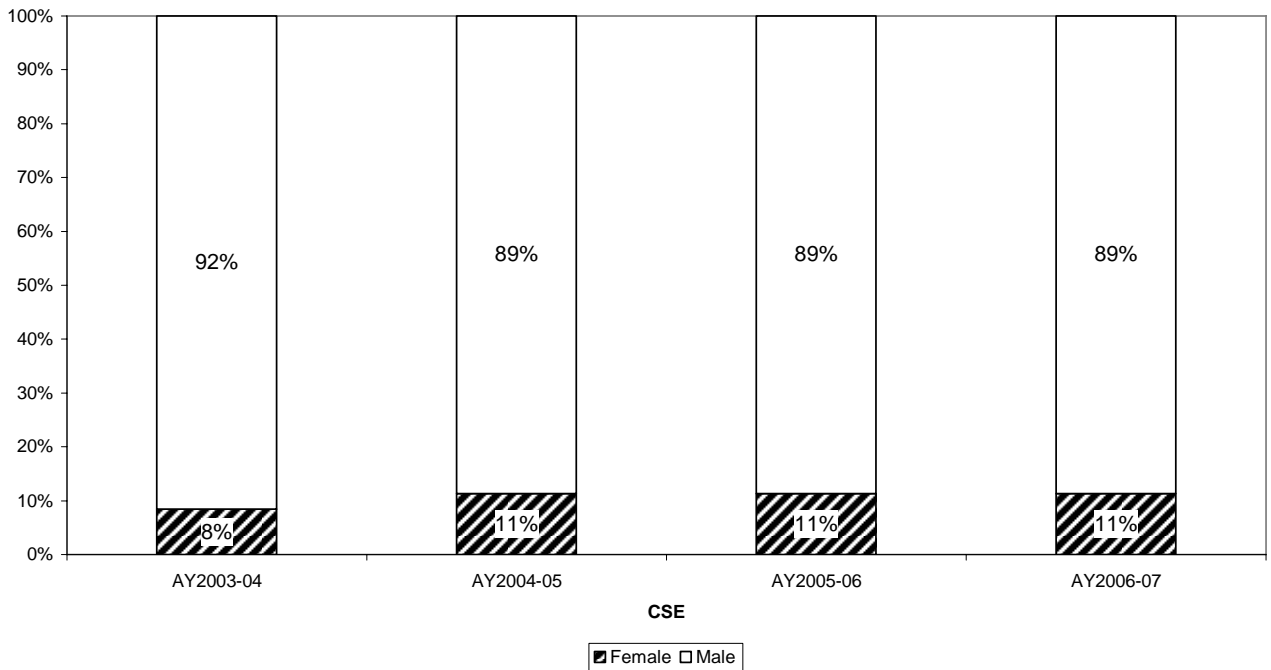


Figure 3C-0-7

**Number of Tenure Stream Faculty by Gender in S&E Departments of WSOM from AY2003-04 to AY2006-07**

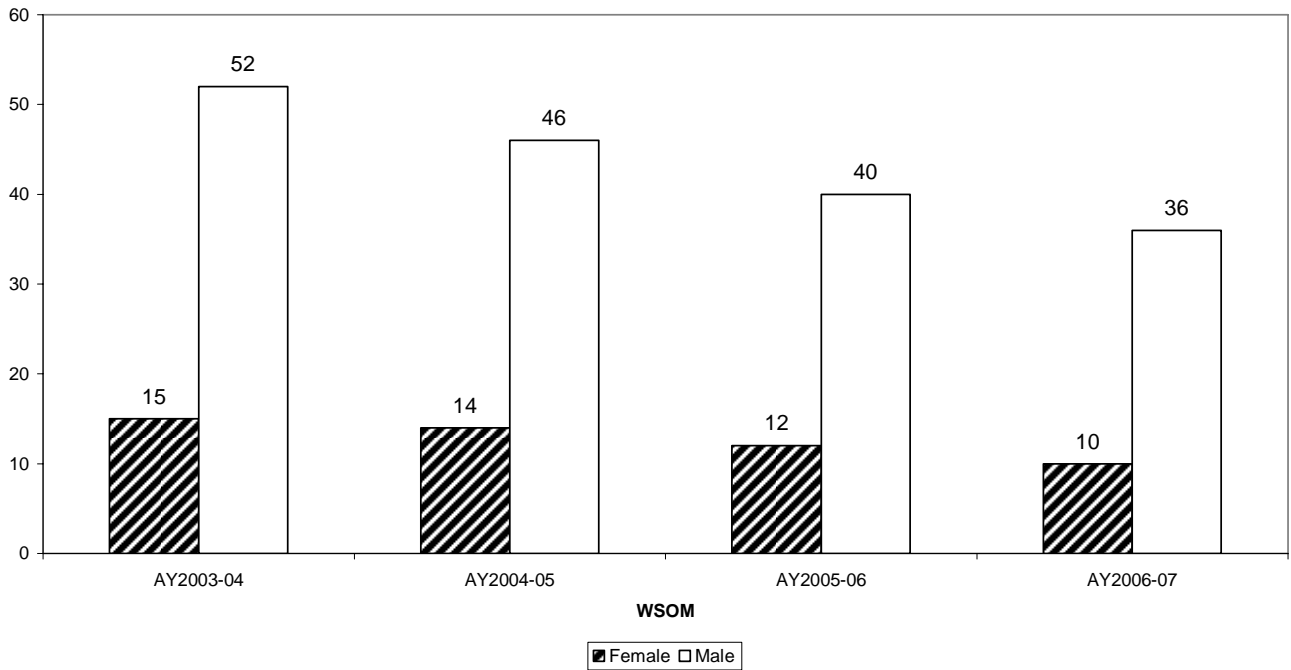


Figure 3C-0-8

**Percentage of Tenure Stream Faculty by Gender in S&E Departments of WSOM from AY2003-04 to AY2006-07**

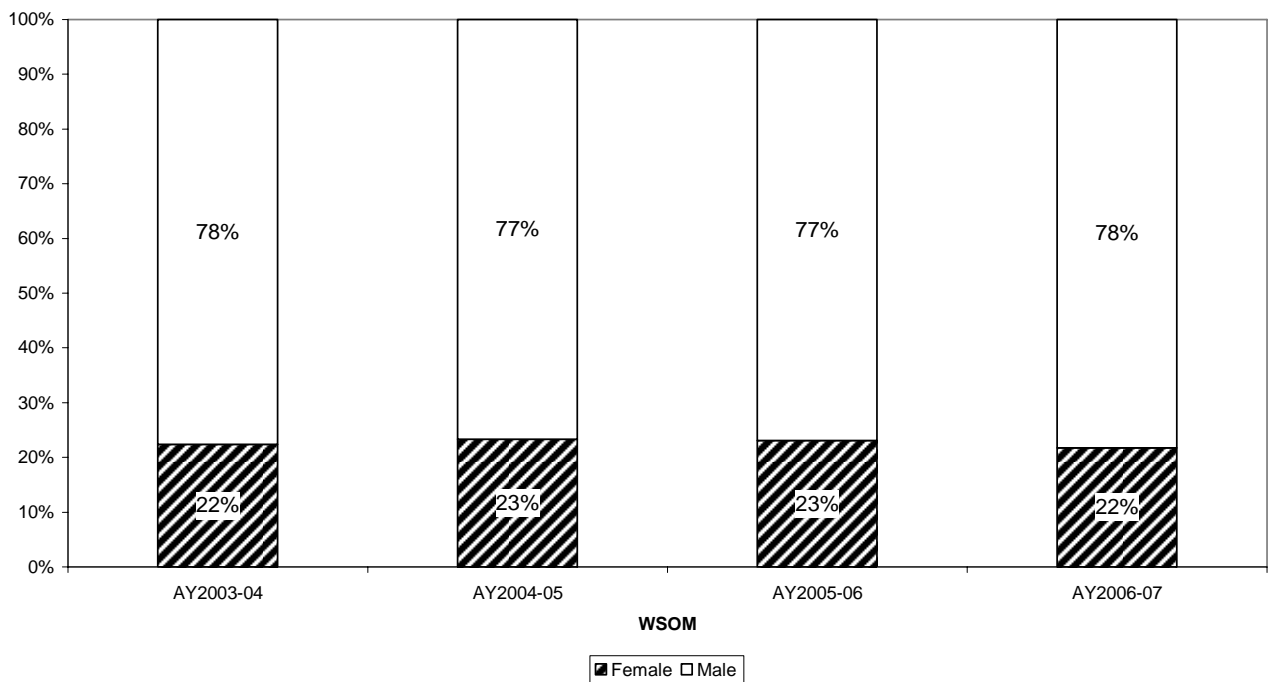


Figure 3C-0-9

**Number of Tenure Stream Faculty by Gender in Basic Science Departments of SOM from AY2003-04 to AY2006-07**

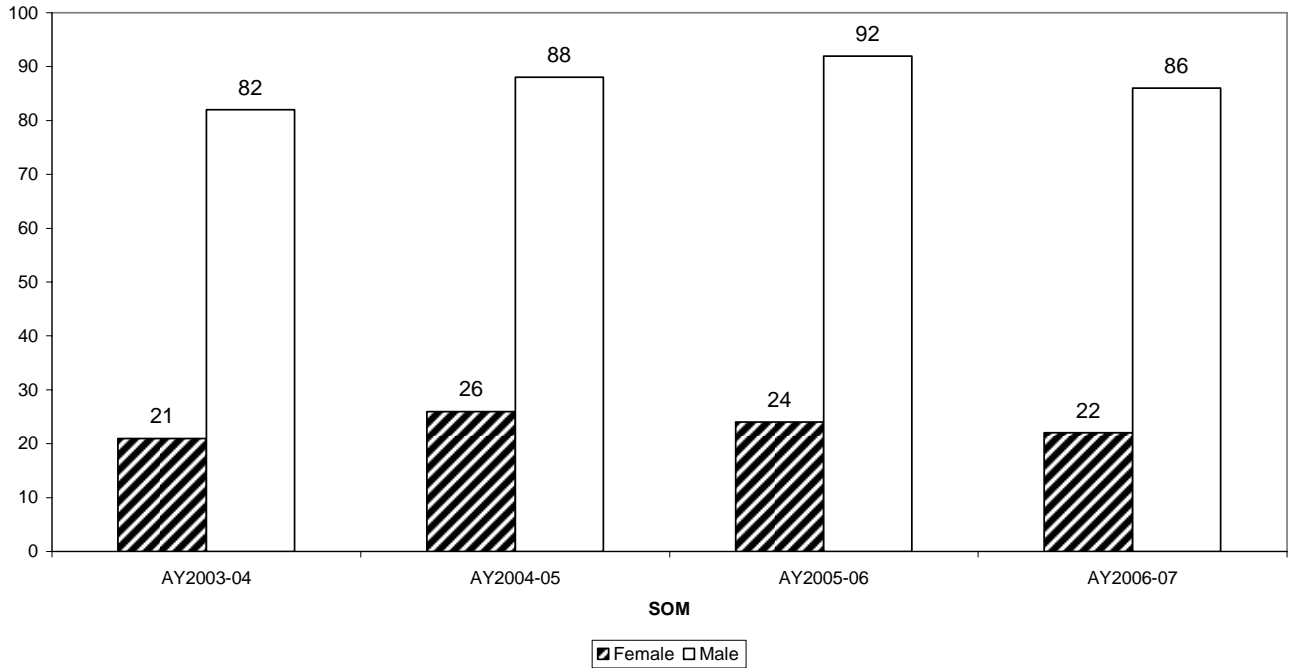


