



NSF ADVANCE  
INSTITUTIONAL TRANSFORMATION  
FOR FACULTY DIVERSITY

**Year End Report**  
**September 1, 2007 through August 31, 2008**

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## I. PARTICIPANTS

### A. PROJECT PARTICIPANTS

**Evelyn Posey:** Principal Investigator

**Has worked for more than 160 hours:** Yes

**Contribution to project:** Evelyn Posey is responsible for providing the leadership, education, incentives, and plans to ensure successful implementation of this initiative. The ADVANCE Coordinator and Evaluator report directly to her. Dr. Posey leads the Faculty Development component and chairs the internal Institutional Action Board and the external Advisory Board. Dr. Posey's support, 25% of her 100% salary for 12 months, comes from the university cost sharing portion of the grant.

**Elizabeth Anthony:** Co-Principal Investigator

**Has worked for more than 160 hours:** Yes

**Contribution to project:** Elizabeth Anthony leads the Policy and Recruitment component. Her responsibilities are to develop work-life policies, support recruitment efforts by interacting closely with search committees and the EO/AA officer, and provide research support to female faculty and/or faculty involved in gender research via open competition Graduate Research Assistantships (GRA). Dr. Anthony's support, 33.3% of her salary 4.5 months and 1 summer month, comes from the university cost sharing portion of the grant, and 2 summer month salary from the "Salaries and Wages" portion of the NSF grant budget.

**Patricia Witherspoon:** Co-Principal Investigator

**Has worked for more than 160 hours:** Yes

**Contribution to project:** Patricia Witherspoon leads the Collaborative Leadership component. The overarching objective of the Collaborative Leadership component is to facilitate the creation and sustenance of a culture and climate conducive to recruiting, retaining, and promoting a diverse faculty at UTEP. Dr. Witherspoon's support, 10% of her 100% salary for 12 months, comes from the university cost-sharing portion of the grant.

**Jana Renner:** Senior personnel

**Has worked for more than 160 hours:** Yes

**Contribution to project:** Jana Renner works closely with the investigators to create, implement, and document the grant activities. She facilitates communication between the investigators and department chairs and faculty to inform them of the progress of the grant and opportunities provided by the grant. She is responsible for the daily operations and management of the ADVANCE office. Ms. Renner's support, 100% of her salary for 12 months, comes from the "Salaries and Wages" portion of the NSF grant budget.

**Igor Ryabov:** Senior personnel

**Has worked for more than 160 hours:** Yes

**Contribution to project:** Igor Ryabov is responsible for working with the investigators to implement an evaluation component for each of the substantive grant activities in the remaining grant years that will serve to diagnose areas for revision, assist in the identification of "best practices" associated with each component, and to document institutional changes attributable to the grant's initiatives. Dr. Ryabov's support, 100% of his salary for 12 months, comes from the "Salaries and Wages" portion of the NSF grant budget.

**Ann Darnell:** Senior personnel

**Has worked for more than 160 hours:** Yes

**Contribution to project:** Ann Darnell is responsible for data collection and analysis corresponding to the NSF 12 Quantitative Indicators of Activity and Progress. She works with the investigators and with the staff of UTEP administrative data collection units to secure preliminary estimates for the indicators and to develop a strategy for consistent data collection methodologies for future grant years. Ms. Darnell's support, 50% of her salary for 12 months, comes from the "Salaries and Wages" portion of the NSF grant budget.

**Celia DeSantiago:** Administrative Assistant

**Has worked for more than 160 hours:** Yes

**Contribution to project:** Celia DeSantiago provides administrative support to the Program Coordinator and Program Evaluator including entering data, arranging travel, processing purchase requisitions, managing records, and maintaining the financial records database. In January 2008, Ms. Santiago was hired as the Administrative Assistant for the Center for Effective Teaching and Learning (CETaL). For the remainder of the fiscal year, Ms. DeSantiago split her appointment between ADVANCE (20%) and CETaL (80%). Ms. DeSantiago's support, now 20% of her salary, comes from the "Salaries and Wages" portion of the NSF grant budget.

**Karla Ramirez:** Undergraduate student

**Has worked for more than 160 hours:** Yes

**Contribution to project:** Karla Ramirez, Department of Information and Decision Sciences, serves as the student assistant for the Faculty Mentoring Program for Women and the IMPACT Seminar. Ms. Ramirez' support, 100% of her half-time salary for 12 months, comes from the "Student Wages" portion of the NSF grant budget.

**Sarah Edgar:** Undergraduate student

**Has worked for more than 160 hours:** Yes

**Contribution to project:** Sarah Edgar, School of Nursing, assists with general office duties including data entry and event organization and management. Ms. Edgar's support, 100% of her half-time salary for 12 months, comes from the "Student Wages" portion of the NSF grant budget.

**Karina Ramos:** Undergraduate student

**Has worked for more than 160 hours:** Yes

**Contribution to project:** Karina Ramos, College of Education, assists with general office duties including data entry and event organization and management. Ms. Ramos' support, 100% of her half-time salary for 12 months, comes from the "Student Wages" portion of the NSF grant budget.

## **B. PARTNER ORGANIZATIONS**

**New Mexico State University:** Financial Support; Collaborative Research

UTEP and NMSU work together on dual career couple recruitment and collaborated (including sharing financial responsibility) on the production of a brochure to promote this initiative. Former Co-PI Dr. Gates is also part of a NMSU grant proposal “Effective Strategies to Diversify Academic STEM.”

**University of Maryland Baltimore County:** Financial Support, Collaborative Research

UTEP sponsored one junior female faculty member from the Department of Electrical and Computer Engineering and one junior female faculty member from the Department of Chemistry and her senior level female graduate student to attend the Faculty Horizons Workshop. Summer 2005.

**University of Michigan:** Financial Support; Collaborative Research

PI Evelyn Posey, Co-PI Tine Reimers, and former Coordinator, Kelly Andronicos, authored a chapter on mentoring entitled “A Faculty Mentoring Program for Women: Building Collective Responsibility for Developing a Highly Qualified Faculty” for the book *Advancing Women in Science and Engineering: Lessons for Institutional Transformation*, published by the Michigan Press in October 2007.

**University of Washington:** Financial Support

UTEP sponsored ADVANCE department chairs from Civil Engineering, Industrial Engineering, and Psychology to attend the National University of Washington ADVANCE Summer Leadership Workshop. Summer 2005.

UTEP sponsored the department chair from Civil Engineering and an Associate Dean from Engineering to attend the National University of Washington ADVANCE Summer Leadership Workshop. Summer 2007.

**Virginia Polytechnic Institute and State University:** Collaborative Research

UTEP ADVANCE PI, Evelyn Posey, was interviewed by Ellen Plummer as part of the Virginia Tech and Michigan study to determine the successes and challenges of the NSF ADVANCE institutional transformation efforts. Fall 2006.

UTEP co-sponsored Ann Gates and Roberto Osegueda, College of Engineering, to attend the ADVANCE Engineering Deans meeting. 2005

**Texas Tech University:** Collaborative Research

PI Evelyn Posey served as external advisor to the Texas Tech ADVANCE PAID grant. 2007, 2008.

**Case Western Reserve University:** Collaborative Research

PI Evelyn Posey and Co-PIs Tine Reimers and Libby Anthony were interviewed by the Case Western Reserve PI for their study on leadership development at NSF ADVANCE institutions. The results of this study were disseminated at the 2006 ADVANCE PI Meeting.

**The University of Texas at Arlington:** Collaborative Research

PI Evelyn Posey consulted with faculty developing an ADVANCE PAID proposal. Spring 2008.

**The University of Texas Health Science Center, San Antonio:** Collaborative Research

PI Evelyn Posey consulted with faculty developing an ADVANCE PAID proposal. Fall, 2007.

C. OTHER COLLABORATORS

**1. Faculty Fellows**

Faculty Fellows serve as college liaisons and assist in recruiting and mentoring activities. Faculty Fellows identified and recruited mentors for the Faculty Mentoring Program for Women, met with departmental search committees to discuss best practices for diversity in faculty recruitment, met with female faculty candidates to promote UTEP and to describe the support that the department, college, university, and ADVANCE program can provide, and followed-up on post-interview progress of searches, including dual career placements. The four Faculty Fellows, one from each ADVANCE college, also attend monthly meetings with the ADVANCE team, attend yearly retreats, and participate in Advisory Board meetings.