Figure 3C-0-10

**Percentage of Tenure Stream Faculty by Gender in Basic Science Departments of SOM from AY2003-04 to AY2006-07**

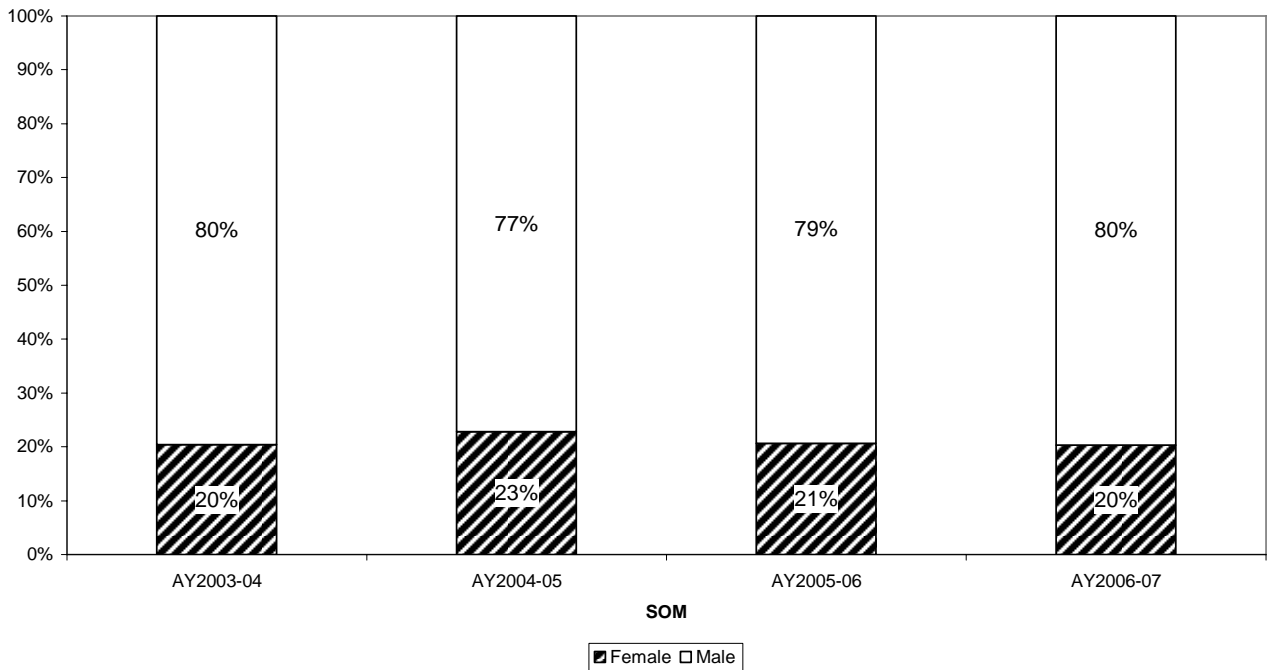


Figure 3C-1-1

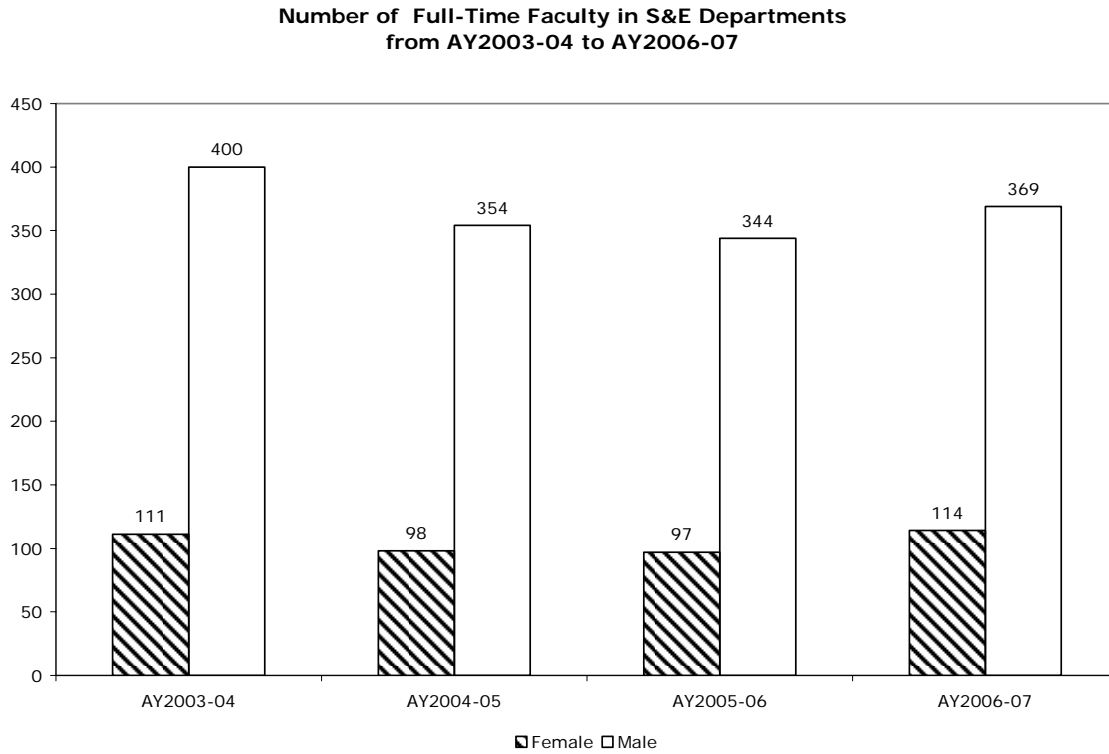


Figure 3C-1-2

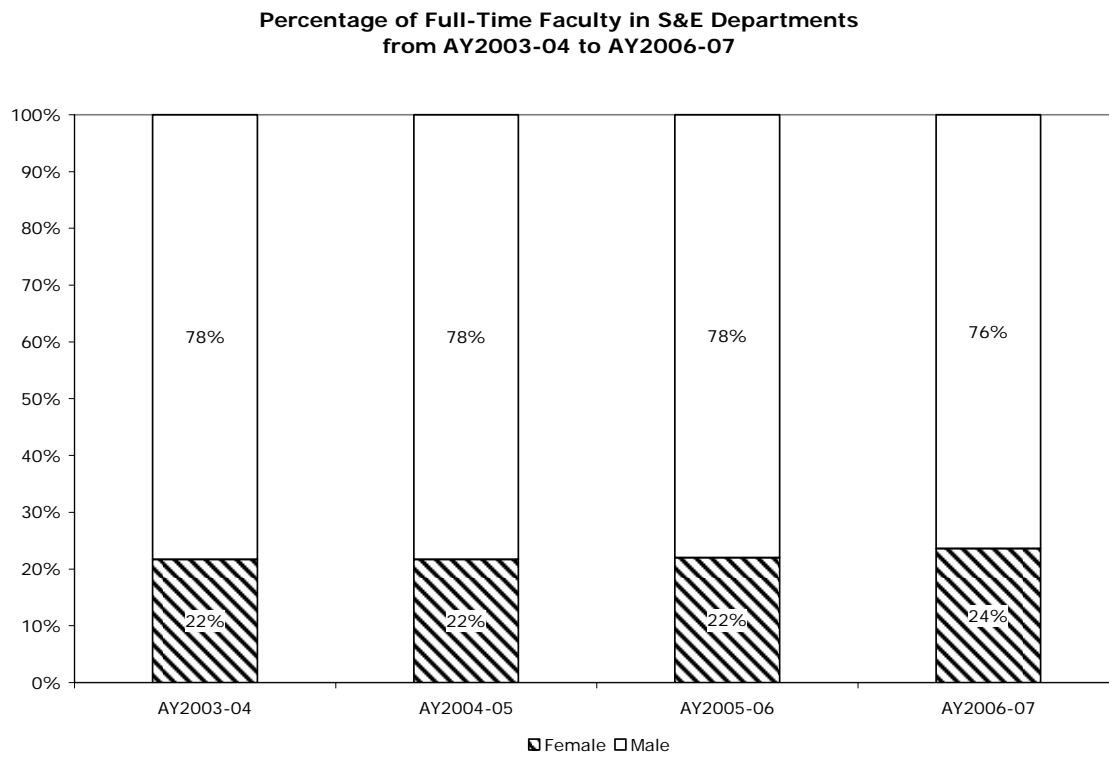
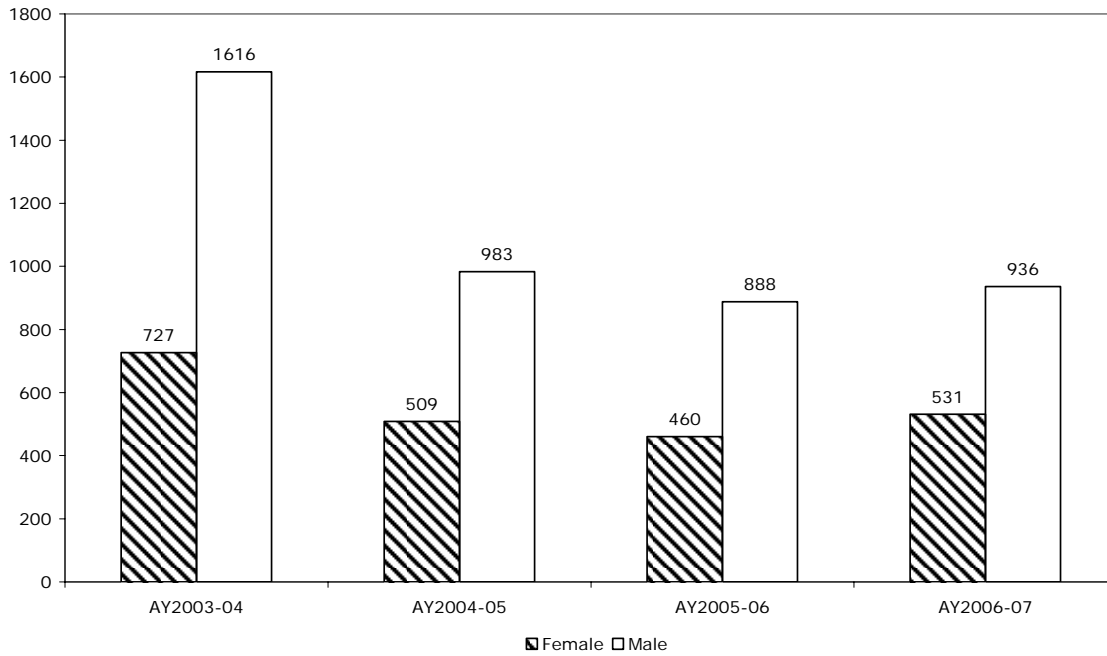


Figure 3C-2-1

**Number of Full-Time Faculty in all University Departments  
from AY2003-04 to AY2006-07**



Note. Non-Case-Paid employees were included in AY2003-04.

Figure 3C-2-2

**Percentage of Full-Time Faculty in all University Departments  
from AY2003-04 to AY2006-07**

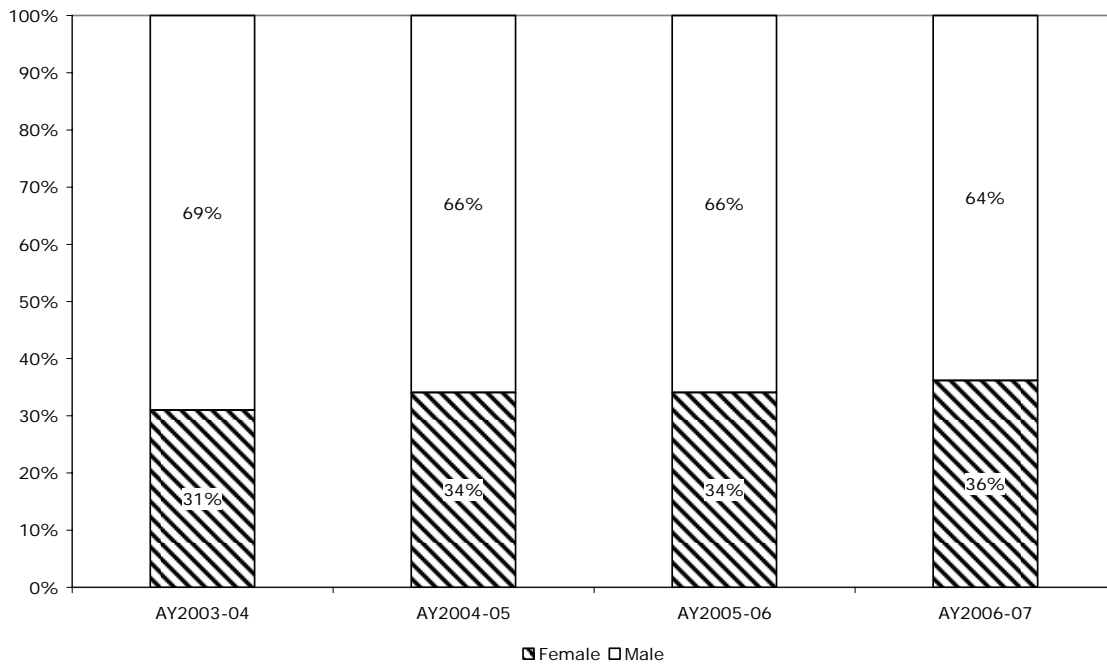


Figure 3C-3-1

Number of Full-Time Faculty in S&E Departments by School from AY2003-04 to AY2006-07

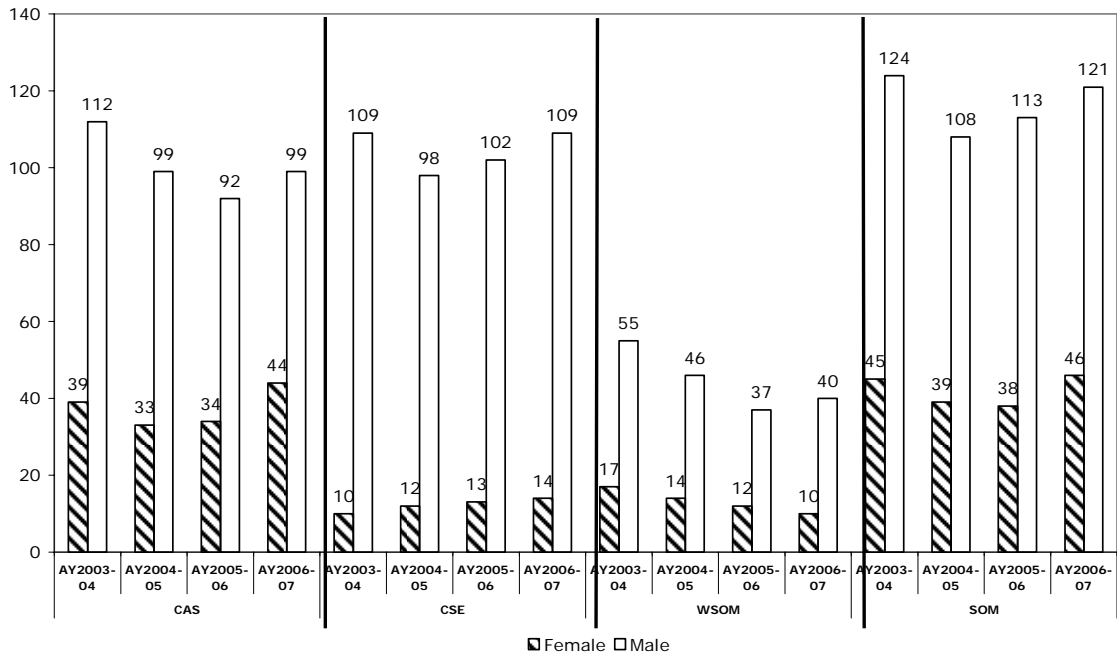


Figure 3C-3-2

Percentage of Full-Time Faculty in S&E Departments by School from AY2003-04 to AY2006-07

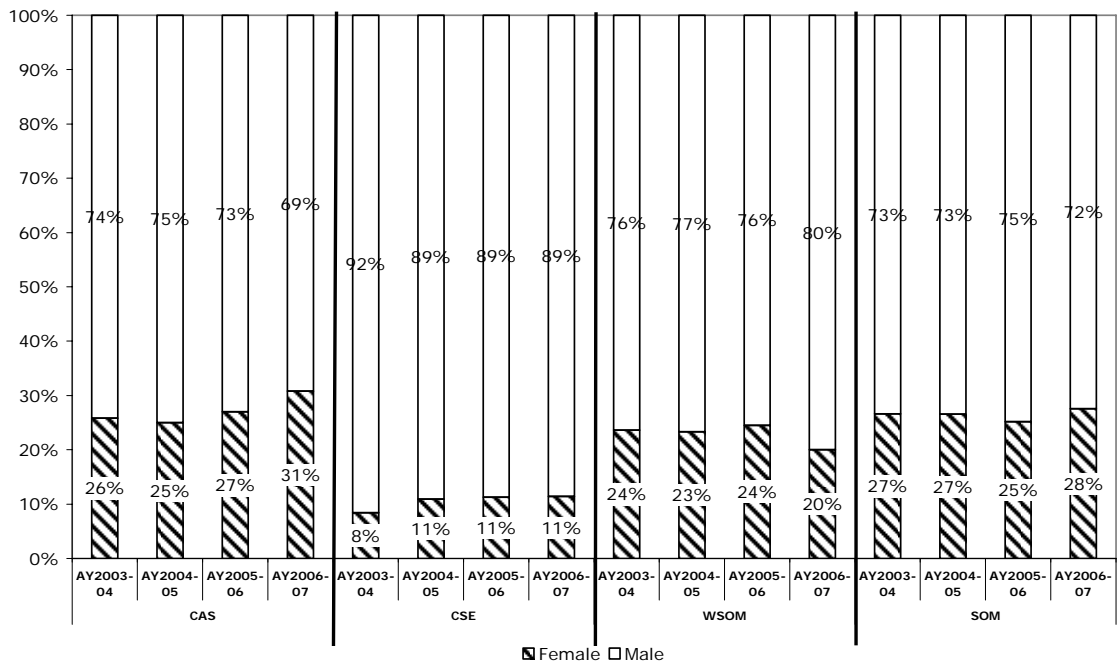


Figure 3C-3-3

Number of Part-Time/Adjunct Faculty in S&E Departments by School from AY2003-04 to AY2006-07

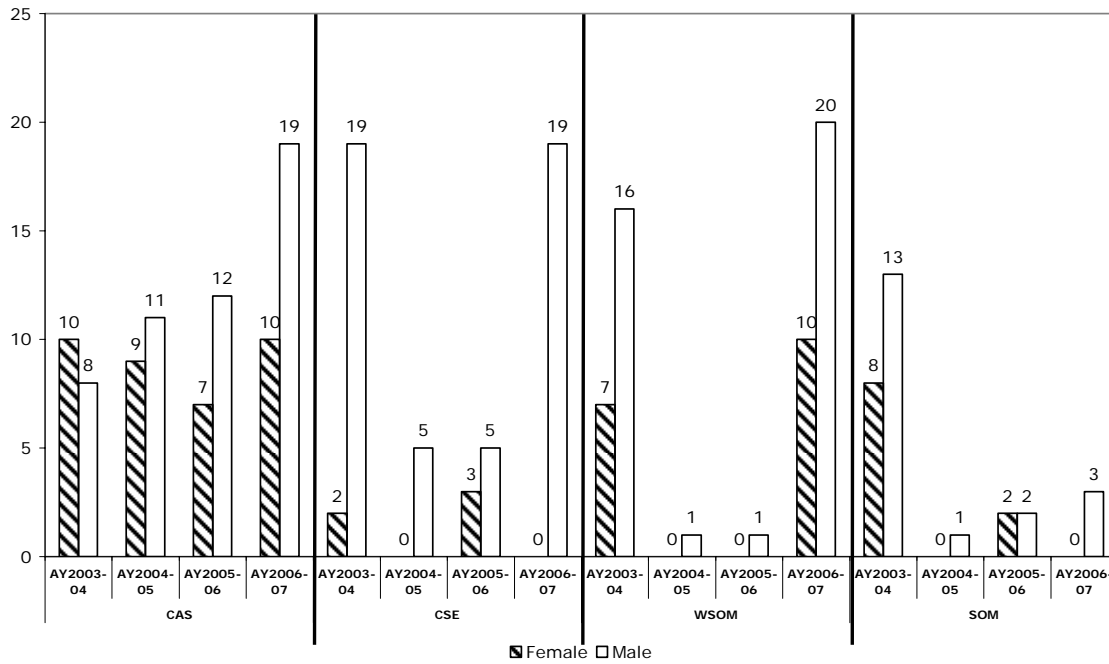
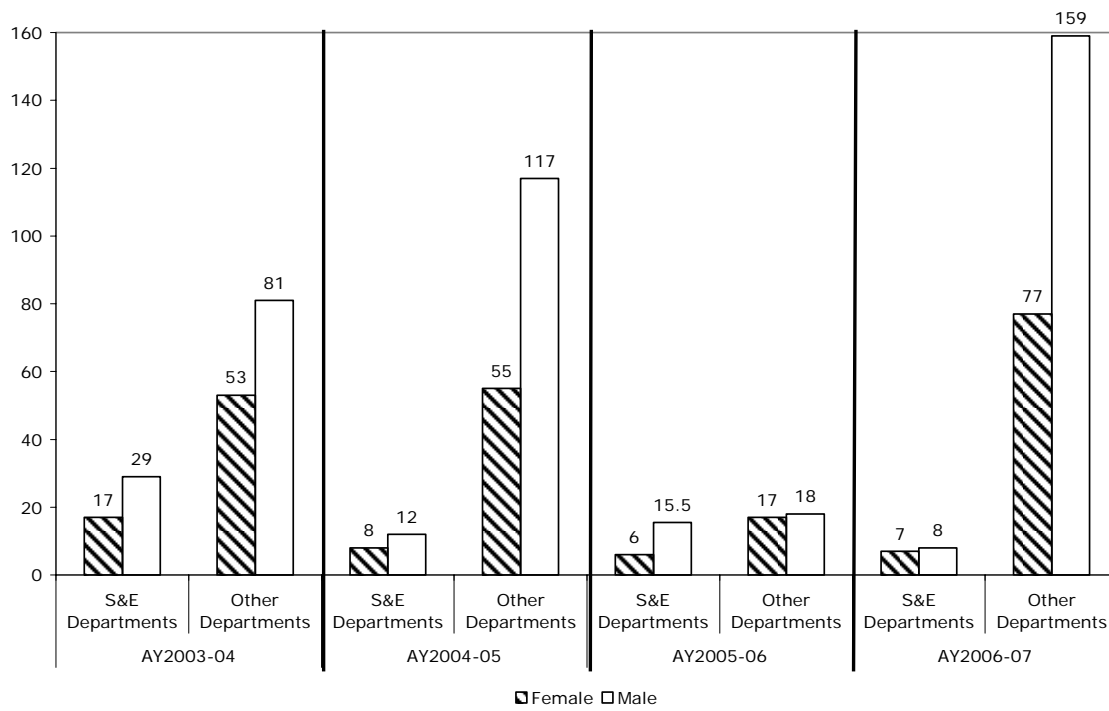


Figure 3C-4

Faculty Hired by Gender from AY2003-04 to AY2006-07



Note. Includes a 50/50 joint appointment with no designated primary department in AY2005-06.