ADVANCE Faculty Fellows:

- Carlos Ferregut, Associate Dean and Professor, College of Engineering
- Wendy Francis, Associate Professor, Department of Psychology
- John Hadjimarcou, Chair and Associate Professor, Department of Marketing and Management
- Elizabeth Walsh, Associate Professor, Department of Biological Sciences

**2. ADVANCE Path Forward Committee**

In the fall of 2007, ADVANCE established a Path Forward Committee to ensure the institutionalization of key ADVANCE components. The most significant commitment to date has been the addition of an Associate Dean in each college charged with faculty development and research. These are the faculty specifically charged with continuing the ADVANCE mission.

ADVANCE Path Forward Committee:

- Sandra Hurley, Chair, Associate Provost for Faculty and Academic Affairs
- Elizabeth Anthony, Co-PI

- Harry Meeuwssen, Director of the Center for Teaching and Learning
- Anny Morrobel-Sosa, Dean, College of Science
- David Novick, Associate Provost for Academic Support Services
- Evelyn Posey, PI
- Patricia Witherspoon, Co-PI

### **3. Advisory Board Members**

The Advisory Board is responsible for continuous refinement of the UTEP NSF ADVANCE initiative. It provides innovative ideas, monitors progress, and, at the conclusion of the grant, will assess the success of our initiative. The six members of the board are representative academic, business, and scientific leaders who are recognized nationally for their work in organizational transformation and commitment to diversity. UTEP ADVANCE conducted its fifth Advisory Board Site Visit April 20-21, 2008.

The Advisory Board members:

- Committee Chair - Karan Watson, PhD, PE, Dean of Faculties and Associate Provost, Texas A&M University
- Myrna Deckert, Consultant, Paso Del Norte Group
- Lisa Frehill, PhD, Executive Director, Commission on Professionals in Science and Technology
- Emir José Macari, PhD, Dean, College of Engineering and Computer Science, California State University at Sacramento
- James E. Murphy, Consultant
- Orlando Taylor, PhD, Vice Provost for Research and Dean of the Graduate School, Howard University

### **4. Subcommittees**

The following faculty served on the Graduate Research Assistant Awards Proposal Review Committee.

- Elizabeth Anthony, Co-PI, Geology
- John Hadjimarcou, Associate Professor, Marketing and Management
- Wendy Francis, Associate Professor, Psychology
- Elizabeth Walsh, Associate Professor, Biology
- Carlos Ferregut, Associate Dean, College of Engineering

### **5. Other Specific People Not Listed**

- Armida Ruiz-Martinez, Assistant Director of Human Resources, is working with the ADVANCE team to identify HR strategies to better serve faculty.
- Sandy Vasquez, Assistant Vice President, provides the faculty search updates to the ADVANCE team.

- Michelle Villa and Yixen Chin, Department of Communication, assisted Pat Witherspoon, Professor of Communication and co-PI, with research related to the ADVANCE grant.
- Michael Merritt, Department of English, assisted with Web site design.

## II. ACTIVITIES AND FINDINGS

### A. RESEARCH AND EDUCATION ACTIVITIES

Year 5 of the University of Texas at El Paso (UTEP) NSF ADVANCE Institutional Transformation for Faculty Diversity initiative was a bittersweet one as we began the serious work of institutionalizing our project. This gave us the opportunity to consider what we have accomplished to date, reflect on what still needs to be done, and work diligently to ensure that ADVANCE is part of the way things are done around here.

UTEP ADVANCE continues to make significant progress overall. Some of our accomplishments to date:

- Since the 2003-04 hiring season, **38% of the tenure-track/tenured faculty hires in the ADVANCE departments have been women.** In 2007, **22% of the tenure-track/tenured faculty in ADVANCE departments are women, up from 15%** in 2003. For the previous decade, 1992-2001, the percentage of women in these departments remained flat at 14%.
- The percent of female faculty in ADVANCE departments has increased from the fall of 2004 to the fall of 2007 at all ranks of tenure-track/tenured faculty. Female professors increased from 10% to 13%, associates from 14% to 18% and assistants from 25% to 34%.
- To assist with recruitment, the **ADVANCE team has met with 95 percent of the ADVANCE department female candidates** and has facilitated the hiring of **11 dual-career academic couples.** A Human Resources staff member now meets with all candidates who have partners who need help finding jobs in the region. Prior to ADVANCE, no one person was charged with assisting dual-career candidates.
- ADVANCE has provided **\$239,937 in salary funds** for 7 dual career hires, **\$225,000 in start-up funds** to 22 women, and over **\$280,000 in research funds (54 awards to 43 faculty)** to support Graduate Research Assistants.
- Female faculty in the College of Science increased at the professor and associate professor ranks between 2004 and 2007, while the College of Engineering doubled the number of female assistant professors, increasing from three to six.
- All four colleges that house ADVANCE departments have initiated a **formal third year review.** Prior to ADVANCE, two colleges had a formal third year review. A **policy for extending the tenure clock** is now included in the Handbook of Operating Procedures.



- The highly successful **Faculty Mentoring Program for Women**, in place since fall 2000, continues with over **130 participants**. Prior to the inception of the FMPW, there was no university-wide mentoring program.
- The **IMPACT Seminars** which help faculty develop integrated plans for career success has had 46 faculty, men and women, all ranks participate since 2004. Prior to ADVANCE, there was no such university-wide program.
- Three STEM females have been recommended for promotion to full professor and two females in the Social and Behavioral Sciences have been recommended for tenure and promotion to associate professor for the 2008-09 academic year. This continues the trend since the beginning of ADVANCE that all women who have come up for tenure and/or promotion in the 18 ADVANCE departments have been successful. Prior to ADVANCE there was no central database tracking this indicator.
- ADVANCE is opening channels of communication through **Chair Chats, Chair Interviews, Women Faculty Forums**, and the administration of a faculty **work life survey** and its results. Beginning in fall 2006, **the Provost has appointed a Vice Provost for Faculty and Academic Affairs and convened a university-wide Chairs' Council**. Prior to ADVANCE, Chairs had no formal method of sharing concerns or best practices.
- The UTEP Human Resources department now administers a university-wide **faculty exit survey**. Prior to ADVANCE, there was no formal faculty exit survey.
- ADVANCE conducted research on **Latinas' pathway to the PhD** and interviewed all UTEP ADVANCE faculty women to record their experiences with recruitment, retention, and promotion.
- The ADVANCE initiative now includes **four Faculty Fellows** who work with their respective colleges on recruitment and retention. As of fall 2007, each college has appointed an Associate Dean for Faculty.
- The UTEP ADVANCE team has made **40 campus presentations, 30 presentations at national and regional conferences**, and has **written four papers and one book chapter** on the UTEP NSF ADVANCE initiative.

In April 2008, we hosted our ADVANCE external Advisory Board for the last time. They again helped us focus on the original goals of our initiative: 1) to value and build a talented, diverse faculty and recognize that a collegial, productive environment can be created for anyone and everyone, and 2) to understand that organizational commitment and communication are vital to the realization of this mission.

Understandably, our Advisory Board was interested in our efforts at institutionalization and directed most of their comments to this topic. Specifically, they suggested the following:

- Identify funding to continue the Policy and Recruitment component's efforts at dual career hiring, including start-up funds and Graduate Research Assistant awards.

- Institutionalize the Faculty Development component (Faculty Mentoring Program for Women and IMPACT ) within the Center for Effective Teaching and Learning (CETaL). Institutionalize the Collaborative Leadership component within the Sam Donaldson Center for Communication Studies.
- Because of their emphasis on compliance rather than service, ensure that Human Resources personnel do not advise faculty on work life issues such as Family Medical Leave.
- Develop a public relations campaign, with a focus on the benefits to students, to spread the word of our ADVANCE accomplishments. Ensure that selected ADVANCE initiatives become part of the upcoming university capital campaign.

To help ensure institutionalization, we continue to work with our ADVANCE Path Forward Committee (chaired by Associate Provost Sandra Hurley) to discuss each Advisory Board recommendation at length and to develop a detailed plan for institutionalizing our initiative. Throughout this report, we will share information on decisions and actions already taken to address the Advisory Board's concerns.

Following is a description of Year 5 Research and Education activities by component:

### **1. Policy and Recruitment**

Policy and Recruitment, under the direction of PI Elizabeth Anthony, continues to oversee two areas: 1) faculty recruitment and retention and 2) the Graduate Research Assistantship (GRA) program.

Specific activities during Year 5:

- Continued to meet with female and dual career faculty applicants during their on-campus visits. The results of the recruitment year are listed below under Findings. The Faculty Fellows met additionally with female and dual career individuals.
- Collaborated with ADVANCE Evaluator Igor Ryabov to quantify the ethnicity and race of the females hired during the first 4 years of the ADVANCE grant. We verified our findings by asking faculty directly what ethnicity/race they report to NSF. A highlight of the survey is that 31% of the female hires (and an even higher percentage (41%) of the dual career females are Hispanic. The full results of the survey are discussed below in Findings.
- Served on the ADVANCE Path Forward committee.
- Formulated a dual career policy for UTEP. This activity included researching existing policies at other U.S. institutions and combining ideas from these policies with lessons learned from UTEP during 5 years of administering the dual career placement for ADVANCE. The policy has been presented to the Path Forward committee and Deans' Council. It will be carried to Faculty Senate in August 2008. The policy and related documents are provided in Appendix A.

- Presented the dual career policy and led the discussion at a Round Table break-out group at the Annual ADVANCE PI meeting in Virginia, May 2008.
- Served on the College of Science Promotion and Tenure Committee. This committee is constituted of a faculty member from each department in the college. They meet in the fall to review and make recommendations for all tenure and promotion applications. They meet in the spring to make formal recommendations for post-tenure review and third year review.

The third-year review process includes bringing each faculty member and his/her mentor to meet with the committee and discuss in an informal and collegial environment the most effective strategies to strengthen the tenure dossier. The Dean of Science then meets with each third year candidate to discuss the review from the departmental and college levels. The process works very effectively to help with “course correction” and, we feel, has contributed directly to the high number of successful tenure recommendations during the lifetime of the ADVANCE grant.

- Served on a College of Science Ad Hoc committee to review promotion and tenure policy. A policy statement was formulated that is currently under review by 1) a committee of tenure-track faculty and 2) the college department Chairs. This initiative originated in the Provost’s office.
- Administered the Graduate Research Assistantship program which has been in place since the inception of the grant. Appendix B includes a listing of funded faculty. Both students and faculty are positive in the impact of this program on their career development. Many of the students are from minority groups, and this program is one way that the UTEP ADVANCE initiative reaches out to this group.
- Prepared reports and presentations to internal Principal Investigator meetings (which are scheduled twice a month), meetings with the President and Provost of UTEP (each two times a year), our external Advisory Board (once a year), the annual PI meeting, and the Annual Report.

As part of ADVANCE institutionalization, beginning fall 2008, faculty recruitment and retention activities will be the shared responsibility of Associate Provost and CETaL Director Harry Meeuwssen and the Associate Dean of Faculty in each of the ADVANCE colleges. Funding for start-up and dual career hires will be sought through the STARS program, a University of Texas System initiative that provides funding to attract and hire outstanding researchers.

## **2. Faculty Development**

Faculty Development, under the direction of PI Evelyn Posey and Associate Provost and Center for Effective Teaching and Learning (CETaL) Director Harry Meeuwssen, continues to offer two programs: the *Faculty Mentoring Program for Women* and the *IMPACT Seminars*.

### *Faculty Mentoring Program for Women (FMPW)*

The goals of the *Faculty Mentoring Program for Women Program* are to help new women faculty with:

**Balancing Work Loads:** Facilitate the attainment of individual strategic career objectives by providing an environment where women faculty can discuss the conflicting demands of work and family and prioritizing the diverse demands of teaching, research, and service

**Access:** Increase women faculty's effectiveness and visibility through improved access to information and resources that support academic activities and to networking opportunities for new ventures and relationships

**Acculturation:** Orient new women faculty to UTEP, including helping them avoid mere trial and error approaches to managing relationships with students, faculty, staff, and administrators

Only seven new women faculty were hired in fall 2007, so each new faculty member was paired with an individual mentor. Previously, in 2005-2006, the FMPW used a "group mentoring" approach whereby faculty women were placed into "mentoring teams" consisting of up to six other new women faculty from their college and two mentors from their colleges but not from their own departments. This program is an 18 month program, so the program consisted of both the mentoring teams that were formed in the last academic year and the mentoring pairs that were paired this year.

As in previous years, the program offered monthly luncheons or breakfasts for the mentoring teams and pairs with the aim of increasing networking opportunities, mentoring conversations and peer mentoring. Monthly luncheons had a topic based on an assigned article or are simply structured opportunities for mentoring teams to meet and discuss challenges and solutions on a regular basis. The program also offered two brown bags each semester for mentees only where peer mentoring networks were enhanced and new women faculty compared notes and addressed challenges. In addition, two mentor training sessions were conducted during the year.

As part of ADVANCE institutionalization, beginning fall 2008, the Faculty Mentoring Program for Women will evolve into the Collaborative Faculty Mentoring Program to be directed by Associate Provost and CETaL Director, Harry Meeuwsen. For a complete description of this new program, see Appendix C.

### *Impact Seminars*

The *IMPACT Seminars* are designed to increase the effectiveness of participating faculty by developing new ways of integrating teaching, research, and service, and by developing leadership skills. They build communities of current and future faculty leaders from various ranks who are committed to continual reflection on the relationship between teaching, research, and service, and on leadership in the academe. Participants develop individual career action plans that facilitate their professional advancement. During the intensive week-long seminar, facilitators ask questions with a view toward maximizing the quality of student learning and enhancing a productive professional career. Participants develop assessment plans to record the effects of the action plans proposed. Participating faculty

gather documentation, meet monthly, and discuss the effectiveness of their plans. In the second summer of participation, they disseminate their results at meetings and/or through refereed publications.

As part of ADVANCE institutionalization, beginning fall 2008, the IMPACT Seminars will be under the direction of Associate Provost and CETaL Director Harry Meeuwssen and ADVANCE Faculty Fellow and Marketing and Management Professor John Hadjimarcou. They will continue in much the same format, but with a heavier emphasis on leadership training.

### **3. Collaborative Leadership**

Collaborative Leadership, under the direction of PI Patricia Witherspoon, establishes and enhances connections among faculty and administrators and creates and sustains positive organizational climates and rich organizational cultures that facilitate the recruitment, retention, and promotion of women in sciences and engineering.

The ADVANCE team, including the Faculty Fellows, engaged in finding those connections by facilitating dialogues among Chairs and among women on the faculty, as well as faculty engaged in departmental search processes. We are engaged in creating and/or changing climates and cultures through conversations, programs, and projects and are also working with colleagues in university administration to sustain the climates and cultures that will facilitate the recruitment, retention, and promotion of women.

Specific activities during Year 5:

- Conducted two “Chair Chats” or focus group discussions among department Chairs of the 18 ADVANCE departments. The following question guided these discussions: How can Chairs create a positive climate that facilitates retention and promotion of women at UTEP?
- Conducted 4 forums for women faculty to discuss the following question: What kinds of support are needed at UTEP to facilitate recruitment, retention, and promotion of women faculty?
- Assistant professors were invited to attend separate forums from the associate and full professors. Additionally, all women faculty were given the option of visiting individually with Dr. Witherspoon if they chose to keep their comments confidential from other faculty women. One individual chose this option.
- Completed a report of 55 interviews with women faculty in the 18 ADVANCE departments to determine their pathways to the PhD and initial faculty appointments. Findings were reported to the NSF in a special document, and a journal article that summarized the findings was accepted for publication.

As part of ADVANCE institutionalization, beginning fall 2008, ADVANCE community building programs will be situated in the Sam Donaldson Center for Communication Studies, directed by PI Witherspoon.

#### **4. Evaluation**

Evaluation, under the direction of Igor Ryabov and assisted by Ann Darnell, examines the overall impact of the three major ADVANCE components (Policy and Recruitment, Faculty Development, and Collaborative Leadership) designed to address the program goals of valuing a talented, diverse faculty and understanding that organizational commitment and communication are vital to the realization of this mission. Both quantitative and qualitative methodologies are used to holistically evaluate whether this transformation is occurring. Assisted by recommendations from our Advisory Board, the NSF Site Visit team, and external evaluator Jennifer Greene, Year 5 activities include:

##### *Work Life Survey*

The ADVANCE Faculty Work Life Survey was created as an online survey, modeled after the initial paper survey administered in the spring of 2004, asking all tenure-track/tenured faculty and full-time lecturers in the 18 ADVANCE departments to rate various areas of their satisfaction with work life at this university. Results were analyzed and presented to the ADVANCE team, Deans, the Provost's Office, Advisory Board, and at a Round Table break-out group at the Annual ADVANCE PI meeting in Virginia, May 2008. The final report will be disseminated to all via the ADVANCE web site. Survey results are presented in the Findings section of this report.