Figure 3C-5-1

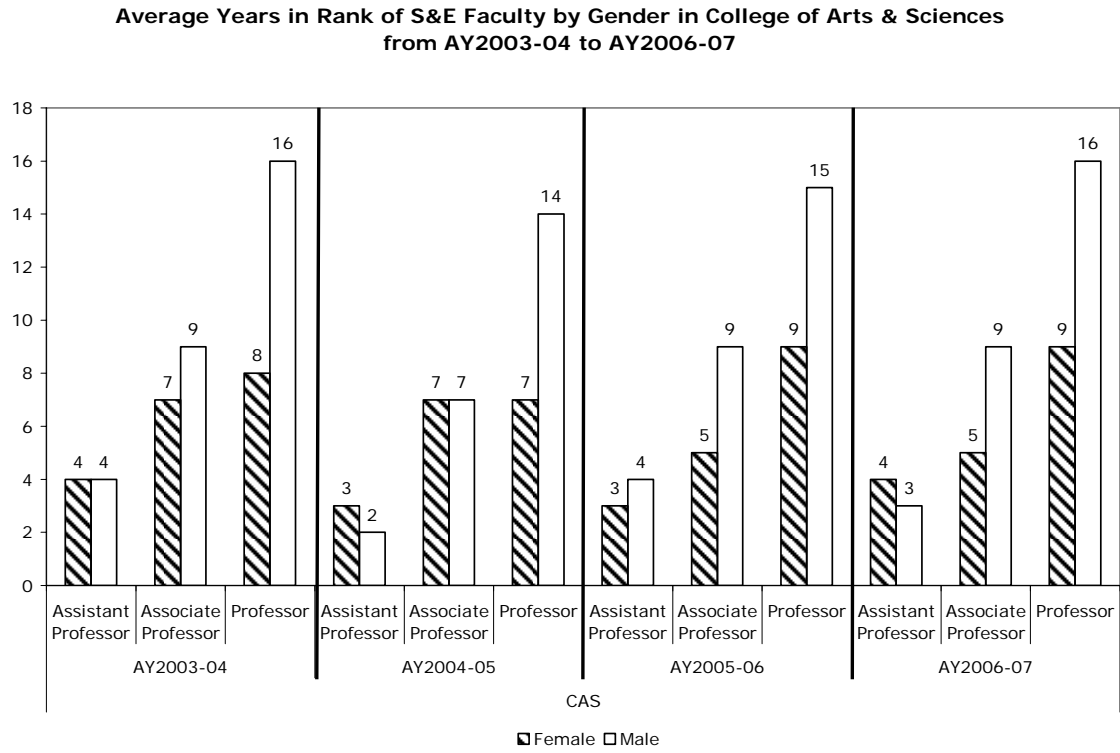


Figure 3C-5-2

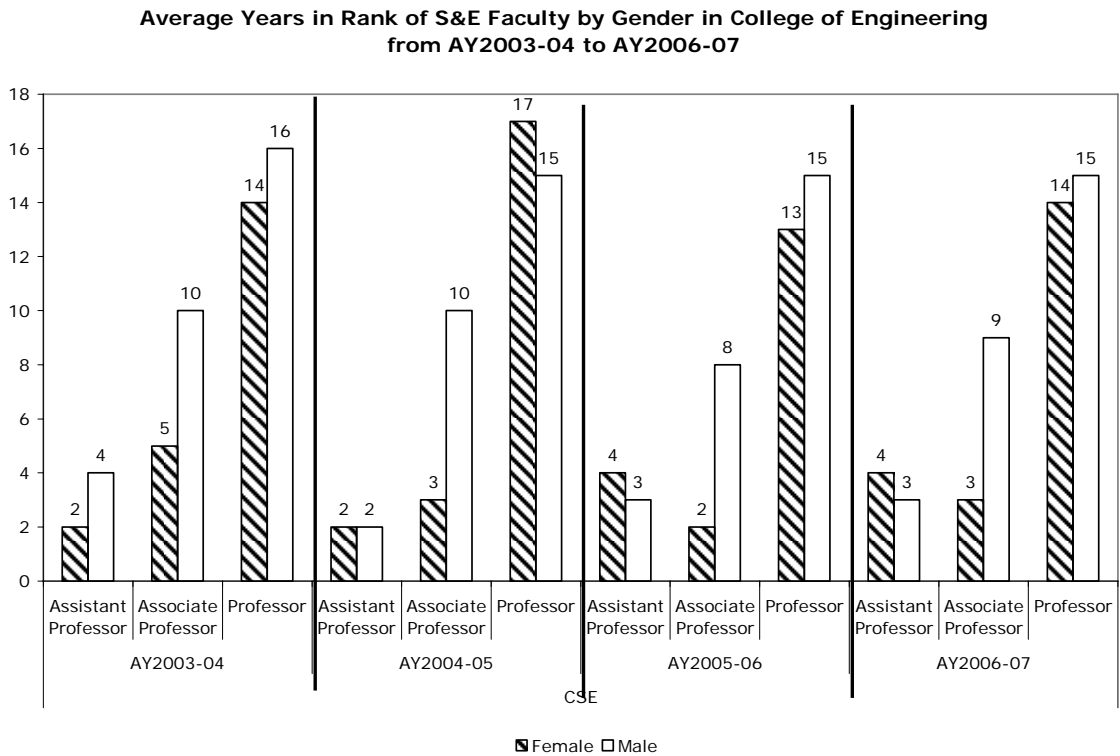


Figure 3C-5-3

Average Years in Rank of S&E Faculty by Gender in School of Management from AY2003-04 to AY2006-07

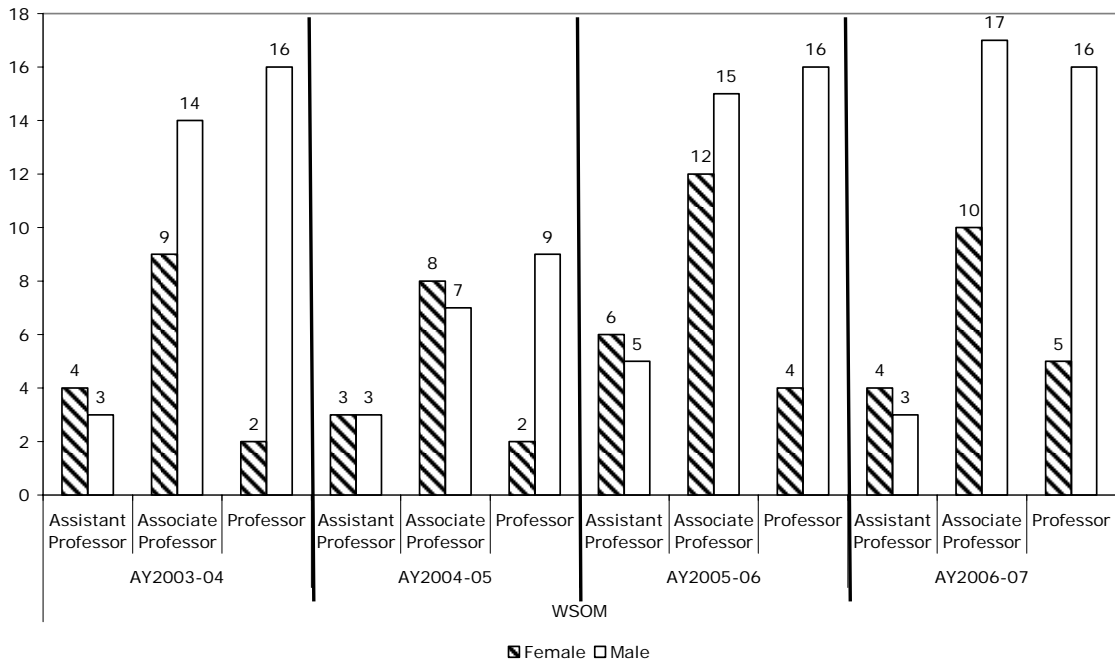


Figure 3C-5-4

Average Years in Rank of S&E Faculty by Gender in School of Medicine from AY2003-04 to AY2006-07

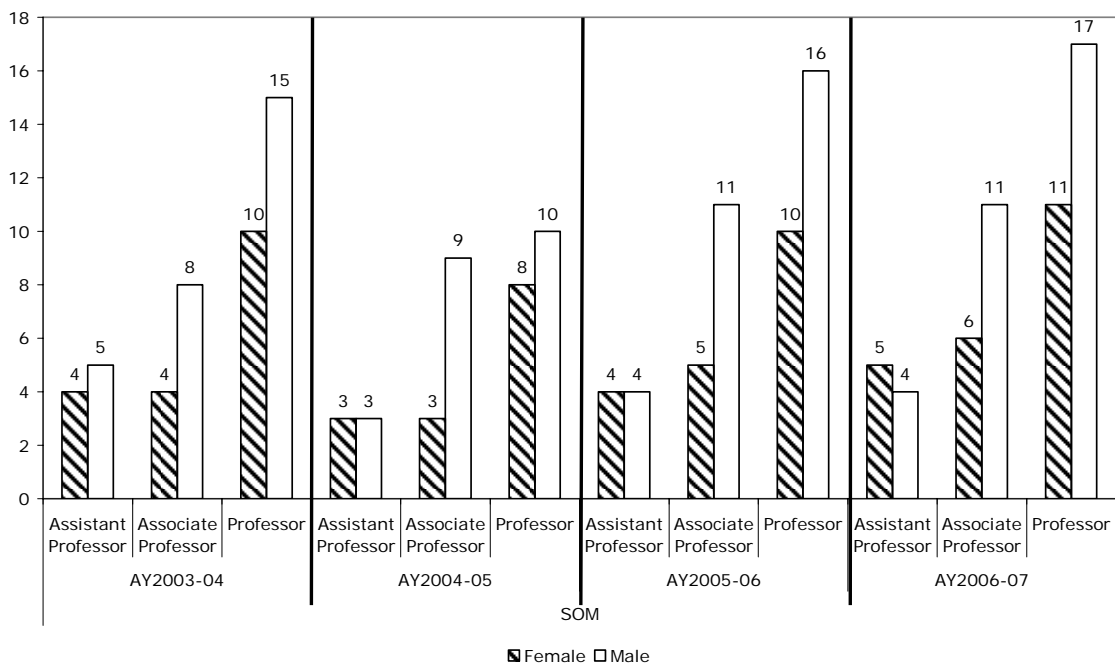
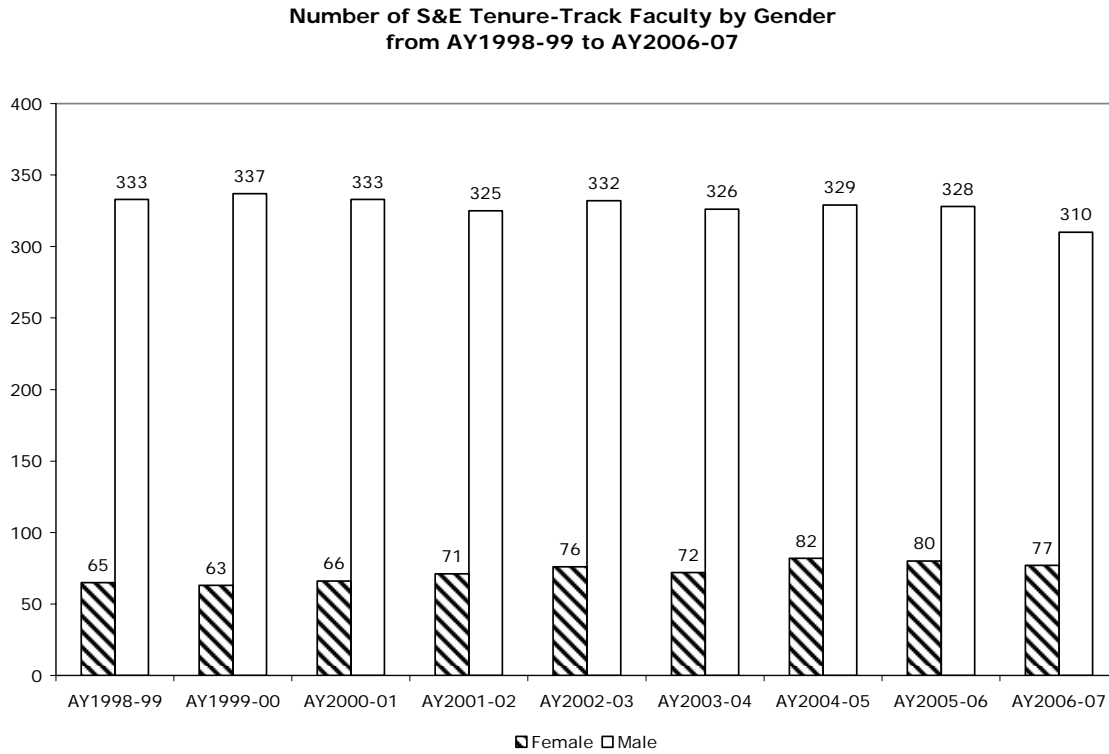