##### *Pathway to the PhD*

As described under the Collaborative Leadership section above, PI Pat Witherspoon and Evaluator Ryabov analyzed 55 interviews of women tenure-track, tenured faculty using *QSR Nudist* software. The research identified major themes that emerged from the interviews of Anglo, International, and Latina faculty. The findings of this study may contribute to the discourse on under-representation of women in the sciences and engineering in general, and Latina faculty in particular. The detailed report on the findings of this study is given in Appendix D.

##### *NSF 12 Indicators*

The NSF 12 Indicators were updated for 2007-2008 and analyzed in conjunction with the faculty work life survey. Change in response to questions identified between the first and second wave of the survey were compared to changes found between the beginning and latest NSF 12 indicators. Results of this analysis can be found in the Findings section of this report. The latest NSF 12 indicators are provided in Appendix E.

##### *Institutionalization of ADVANCE Faculty Database*

After collaborating with multiple institutional offices, beginning fall 2008, the ADVANCE database will move to the Provost's Office to become part of a larger database, *Digital Measures*, recently purchased by the university in part to ensure that we hire and retain a talented, diverse faculty who continue to enjoy a collegial, productive environment. Custom database queries are being created in order that faculty data may easily be retrieved to answer questions related to gender and ethnic diversity.

*Comparison of Program Accomplishments with other ADVANCE Institutions*

The number of female hires over the past several years in ADVANCE departments has decreased, partially in response to an overall decrease in hiring and partially due to difficulty in recruiting qualified females to this institution. Response of satisfaction to work life is high among female faculty in the 18 ADVANCE departments indicating those that do come are generally pleased with their decision. Program results reported on web sites at other ADVANCE institutions are being compared to our results. This comparison will be included on our Web site and in the final report to NSF.

**B. FINDINGS**

**1. Policy and Recruitment**

The recruitment year is almost complete and reveals the following statistics:

- Females represent 4 of the 13 hires (31%) in the ADVANCE departments.
- The female mathematician hire is a dual career opportunity. This hire represents our sole dual career success for this hiring cycle.
- The female hires come from the social sciences, mathematics, and the biological sciences.
- Hiring rates in the Colleges of Business Administration and Engineering remain low.

PI Elizabeth Anthony collaborated with Evaluator Igor Ryabov on a survey of the ethnicity/race of the female hires in the first 4 years of the grant. People could indicate both ethnicity and immigration status (as is permitted when applying for NSF funding) making the different categories total to greater than 100%. A summary table is provided below.

<b>Summary</b>	<b>White</b>	<b>Hispanic</b>	<b>Asian</b>	<b>Native American/ African American</b>	<b>International</b>
Female Hires	45.7%	31.4%	20.0%	0.0%	48.6%
Dual Career Hires	50.0%	40.9%	4.5%	0.0%	59.1%

We note the following important indicators from this survey:

- Hispanic females constitute approximately 1/3 of our hiring successes. We recognized at the onset of ADVANCE that the grant provided an opportunity to impact the representation of Latinas on this campus. We have taken extra care to evaluate the Latina experience through our research on pipeline and through active recruitment.
- We have been unsuccessful in diversifying the Native American/African American faculty. We have worked with search committees to search out these candidates, but without success. Our experience through the tenure of the ADVANCE grant is that our

location and student body has made possible success amongst the Hispanic population (both male and female) but has hindered our success with other people of color.

- Our hiring, as is true of all STEM field, relies heavily on the talented pool of International scientists and engineers. Gender diversity is being achieved in STEM (at least at UTEP) through hiring of highly qualified International faculty.

## **2. Faculty Development**

### *Faculty Mentoring Program for Women*

Since 2000, 132 faculty have participated as mentees in the FMPW; over 60 senior faculty have served as mentors, some more than once. Of the 132 faculty who have participated in the program, 77.2% (102) are still at UTEP.

Mentees report similar benefits to those reported in past years.

- Increased returns to social capital formed: membership in research-oriented peer networks, participation in cross-disciplinary research and teaching activities.
- Diminished social and professional isolation: commonality of experience, sharing of knowledge across disciplines.
- Integration of teaching and research: effective incorporation of teaching into research and service, employment of time-saving resources.
- Leadership training: building relationships with senior faculty, using them as role models.
- Preparation for tenure: psychological accommodation for the desirable professional outcomes, writing grant proposals, exploring new research projects and developing new courses.
- Balanced approach to service: learning to say “no” deliberately without loss of prestige, understanding the demands and expectations of department chair and faculty colleagues.
- Institutional acculturation: acquiring the sense of belongingness to the institution, understanding of the common academic policies and practices.

### *IMPACT Seminars*

IMPACT Seminars conducted from 2003-2008 were evaluated based on annual evaluations submitted at the end of the year-long seminar. In summary, participants report the following personal benefits:



- Work load management
- Increased self-awareness
- Enhanced learning ability
- Positive attitude
- Empowerment
- Adjustment to community
- Integration of teaching, research, and service

The following institutional benefits related to the changes in institutional culture were also identified:

- Leadership training
- Collaboration and collegiality
- Integration of personality into the institutional culture

### **3. Collaborative Leadership**

During spring 2008 Chair Chats, department Chairs made several observations related to recruitment, retention, and promotion of women at UTEP. These included:

- At UTEP, there's not enough interaction among departments, but CETaL is good for getting people together.
- A financial incentive is needed to build bridges between departments, or rewards like course releases for interdisciplinary teaching.
- College research committees need to meet to look at strategic directions—what is “hot” in interdisciplinary areas. We need to know what research is underway in our colleges. Some money from the Vice President for Research's office would help this effort. Such committees can look at the pros/cons of proposals; ORSP has built in accountability for these endeavors.
- Endowments need to be used in faculty recruitment; existing endowments are unfilled and not put to use.
- Dual career hiring has been very helpful. It is a huge issue and is becoming more prevalent on other campuses, too.
- Mentoring is still very important to retention and promotion, as is understanding the tenure process.
- Salary is an issue at UTEP. Salaries are low. Lack of resources is a big issue.
- We should have a meeting of UTEP chairs and other chairs in our region, e.g. Big 10 chairs in one discipline often meet.

- Climate makes a big difference in departments. It changes through departmental entries and departures. A positive climate helps new people. They want to accomplish things; they have an expectation of fairness; it takes a while to “build up.”
- We are losing people to better salaries and good opportunities. Such offers help people put together a research program.
- Reductions in teaching loads and more support for travel are helpful for a positive climate.
- Getting the authorization to hire takes too long. Some departments lose people to departments who hire in the fall.
- Climate will continue to be important to young faculty/collegial people.
- We need to distinguish between collaboration that is genuine and that which is coerced, e.g. junior faculty “made” to work with senior faculty in order to do most of the work.
- Junior faculty need good guidance re: tenure and promotion portfolio, and the appropriate mix of lead authored/single-authored/multi-authored articles.
- Requirements for promotion and tenure, considering UTEP’s teaching load: 5 published articles; refereed book chapters; publishing in quality outlets.
- Less funding is a problem for younger faculty at UTEP.
- Being effective at networking is important for faculty.
- Moving up to full professor is rare at UTEP. Associate professors who are negative may be stuck at the associate professor level and create climate problems.
- We need more information from student evaluations: need mean, median, mode, and distributions and need more analyses of student evaluations. It is important to know where everyone is with their teaching.

Selected observations from women at Faculty Forums:

- We need course load reductions (for submitting research grant proposals).
- Administration needs to be more flexible re: faculty being away for professional development, e.g. a month away from campus.
- Budget councils which include unsupportive, vindictive men are negative factors for remaining at UTEP.
- There is a higher expectation of service for women than men. We have to be sure junior women faculty are not overloaded with service.

- Social support needed:
  - money for travel to do research
  - money for conferences
  - more URI grants
- Faculty would benefit from a research adviser with regular research meetings.
- There needs to be more social activity in “an open platform.”
- Mentoring is needed in different stages in one’s career, e.g. mentoring when getting together material for a third year review.
- At UTEP, official channels don’t carry a lot of information for rank and file faculty. Communication is not systematic. Faculty are not informed as they should be about events.
- Some senior faculty only teach their courses. They don’t mentor faculty in their own department.
- Protect junior faculty! They shouldn’t be the only faculty teaching large classes. ORSP should aid, not hinder, faculty—the result of a budget problem.
- Need to attract more professional staff, e.g. in budgeting, writing, with higher salaries.
- Currently, there is a need for so much follow-up from faculty on grant matters because of infrastructure issues.
- Need leadership training at UTEP, including Chair training.
- No peer review of endowed positions takes place at UTEP. Such positions should be used for enhancement packages.
- Need to generate more money for fellowships for assistant professors.
- Interdisciplinary efforts cause problems at promotion and tenure time and in team-teaching.
- The Office of Research and Sponsored projects needs people who facilitate interdisciplinary work.
- Need new guidelines on faculty development leaves. They should be for productive faculty; assistant professors should get a course reduction in the third year.
- It is helpful to find people to create collaborative activity, but this takes time, e.g. social networking.
- Human Resources does not handle maternity leaves among faculty appropriately. There should be a faculty round table discussions about maternity leave at UTEP; presenting papers; writing papers.

- Chairs should have a presentation on policies/processes for protecting junior faculty, e.g. every-day teaching schedules; advising; advising theses/dissertations.
- One issue facing junior women faculty is the machismo of some male students. They may challenge these faculty in class, make inappropriate/harassing comments, and talk while the instructor is trying to lecture. FMPW needs to schedule a brown bag seminar on dealing with such students. They have made some faculty so uncomfortable/stressed that leaving the institution is a possibility.
- Climate has improved dramatically at UTEP in the last 5 years, but women need to care of their own. Tenured women faculty need to closely watch untenured women in order to give needed support. This is a human issue, not just a female issue. Don't let junior women faculty become too insulated/isolated. Interfere! If they are in your department, on a committee with you...whatever. Be nosy...intervene to help a junior woman faculty member. If you are tenured, you should have a sense of duty. Tell junior faculty women to call you if they need assistance/support in any way.

PI Witherspoon also gave presentations on leadership and conflict management in January 2008 to leaders at NMSU in an ADVANCE-related program. A similar presentation was made to department heads from several universities in New Mexico, sponsored by NMSU's ADVANCE program. PI Witherspoon also spoke to UTEP's IMPACT seminar on leadership, and gave an updated presentation on her interview project to NSF ADVANCE PIs at their May 2008 meeting.

#### 4. Evaluation

##### *Work Life Survey*

A complete Work Life Survey Technical Report can be found in Appendix D. Findings from Wave 1 and Wave 2 are summarized in the following table:

<i>Climate Issue</i>	<i>Findings (Wave 1, 2004)</i>
<i>Hiring Process</i>	Women were significantly more likely than men to feel that: <ul style="list-style-type: none"> <li>▪ their department did not obtain resources for them;</li> <li>▪ faculty in the department did not make an effort to meet them;</li> <li>▪ they did not negotiate successfully for what they needed;</li> </ul>
<i>Tenure Process</i>	Women were significantly more likely than men to feel that: <ul style="list-style-type: none"> <li>▪ they were unsupported in their advancement towards tenure and promotion.</li> </ul>
<i>Decision Making Process</i>	Women were significantly more likely than men to feel that: <ul style="list-style-type: none"> <li>▪ their department chair did not involve them in the decision-making process;</li> <li>▪ they did not have a voice in how resources were allocated;</li> <li>▪ they were not full and equal participants in decision-making</li> </ul>
<i>Gender Diversity:</i>	Women were significantly more likely than men to feel that: <ul style="list-style-type: none"> <li>▪ their department did not make an effort to promote women into leadership positions;</li> <li>▪ the climate for women in their college was not good;</li> <li>▪ their college had not taken steps to enhance the climate for women;</li> <li>▪ the university had too few women faculty in leadership positions.</li> </ul>

In 2007, we observed significant changes in the responses of female and male faculty to the questions on key areas of institutional climate. We found that:

<i>Climate Issue</i>	<i>Findings (Wave 2, 2007)</i>
<i>Hiring Process</i>	<p>Men and women were equally likely to feel that:</p> <ul style="list-style-type: none"> <li>▪ their department made an effort to obtain resources for them;</li> <li>▪ faculty in the department made an effort to meet them.</li> </ul> <p>Men were significantly more likely than women to feel that:</p> <ul style="list-style-type: none"> <li>▪ they negotiated successfully for what they needed.</li> </ul> <p>However, the majority of women also believed that they negotiated successfully for what they needed.</p>
<i>Tenure Process</i>	<p>Women were significantly more likely than men to indicate that:</p> <ul style="list-style-type: none"> <li>▪ they were told about assistance available to pre-tenure/promotion faculty (e.g., workshops, mentoring).</li> </ul> <p>Men and women were equally likely to feel that:</p> <ul style="list-style-type: none"> <li>▪ they were supported in their advancement towards tenure and promotion.</li> </ul>
<i>Decision Making Process</i>	<p>Men were significantly more likely than women to feel that:</p> <ul style="list-style-type: none"> <li>▪ their department chair involved them in the decision-making process;</li> <li>▪ they had a voice in how resources were allocated;</li> <li>▪ they were full and equal participants in decision-making;</li> </ul> <p>However, the gap between male and female faculty decreased significantly since 2004.</p>
<i>Gender Diversity</i>	<p>Men and women were equally likely to feel that:</p> <ul style="list-style-type: none"> <li>▪ their department did not make an effort to promote women into leadership positions;</li> <li>▪ the climate for women in their college was not good;</li> <li>▪ their college had not taken steps to enhance the climate for women.</li> </ul> <p>Women were significantly more likely than men to indicate that:</p> <ul style="list-style-type: none"> <li>▪ the university had too few women faculty in leadership positions.</li> </ul>

The comparison of responses of the two waves (2004 and 2007) revealed that:

- Male faculty became more sensitive to the climate issues for women and minorities
- As a result, among UTEP faculty, gender differences in assessment of the key climate components pronounced in 2004 have become negligible in 2007
- The overall results show continuous improvement in institutional climate at UTEP and increased satisfaction with the working conditions.

#### *Pathways to the PhD*

The most important conclusions of the *Pathways to the PhD* project include:

- Educational backgrounds of their families and the opportunities for education in their communities varied significantly among the women.

- Familial and spousal support, as well as that from close friends or fellow graduate students, was important to the attainment of the PhD.
- A mentor was critical to the educational and professional development of these women. Most mentors, although not all, were men.
- Institutional financial support was especially important to Latinas.
- The vast majority of interviewees, regardless of their origin and family background, emphasize the value of support that they received from their parents, siblings (earlier in their academic careers) and spouses (later in their academic careers).
- Friends and peer groups are important in the early stages of an academic career, especially during graduate studies
- A few faculty reported receiving mixed, or contradictory, messages of support from colleagues and complained about the unsupportive atmosphere they sometimes encountered on the pathway to the PhD.

The detailed report on the findings of this study is provided in Appendix E. The findings are scheduled to be published: Ryabov, Igor and Patricia Witherspoon. [forthcoming] “Diverse Pathways to the Ph.D.: A Study of Women Faculty in the Sciences and Engineering at a Hispanic-Serving Institution.” *Journal of Women and Minorities in Science and Engineering*.

#### *NSF 12 Indicators*

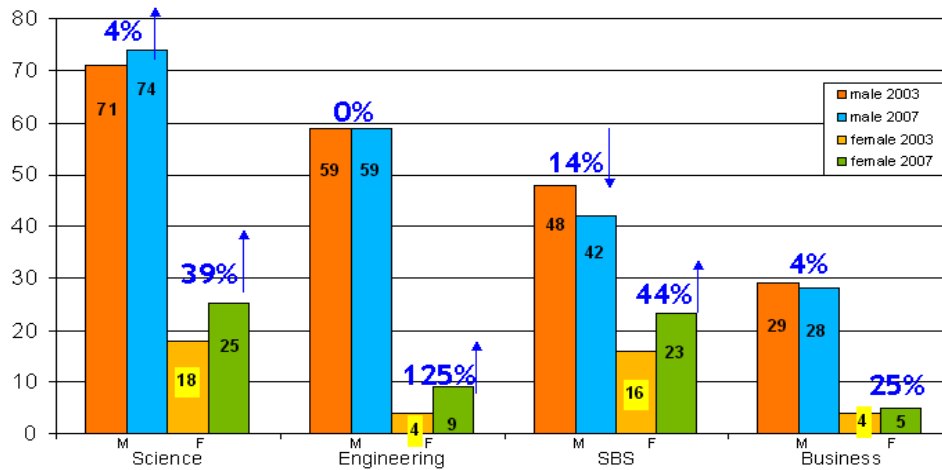
The NSF 12 indicators saw only modest change this past year. Used to measure each year of the grant, the first year’s indicators compared to the current provide an interesting analysis. Updated tables for the 2007-08 NSF 12 indicators are located in Appendix F.