Figure 3C-6-1



Note. Faculty members at the levels of assistant, associate and full professors are reported in Figures 3C-6-1, 3C-6-2, and 3C-6-3.

Figure 3C-6-2

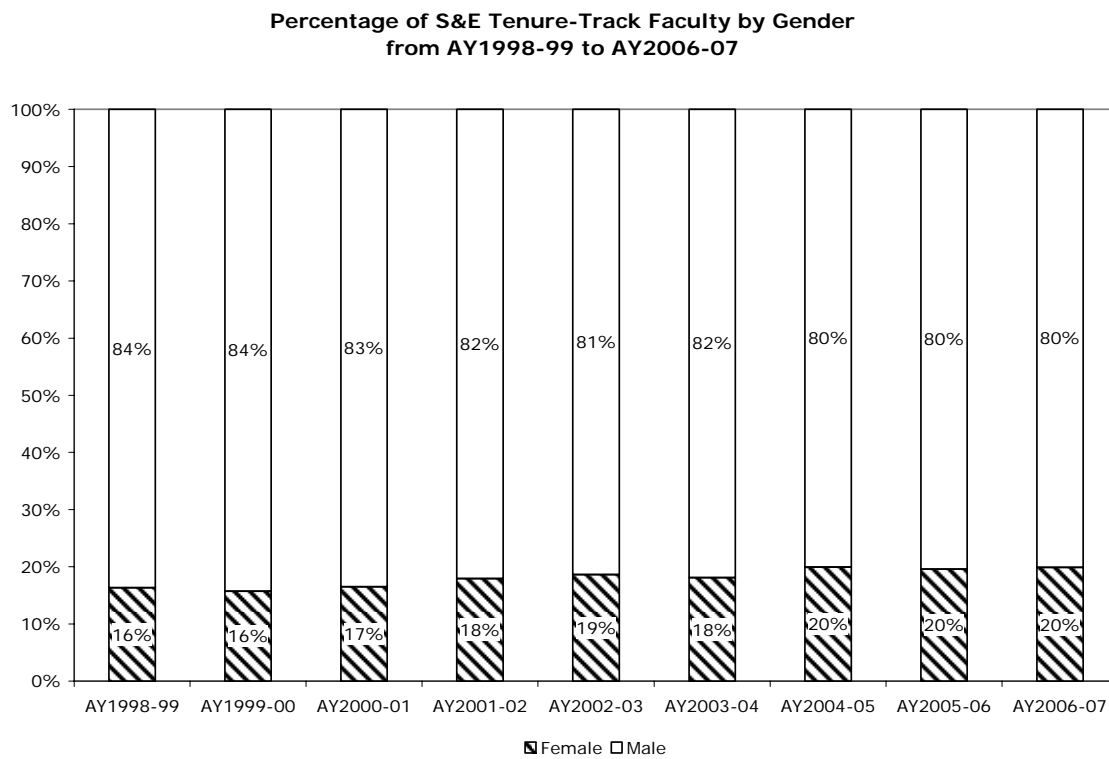


Figure 3C-6-3

Number of Tenure-Stream S&E Faculty by Rank within Gender from AY2003-04 to AY2006-07