Overall, the university slightly decreased hiring of tenure-track positions in 2007. The number of faculty at the full, associate, and assistant professor ranks are level at 161 each university-wide. This compares to last year at 148 professors, 163 associate, and 183 assistant professors. This flattening across rank reflects decreased hiring, occurring primarily at the assistant professor rank, and granting of tenure and promotion for those that came up for review. In ADVANCE departments, there are 104 full professors, 87 associates, and 89 assistants.

Satisfaction with the overall hiring process remains strong, with over 80% of both males and females, regardless of ethnicity, rank or discipline, reporting satisfaction in the fall 2007 administration of the ADVANCE Faculty Work Life Survey. Respondents indicating feelings of isolation in individual ADVANCE departments and at the university campus overall were quite low, with the exception of non-tenure-track faculty (40% at the departmental level and 50% at the campus level). The number of women responding that their department has actively recruited women faculty increased from 67% in the first administration of the survey to 86% in the second administration. However, 62% of the women faculty and 55% of men agree that there are still too few women faculty in their department.

The following graph shows the change in gender composition between the beginning and final years of the program.

## Number And Percent Of ADVANCE Faculty In Tenured/Tenure-Track Positions



### *ADVANCE Faculty Hires and Leadership*

Thirty-six females and 57 males were hired in tenure-track/tenured positions during the ADVANCE Institutional Transformation grant. Additionally, in this past year, new College of Engineering and College of Science Deans were hired. The College of Science hired its first female Dean. She has been a valuable asset to the ADVANCE Path Forward Committee and to the institutionalization of ADVANCE activities.

Leadership continues to support gender and ethnic diversity, with four female Chairs overseeing the 18 ADVANCE departments. Continuing as President of the university, Dr. Diana Natalicio has met with the ADVANCE team and Advisory Board each year of the grant, continuing to be an advocate for equality and diversity. While several female leaders have stepped out of Chair and Associate Dean positions, a new Chair opening in Physics currently has one male and one female candidate for the position. Additionally, one female Chair who previously moved to an Associate Dean position is in process of moving into the Provost's Office.

*ADVANCE Attrition*

Twenty-five tenure-track/tenured ADVANCE faculty left the University in 2007. Of these, 7 were females, 3 of whom were hires during the ADVANCE grant period (included in ADVANCE Faculty Hires above). None of the 7 females retired. One female relocated to another ADVANCE institution where her husband is a tenured faculty member. Another female left due to a better financial offer and closer location to family. Of the 25 males leaving, 6 retired.

When asked in the fall 2007 Faculty Work Life Survey if they had ever considered leaving UTEP, 74% of the female respondents and 68% of the male respondents replied they had considered leaving. However, only 33% females and 50% males responded that they had “seriously” or “somewhat seriously” considered leaving. The others considering were “not very seriously”. 52% of all whites (compared with 32% Hispanic and 22% Asian/African American) and 55% full Professors (compared with 46% Associate, 32% Assistant and 44% non tenure-track) indicated they had seriously or somewhat seriously considered leaving. The percent indicating they ever considered leaving UTEP dropped by 8% for males and 15% for females between the 2004 and 2007 surveys.

*Salary*

A salary study was conducted using the 2007-08 nine-month academic salary, controlling for rank and discipline. Tenure-track/ tenured faculty and full-time lecturers were included in the study. Inadequate data existed for females at the full professor and associate professor ranks in Business and Engineering. In Social and Behavioral Sciences (SBS) and Physical/Life Sciences (coded as “Science”), the average female salary was higher than their male counterpart for full professors (see table below). The majority of females in Social and Behavioral Sciences, representing those at the lecturer (full time only), assistant professor and associate professor rank, averaged less than men at the corresponding rank. Whereas only one rank showed female average salary to be higher than males in SBS, in Science, the reverse was true. Only at the assistant professor rank did females average less than males, with the average difference between males and females less than \$800.00. Business had a greater average salary for female lecturers and male assistant professors. Engineering was reversed, with a female assistant professor averaging more than a male assistant professor, while the male average salary for lecturers surpassed females.

*Average Academic Salary by Gender, Position, and Discipline - 2007*

College	Professor		Associate		Assistant		Lecturer	
	Male	Female	Male	Female	Male	Female	Male	Female
Business	97,638.33		86,919.42		96,445.22	93,104.75	40,749.50	41,082.00
Engineering	90,085.85		86,577.11		76,118.61	79,770.25	57,473.33	43,480.00
Social & Behavioral Sciences	87,022.50	92,243.70	65,717.30	62,710.25	56,799.66	52,630.45	38,527.20	36,870.07
Science	89,803.70	93,476.75	65,298.64	69,397.00	60,341.86	59,613.00	38,552.26	40,958.16

When ANOVA tests were run testing for statistical difference by gender, controlled for by discipline and rank, none was found.



### *Tenure and Promotion*

The 2007-2008 year proved to be another successful one for all ADVANCE female faculty who went up for tenure and/or promotion. This year witnessed the largest number of applicants (30) for tenure and/or promotion during any year of the ADVANCE grant. Twenty-five males and five females applied. Three females in Science and Engineering will be promoted from associate to full professor, increasing the number of full female professors in ADVANCE departments to 16 in Fall 2008 (excluding the female Dean of Science). Two assistant professors in SBS will receive tenure and promotion to associate professor. 100% of ADVANCE females who have gone up for tenure and/or promotion during the course of the grant were approved.

Twenty-five males in ADVANCE departments also went up for tenure and/or promotion. Of these, 20 have been approved by UTEP. Six males in Science were promoted to full professor. Ten males in ADVANCE departments received tenure and promotion to associate and four untenured associates received tenure only. Of those males denied, two were denied tenure and promotion to associate, one untenured associate was denied tenure and two tenured associates were denied promotion to full professor. Over the entirety of the grant, 82% of ADVANCE males who have gone up for tenure and/or promotion were approved.

The ADVANCE components have had considerable impact in satisfaction with the tenure/promotion process overall. Between the first and second administrations of the Faculty Work Life Survey, 11% more males (71%) and 24% more females (81%) reported being satisfied with the tenure/promotion process overall. Similar increases in agreement were seen to the following statements:

- I understand/understood the criteria for achieving tenure/promotion.
- I received feedback on my progress toward tenure/promotion.
- I feel/felt supported in my advancement to tenure/promotion.
- My senior advisor/mentor committee is/was very helpful to me in working toward tenure/promotion.

The one statement where responses for males declined in agreement between survey administrations was “I was told about assistance available to pre-tenure/promotion faculty (e.g., workshops, mentoring).” Females in agreement increased between survey administrations, from 64% in the first wave to 76% in the second wave. Males declined from 62% to 46%. The ADVANCE Faculty Mentoring Program for Women is a major initiative of the ADVANCE grant where promotion/tenure is addressed. Survey responses to this question and actual promotion/tenure results both suggest that a similar program for men would be beneficial.

### *Start-Up Packages*

Start-up data were gathered on 24 males and 12 females from the last two years of ADVANCE hires. With so many contributing factors, it is difficult to make any strong conclusions on this volume of data; however, ranges and averages can be given along with several points that seem to indicate differences do not occur by gender or ethnicity. The average female start-up package was \$122,402, with a range from \$12,020 to \$262,020. The average male start-up package was \$110,016, with a range from \$2,020 to \$399,765. When examining start-up by ethnicity, Whites (n=16) received an average start-up of \$80,994 while Latinos (n=13) average start-up was \$141,434. Again the range was extreme, from \$2,020 (White) to \$399,765 (Hispanic). Removing the outliers, the average was much closer, with Latinos averaging only \$13,000 more than Whites.