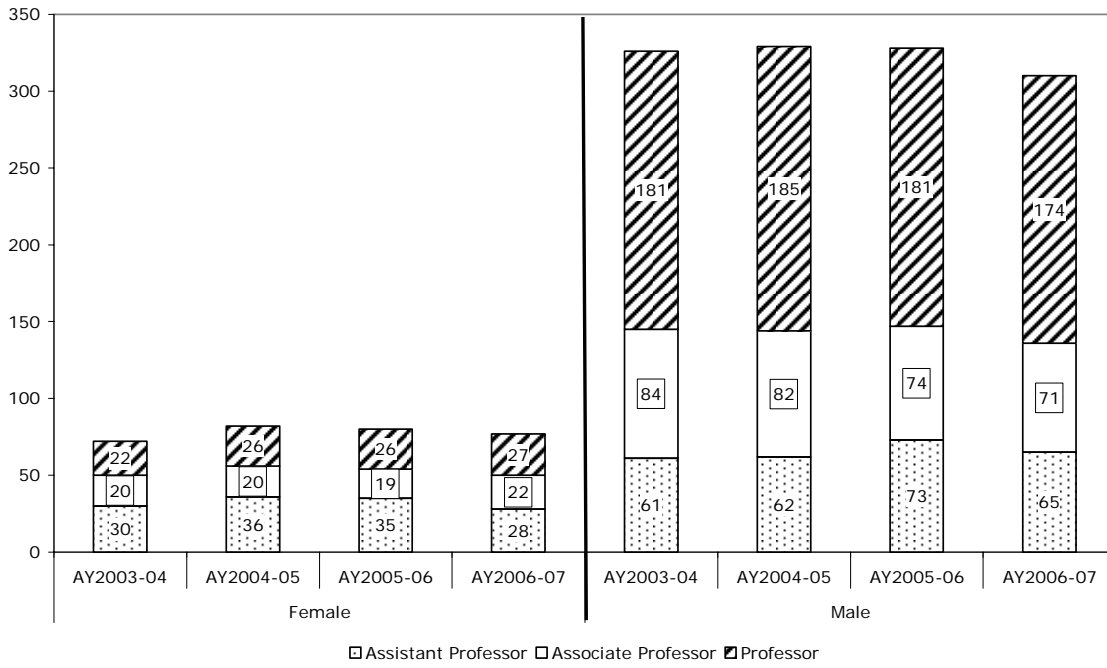


Figure 3C-7-1

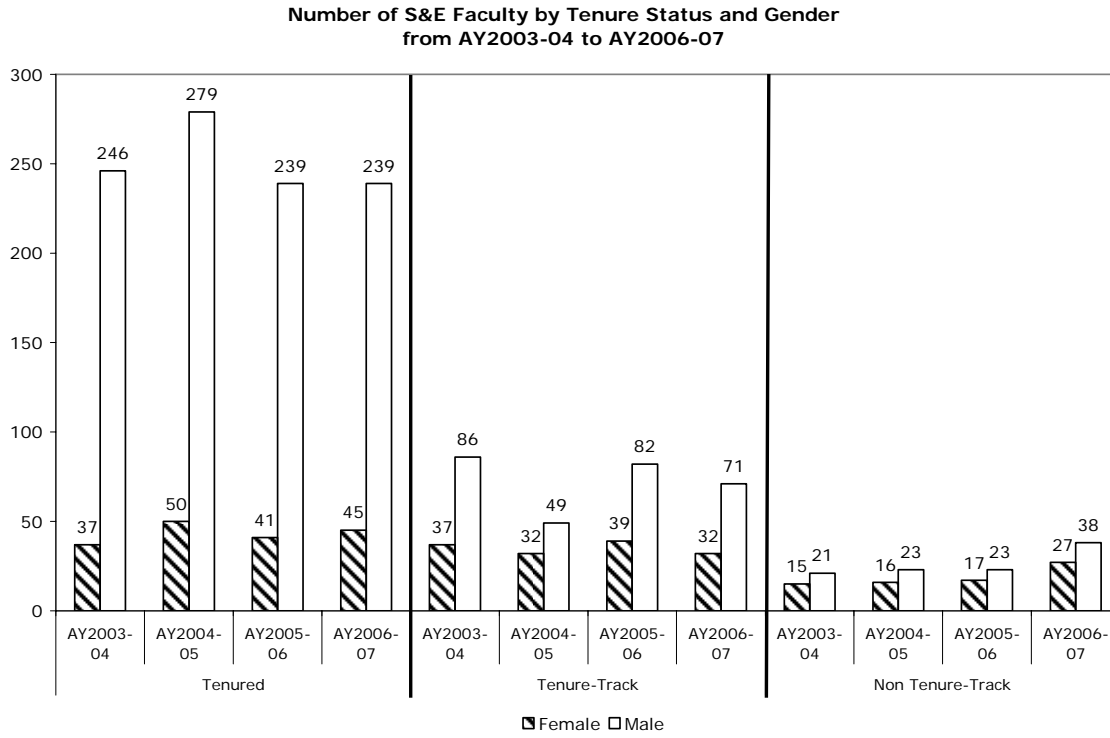


Figure 3C-7-2

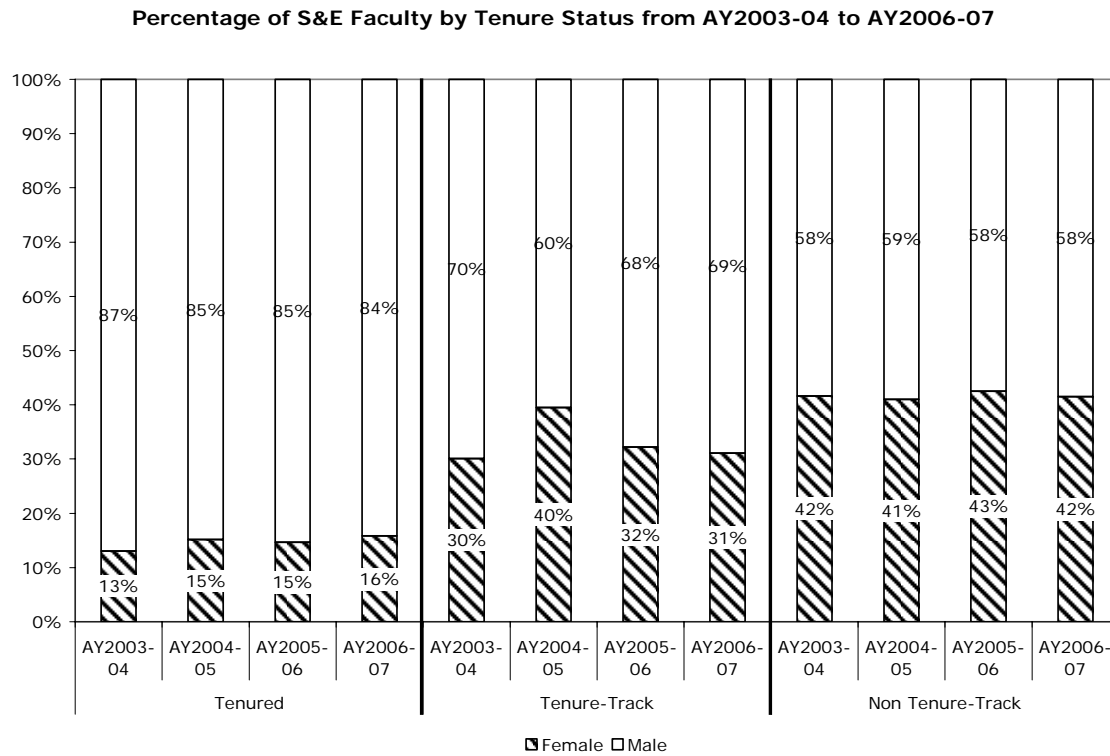


Figure 3C-8-1

**Number of Faculty Awarded Tenure by Gender  
in S&E and Other University Departments  
from AY2003-04 to AY2006-07**

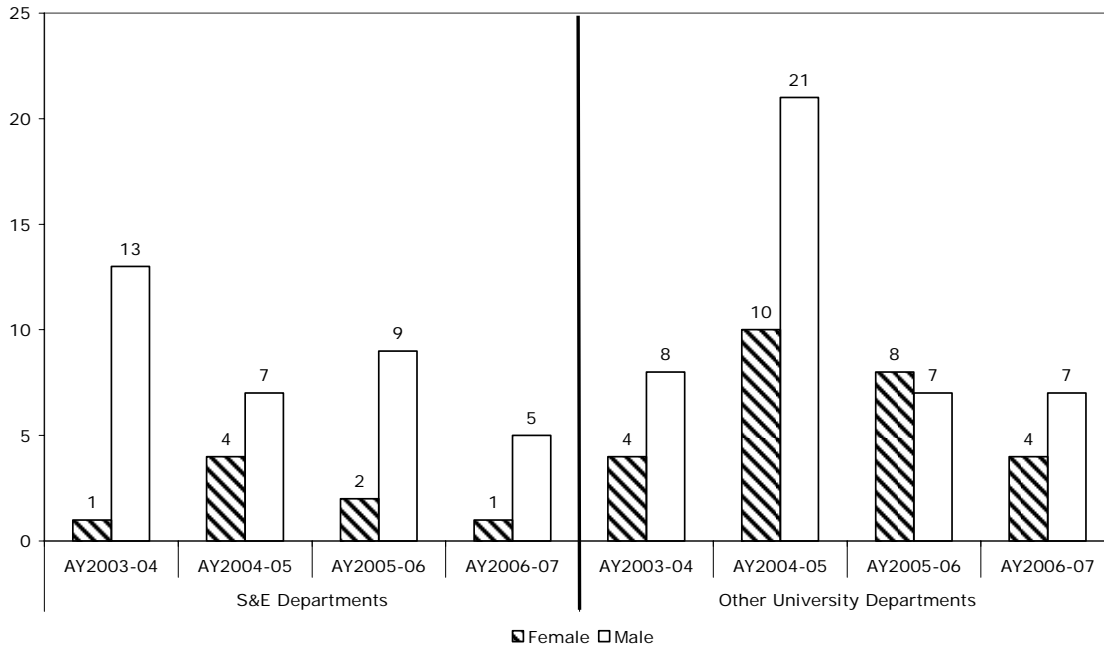


Figure 3C-8-2

**Percentage of Faculty Awarded Tenure by Gender  
in S&E and Other University Departments  
from AY2003-04 to AY2006-07**

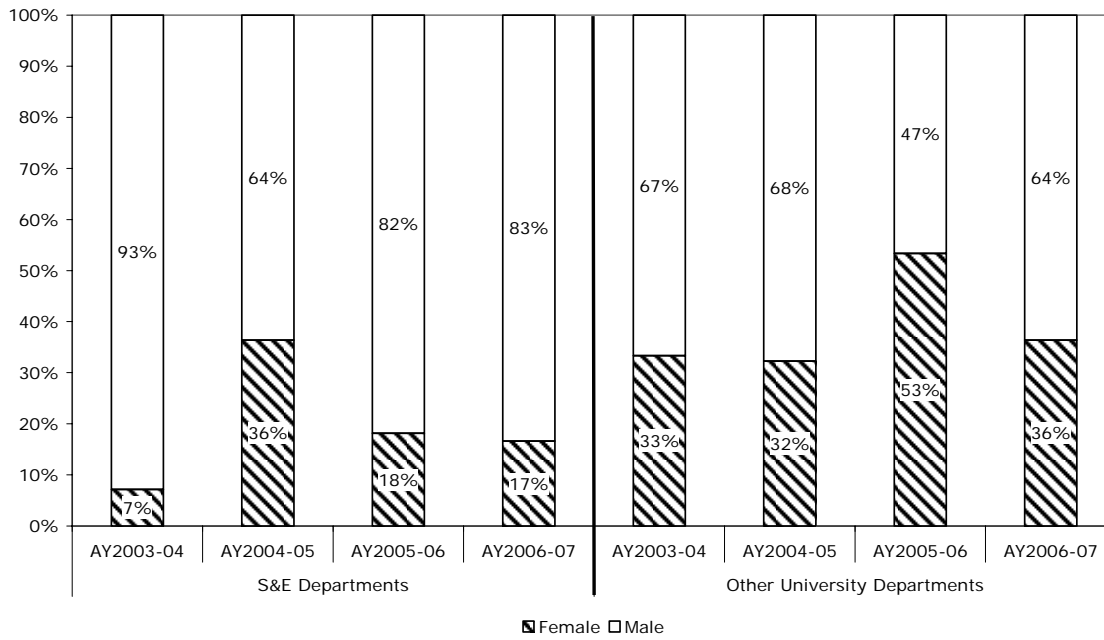


Figure 3C-9-1

**Number of Faculty Promoted to Full Professor by Gender  
in S&E and Other University Departments  
from AY2003-04 to AY2006-07**

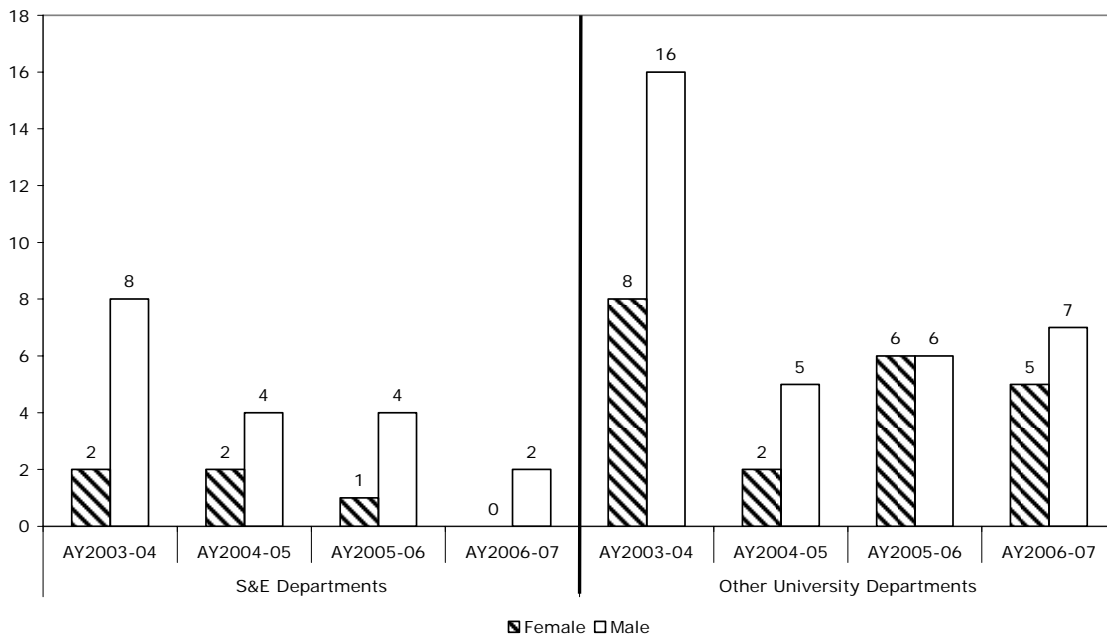


Figure 3C-9-2

**Percentage of Faculty Promoted to Full Professor by Gender  
in S&E and Other University Departments  
from AY2003-04 to AY2006-07**

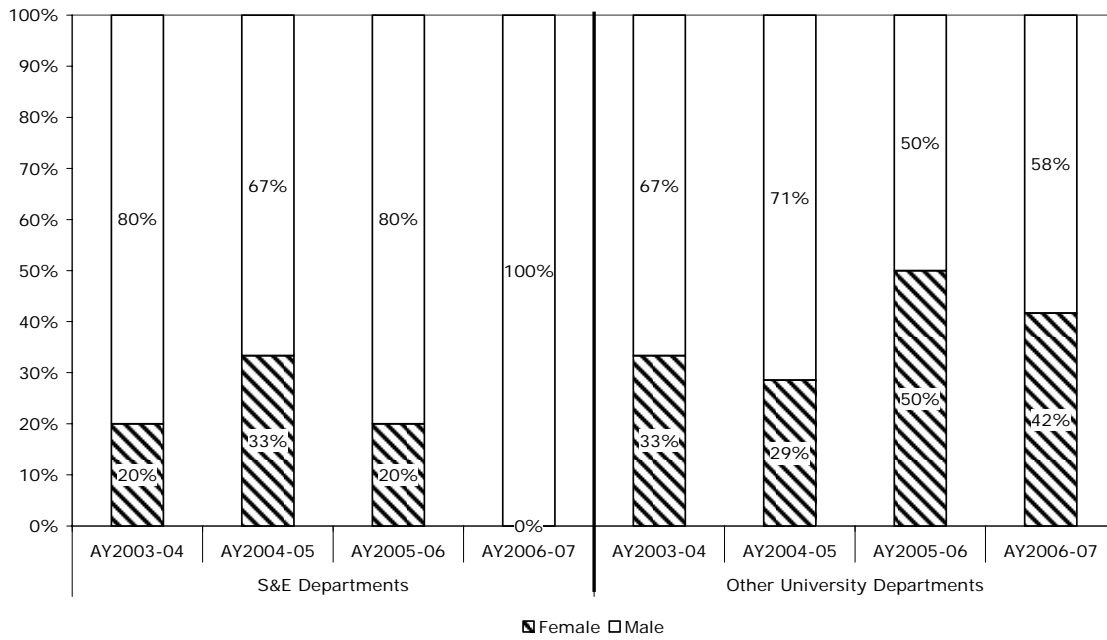


Figure 3C-10-1

**Number of Faculty Departed from Institution by Gender  
in S&E and all University Departments  
from AY2003-04 to AY2006-07**

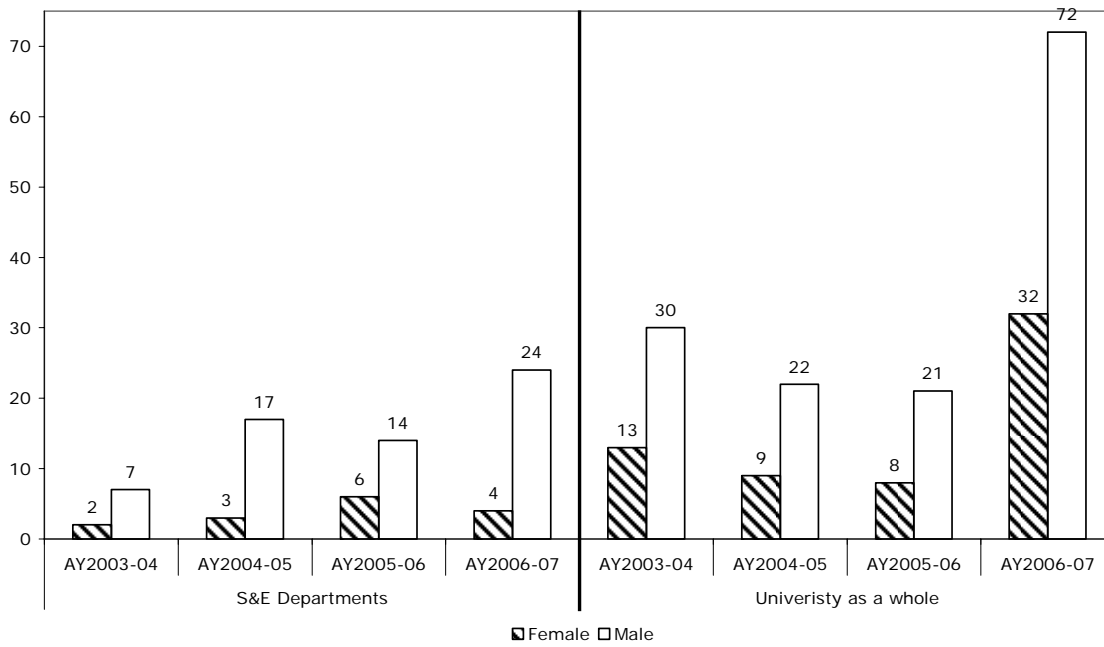


Figure 3C-10-2

**Percentages of Faculty Departed from Institution by Gender  
in S&E and all University Departments  
from AY2003-04 to AY2006-07**

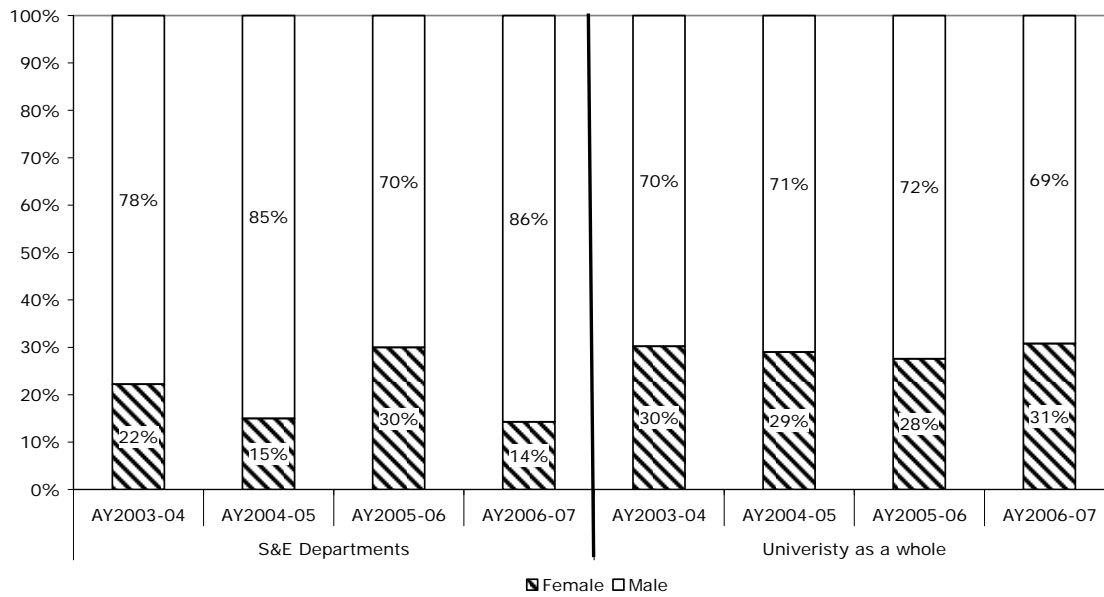
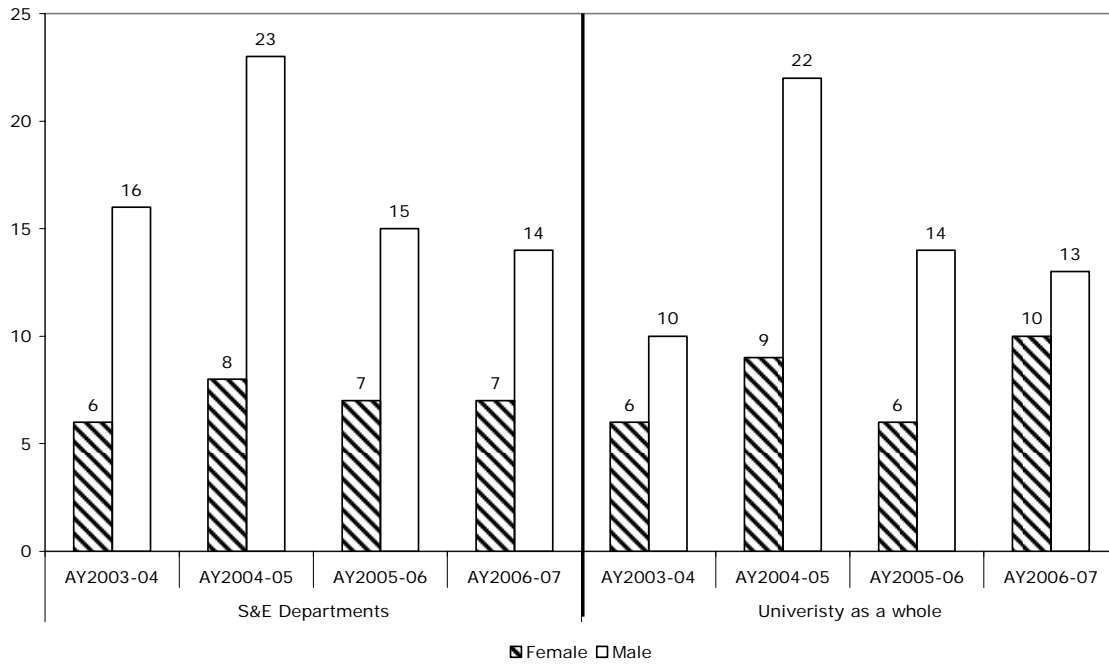




Figure 3C-10-3

Average Time at Institution by Gender in S&E and all University Departments from AY2003-04 to AY2006-07



Note. The average years at institution of departed faculty are reported here.