The two largest contributing factors to start-up costs were discipline and laboratory renovation needs. Mechanical Engineering (which included two females) start-ups ranged from \$220,000 to \$250,000. In the Social and Behavioral Sciences, Psychology hires had the largest start-ups, in the \$75,000 to \$85,000 range. The Life Sciences (Biology and Chemistry) had the highest start-ups in the College of Science, beginning at \$180,000, averaging \$239,755. In disciplines with more than one faculty hire, females and minorities (Latinos and Asians are the two classifications of minority hires at UTEP) frequently were at the high end of the start-up range.

Men reported decreased agreement between Faculty Work Life Survey administrations to the statement, "I was pleased with my start-up package." In the first administration, 70% of the ADVANCE male faculty agreed with the statement, while only 65% agreed during the second administration. Agreement to this statement increased by women from 59% to 72%. Though naivety to the negotiation process decreased between administrations, over half reported being naïve. After carefully examining the data paying close attention to discipline and rank, females and minorities fared well in their start-up negotiations.

### *Space and Resource Allocations*

A minimal amount of renovation and movement has occurred to space since the earlier Office and Research Laboratory Square Footage by Gender study presented results showing no difference by gender. Interestingly, results to the topics of office and laboratory space in the two administrations of the Faculty Work Life Survey reported changes. Responses of agreement to the statements, "I have sufficient office space" and "I have sufficient laboratory space" are shown below:

#### Sufficient Office Space

- 1<sup>st</sup> administration – 72% male and 68% female agreement
- 2<sup>nd</sup> administration – 86% male and 80% female agreement

#### Sufficient Laboratory Space

- 1<sup>st</sup> administration – 58% male and 67% female agreement
- 2<sup>nd</sup> administration – 70% male and 68% female agreement

Neither statement showed statistical significance between gender or ethnicity to indicate that a follow-up physical study was necessary.

In conclusion, data identified by the NSF 12 Indicators supports results of the Faculty Work Life Survey. Change still remains necessary, as the number of females continues to be underrepresented in many departments. Although the majority of both males and females agree that the climate for women is good and the departments are actively recruiting women and minority faculty, too few women still exist in many of the departments and in leadership positions. With high satisfaction rates overall during the most recent survey (91% male and 89% female respond that they are very satisfied or somewhat satisfied to the question, “How satisfied are you, in general, with your job at UTEP?”), UTEP is poised to continue diversifying the faculty to better represent the diverse student population it serves.

### C. TRAINING AND DEVELOPMENT

The NSF ADVANCE initiative sponsored numerous training and awareness sessions during 2007-08. A partial list is provided below. For a complete list of dissemination activities, see Appendix G: Dissemination Matrix 2007-08.

#### 1. **ADVANCE Sponsored Training Activities:**

- **IMPACT Seminar:** designed to increase the effectiveness of participating faculty by developing new ways of integrating teaching, research and service, and by developing leadership skills. Eleven were funded by NSF ADVANCE (\$16,500) while 4 were funded by the Provost (\$6,000). May 2008.

ADVANCE funded:

Yoonsik Cheon, Assistant Professor, Computer Science  
Sandra Garabano, Associate Professor, Languages and Linguistics  
Fernanda Garcia, Assistant Professor, Marketing and Management  
Kristin Gosselink, Assistant Professor, Biological Sciences  
Wen Yee Lee, Assistant Professor, Chemistry  
Kien Lim, Assistant Professor, Mathematical Sciences  
Aurolyn Lukyx, Associate Professor, Sociology and Anthropology  
Gregory Lush, Associate Professor, Electrical and Computer Engineering  
Katja Michael, Associate Professor, Chemistry  
Gina Nuñez, Assistant Professor, Sociology and Anthropology  
Christina Sobin, Associate Professor, Psychology

Provost funded:

Martha Casas, Associate Professor, Teacher Education  
Beverley Calvo, Associate Professor, Educational Psychology  
William Robertson, Assistant Professor, Teacher Education  
Brian Yothers, Assistant Professor, English

- **Mentoring Luncheons:** The Faculty Mentoring Program for Women sponsored monthly sessions where issues of effective scholarship and publishing, mentoring

success, goal setting and personal success strategies, and networking were discussed. Monthly.

- “Breakfast with the Provost:” The Faculty Mentoring Program for Women sponsored a session with participants of the FMPW and the Provost. The Provost answered the participants’ questions about tenure and promotion. November 2007.
- Brown Bag Lunches: monthly informal lunch meetings for pre-tenure women faculty around readings and issues of concern to them. Monthly.
- JoAnn Moody, Higher Education Consultant, facilitated several workshops with Deans, Chairs, Search Committee Chairs, and participants of the Faculty Mentoring Program for Women and IMPACT, on good practices for promoting good departmental climates and best practices in recruiting, retaining, and promoting a diverse faculty. September 2007.
- Maryellen Weimer, Teaching and Learning Consultant, will present a workshop on faculty development and teaching excellence at the Fall Faculty Retreat. The event will be co-sponsored by the Center for Effective Teaching and Learning. August 2008.

## **2. ADVANCE Sponsored Awareness Meetings:**

- Advisory Board Meeting. May 2008.
- President and Provost Meetings: met with the President and Provost to discuss the ADVANCE initiative and its progress. September 2007 and April 2008.
- Chair Chats: PI Witherspoon met with chairs to identify ideas, concerns, and suggestions related to recruitment, retention, and promotion of faculty. March 2008.
- Women Faculty Forums: Dr. Witherspoon met with women faculty to identify ideas, concerns, and suggestions related to climate issues. April 2008.

Internal dissemination presentations were given to the following on-campus entities:

- PI Posey presented on ADVANCE to the “Issues in Higher Education” class. September 2007.
- PI Witherspoon presented the purpose, methods, and findings from the “Pathways to the Ph.D.” project to the Introduction to Communication Graduate Studies class. October 2007.
- Evaluator Ryabov presented preliminary results from the 2007 Work Life Survey to the PIs and ADVANCE Faculty Fellows. February 2008.
- Evaluator Ryabov presented results from the 2007 Work Life Survey to the ADVANCE Path Forward committee. March 2008.

In addition, members of the ADVANCE team made the following contributions to the UTEP campus:

- PI Witherspoon served as a member of the institution’s Intercollegiate Athletics Council.
- PI Witherspoon served as a faculty member in the institution’s Master of Leadership Studies program, offering a course on “Leading Change—A Communication Perspective.” Most of the students in the course are captains and sergeant majors in the U. S. Army.

### 3. Training and Development Sessions Attended by ADVANCE Personnel:

- UTEP EO/AA officer: PI Anthony, Evaluator Ryabov, and Coordinator Renner met to coordinate efforts for faculty recruitment and record-keeping practices to evaluate success of ADVANCE recruitment strategies in September 2007.
- PI's Posey, Anthony, and Witherspoon; Evaluators Ryabov and Darnell; Coordinator Renner; and Dean of the College of Science, Dean Morrobel-Sosa, attended the NSF ADVANCE Meeting. May 2008.
- ADVANCE and the Provost's Office coordinated an audio conference by Inside Higher Ed, "Promoting Faculty Careers for Women. Fourteen administrators, department and program heads, and representatives from Human Resources attended. June 2008.

#### D. OUTREACH

Members of the ADVANCE team provided outreach to members of other communities. A partial list is provided below. For a complete list of dissemination activities, see Appendix G: Dissemination Matrix 2007-08.

- Faculty Fellow Hadjimarcou presented on the IMPACT Seminar at the POD National Conference. November 2007.
- PI Witherspoon presented a two-hour workshop on conflict management to ADVANCing Leaders Program at New Mexico State University. January 2008.
- PI Posey served as a consultant and external advisor to the Texas Tech ADVANCE PAID grant. Conducted site visit in May 2008.
- Drs. Anthony, Posey, Ryabov, Witherspoon, and Coordinator Renner and Evaluator Darnell presented at the NSF PI meeting. May 2008.
- PI Witherspoon presented a session on conflict management and served on a panel on family policies at the New Mexico State University PAID Department Head Retreat. May 2008.

### III. PUBLICATIONS

#### A. JOURNAL PUBLICATIONS

Anthony, E., "NSF ADVANCE Initiative: Institutional Transformation to Achieve Faculty Diversity," *Geological Society of America Abstracts: Special Session Minorities, Women, and Persons with Disabilities in the Geosciences: Continuing Issues and Innovative Solutions*, (2004). Published

Anthony, E. and Bell, R., "Empowering Women Scientists and Engineers: The ADVANCE Program at the NSF," *American Geophysics Union Abstracts: Special Session on Strategies for Academic Success*, (2004). Published

Anthony, E.Y., "Characterization of Continental Mantle in an Active Rift Zone: Kilbourne Hole, New Mexico," *Inaugural EarthScope National Meeting*, (2005). Published

Anthony, E. Y., "Lithospheric North America: insights from xenoliths and applications to EarthScope," *Dickinson Symposium*, (2007). Published

- Anthony, E. Y., "Source regions of granites and their links to tectonic environment: Examples from the western United States," *Lithos*, vol. 80, (2005), p. 61. Published
- Anthony, E. Y.; Andronicos, C.; and Ren, M., "Petrologic and rheologic contrasts in Proterozoic-aged lithospheric mantle: Kilbourne Hole, New Mexico," *Geological Society American Southcentral Meeting*, (2005). Published
- Anthony E.Y.; Ren, M.; Cardon, K.P.; Stern, R.J.; Kimura, J.; Michibayashi, K.; Satsukawa, T.; and Ducea, M., "Continental mantle in the Rio Grande rift: chemistry and fabric studies of xenoliths from Kilbourne Hole, New Mexico," *EOS Transaction, American Geophysical Union*, (2007). Published
- Anthony, E.Y.; Ren, M.; Omenda, P.; and White, J., "QUILF Equilibria for Trachytes and Pantellerites from the Kenya Rift," *15th Annual International Goldschmidt Conference*, (2005). Published
- Archuleta, R.J.; Hoppes, Y.P.; and Primm, T.P., "Mycobacteria Enter a State of Metabolic Dormancy in Response to Starvation", *Tuberculosis*, vol. 85, (2005), p. 147. Published
- Bain, L.J. and Gonzalez, H.O., "Effects of Arsenic Exposure on Development," *Proceedings of the Annual Society of Environmental Toxicology and Chemistry Meeting*, p. 1028, (2006), Published
- Benedict, B.; Fisher, W.W.; Golding, P.; Ortega, R.; Osegueda, R.; and Perez, L.T., "Basic Engineering Science and Technology Success for Students at Community Colleges and Universities," *Extreme Makeover: Improving Education in the Classroom to Ensure Student Success*, (2004). Published
- Benker, S.C.; White, J.C.; Ren, M.; Miggins, D.P.; and Anthony, E. Y., "New evidence for stratigraphic revision of the South Rim Formation, Big Bend National Park, Texas," *Geological Society of America Abstracts with Programs*, vol. 39, (2007), p. 511. Published
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## B. BOOKS OR OTHER ONE-TIME PUBLICATIONS

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## C. OTHER SPECIFIC PRODUCTS

### **Brochure**

NSF ADVANCE: Institutional Transformation for Faculty Diversity  
Revised and updated brochure provides information about the UTEP NSF ADVANCE initiative. This brochure is used both on and off-campus to promote ADVANCE.

### **Brochure**

New Mexico State University and the University of Texas at El Paso Dual Career Opportunities  
UTEP and NMSU will use this as part of their faculty recruitment efforts, striving to jointly increase methods of accommodating the needs of dual career couples.

### **Data or databases**

Faculty Work-Life Survey. (modification of the University of Wisconsin Madison Faculty Work-Life Survey)

This survey establishes baseline data for issues of culture and climate to draw distinctions across gender, ethnicity, departments and colleges and to document a case study for future research and publications. The survey will be re-administered in Fall 2007.

**Data or databases**

UTEP's NSF ADVANCE: Dissemination Matrix

This database is a collection of dissemination activities. It briefly describes the activity, the date of the activity, the component responsible for the activity and the number of individuals involved in the activity.

This database helps track the effort involved in guiding institutional change. We will encourage any researchers interested in tracking such activity to use the information we have collected. We will also share this matrix with other ADVANCE sites and encourage them to collect this type of information so that comparisons can be made across the various institutions.

**Data or databases**

NSF Quantitative Indicators of Activity and Progress

This database tracks UTEP faculty, based on fall appointments beginning in 2004 and faculty files from the Provost's Office. Data derived from the NSF 12 indicators populate the database.

Automated data feeds from other UTEP systems will be performed each fall. The database is encrypted and password protected to secure access of faculty information. All data will be reported in aggregate form.

**Promotional Materials Folder**

The UTEP NSF ADVANCE folder promotes initiative through visual logo recognition while serving as a practical means to disseminate UTEP

ADVANCE brochures, business cards, promotional materials, and other information.

Used as promotional information for the grant.

**D. INTERNET DISSEMINATION****Web site**

This is the official Web site for the Faculty Mentoring Program for Women.

<http://www.dmc.utep.edu/mentoring>

Used as promotional information for the grant.

**Web Site**

<http://www.utep.edu/advance>

This is the official Web site for the award.

**IV. CONTRIBUTIONS****A. CONTRIBUTIONS WITHIN DISCIPLINE**

UTEP was well-represented at the last ADVANCE PI meeting with six members of the ADVANCE team on the program and the new UTEP Dean of Science, Anny Morrobel-Sosa, in attendance. Principal investigators Posey, Anthony, and Witherspoon also presented on ADVANCE at their own professional society meetings.

PI Witherspoon and Evaluator Ryabov had an article, "Diverse Pathways to the PhD: A Study of Women Faculty in the Sciences and Engineering at A Hispanic-Serving



Institution” accepted for publication in the *Journal of Women and Minorities in Science and Engineering*.

PI Witherspoon continues to be called upon to provide workshops on leadership and conflict management. For example, she presented to department heads from several New Mexico universities as part of an NMSU ADVANCE-sponsored event.

The book *Transforming Science and Engineering: Advancing Academic Women*, edited by Abigail J. Stewart, Janet E. Malley, and Danielle LaVaque-Manty was published in October 2007. It includes a chapter, “A Faculty Mentoring Program for Women: Building Collective Responsibility for a Highly Qualified Faculty” by PI Posey, former PI Tine Reimers, and former Coordinator Kelly Andronicos.

PI Posey serves as a consultant and external advisor for the Texas Tech PAID grant: Partnership of Women in Engineering, Research, and Science (PoWERS). As the external reviewer for TTU PoWERS, Posey conducted a site visit May 2008 and followed up with a report.

In addition, PI Posey served as a resource to faculty at the following universities developing PAID proposals: The University of Texas Health Science Center at San Antonio, the University of Texas at Arlington, and the City University of New York.

#### **B. CONTRIBUTIONS TO OTHER DISCIPLINES**

The UTEP ADVANCE team is committed to contributing to the knowledge base by presenting on NSF ADVANCE at every available opportunity. ADVANCE PIs Evelyn Posey (UTEP), Christine Hult (Utah State), and Susan Carlson (Iowa State), all English professors, presented on ADVANCE at their national conference, the Conference on College Composition and Communication, in April 2008.

#### **C. CONTRIBUTIONS TO HUMAN RESOURCE DEVELOPMENT**

The UTEP ADVANCE initiative has contributed several processes and documents for use on this campus and to be shared with Human Resources departments at other universities. A policy for stopping the tenure clock is now in place in the UTEP Handbook of Operating Procedures. Evaluator Ryabov developed an Exit Survey, now in use. PI Anthony drafted a dual career policy, and Faculty Fellow Wendy Francis drafted a handout on medical leave policies that are still under review.

Partly in response to ADVANCE team requests, UTEP’s Human Resources department hired an employee with responsibility to provide assistance to faculty with an emphasis on service rather than compliance.

#### **D. CONTRIBUTIONS TO RESOURCES FOR RESEARCH AND EDUCATION**

The need for data for the NSF 12 indicators has caused UTEP to reconsider the way it collects and maintains faculty data. The university has purchased a database, *Digital Measures*, to assist with the continued maintenance of the NSF 12.

## E. CONTRIBUTIONS BEYOND SCIENCE AND ENGINEERING

As a result of our Advisory Board's recommendation, our ADVANCE program is developing a public relations campaign to spread the word of our ADVANCE accomplishments and to determine the best way to approach donors for assistance with carrying forward ADVANCE initiatives. This effort will bridge science, engineering, communication, and university fundraising.