Figure 3C-11-1

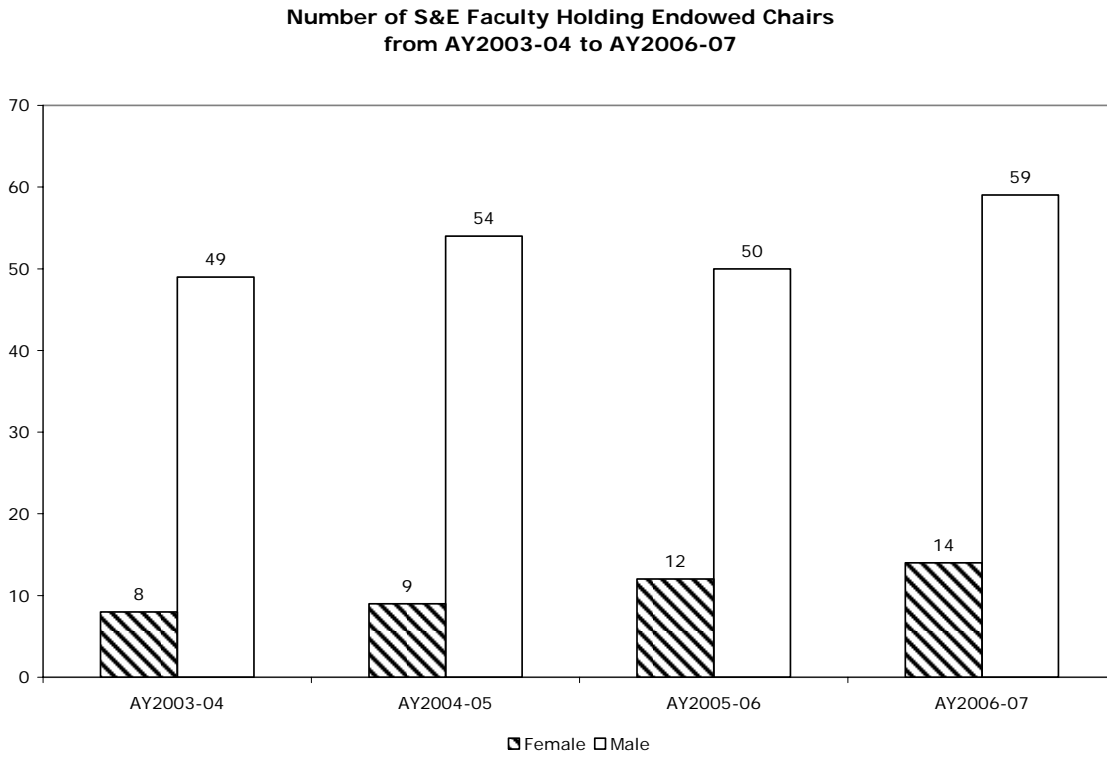


Figure 3C-11-2

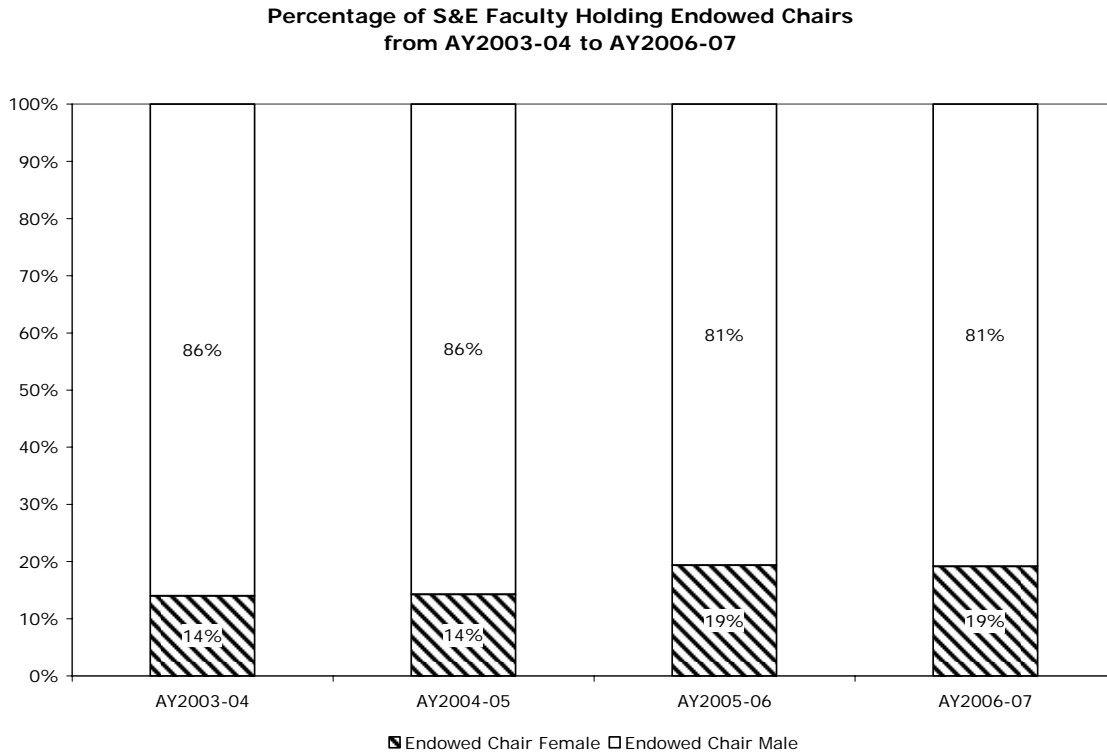
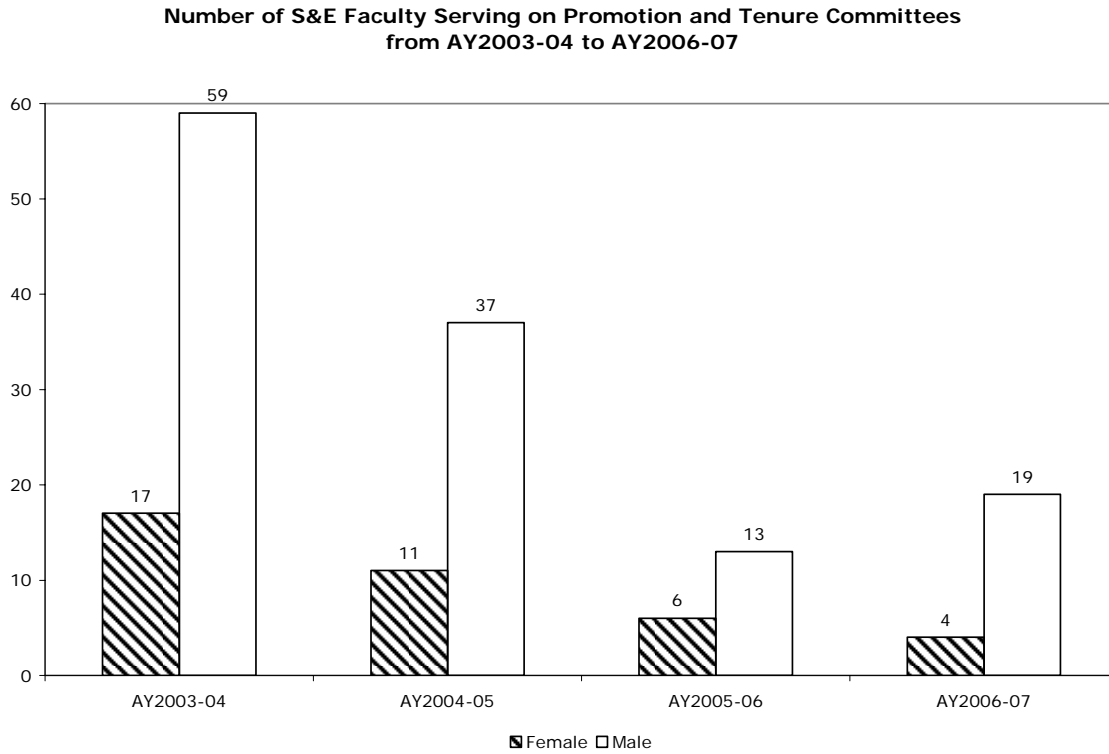


Figure 3C-12-1



Note. Committee members at the departmental level were included in AY 2003-04 and AY 2004-05; only committee members at the school level were reported in AY2005-06 and AY2006-07.

Figure 3C-12-2

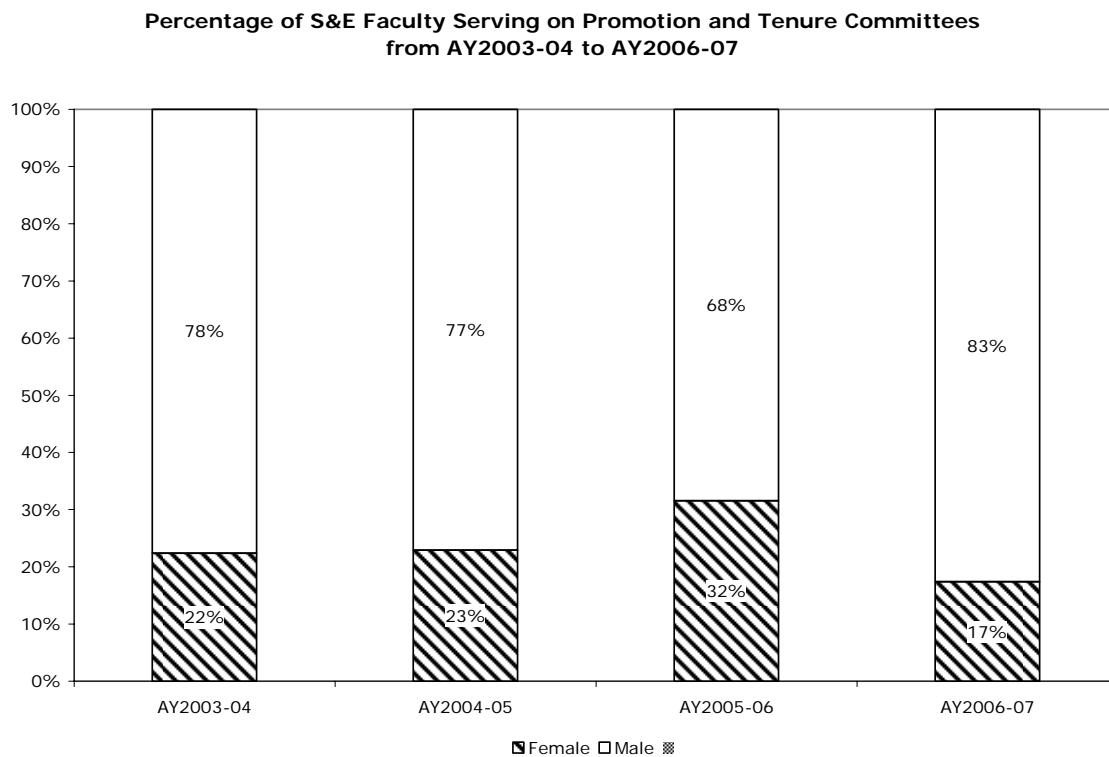
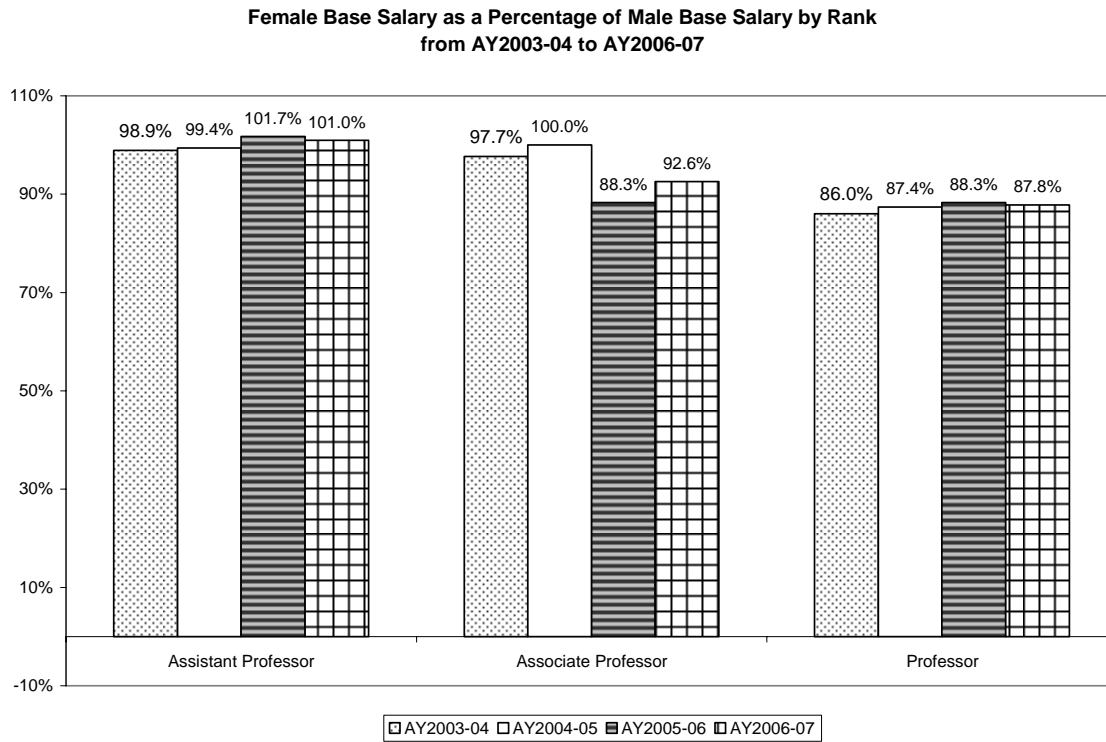


Figure 3C-13



Note. Overall S&E Faculty by Rank

## APPENDIX I



**Leading Change: Creating Tomorrow's University**  
**3<sup>rd</sup> Annual NSF-ACES Provost's Leadership Retreat**  
Thursday, 2 November 2006  
Room 103, Peter B. Lewis Building



### GOALS

1. Provide a forum for ongoing leadership development of key change agents in the institution.
2. Broaden awareness of the positive change efforts regarding diversity and gender equity underway at Case.
3. Catalyze leadership at all levels of the institution: department, school/college, and university
4. Enhance the institutional networks of participants.

### RETREAT SCHEDULE

12:00 – 1:30 p.m.	Keynote – lunch is served
1:30 – 5:00 p.m.	Meeting
5:00 – 6:00 p.m.	Report out – wine and cheese

### AGENDA

12:00-1:30	Welcome and Introductions	Lynn Singer, <i>ACES Principal Investigator, Provost, and Vice President for Academic Programs</i>
	Keynote: Strategies for Climate Change: How Deans and Department Chairs Make a Difference	Gregory Eastwood, M.D., <i>Interim President</i> John Anderson, <i>Provost and University Vice President</i>  Dr. Bernice Sandler
1:30-2:00	Where is ACES now?	Lynn Singer o Donald Feke (G <sup>2</sup> C <sup>3</sup> )
2:00-2:30	Peer to Peer Discussion of ACES Initiatives	Department Chairs
2:30-3:15	Communication for Academic Leaders	Christopher J. Loving
3:15-3:30	BREAK	Refreshments
3:30-4:15	NSF Indicators and Salary Equity Study	Resource Equity Committee
4:15-5:00	Creation of Action Plans	Deans
5:00-6:00	Report out of Action Plans by School	Lynn Singer