

NSF-*Advance* Institutional Transformation at
Case Western Reserve University

*Promoting a campus-wide culture of equity,
participation, openness, and accountability*

Academic Careers in
Engineering & Science (ACES)
*Final Report
and Institutionalization
as ACES+*



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www.cwru.edu/admin/aces/index.html

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About ACES

Vision and Implementation

In 2003 CWRU established Academic Careers in Engineering and Science (ACES) to strive toward gender equity through institutional transformation. The 5-year \$3.5 million program was the first National Science Foundation (NSF) *ADVANCE* grant to a private institution.

Led by the University's Deputy Provost Lynn Singer, with Co-PIs from science and engineering departments and from the department of organizational behavior in the School of Management, the program adopted innovative strategies to improve the participation of women faculty in science and engineering at all levels of faculty and academic leadership.

The goal of ACES was to promote a culture of equity, participation, openness and accountability at CWRU. Specific objectives were: (1) to increase the participation of women at all levels of the university and (2) improve the climate for women faculty through initiatives which ultimately benefit the entire campus. The activities and results achieved through ACES during 2003–2008 are summarized in this report.

ACES Investigators chose 31 NSF fundable departments in four schools at CWRU: the College of Arts & Sciences (CAS), Case School of Engineering (CSE), Weatherhead School of Management (WSOM) and the School of Medicine (SOM) which provided a broad set of departmental variety in size, composition, and research methods in order to allow best practices to be thoroughly tested before being recommended to the university at large. Working closely with the ACES team to launch the initiatives in their schools, the deans of the four schools also received executive coaching.

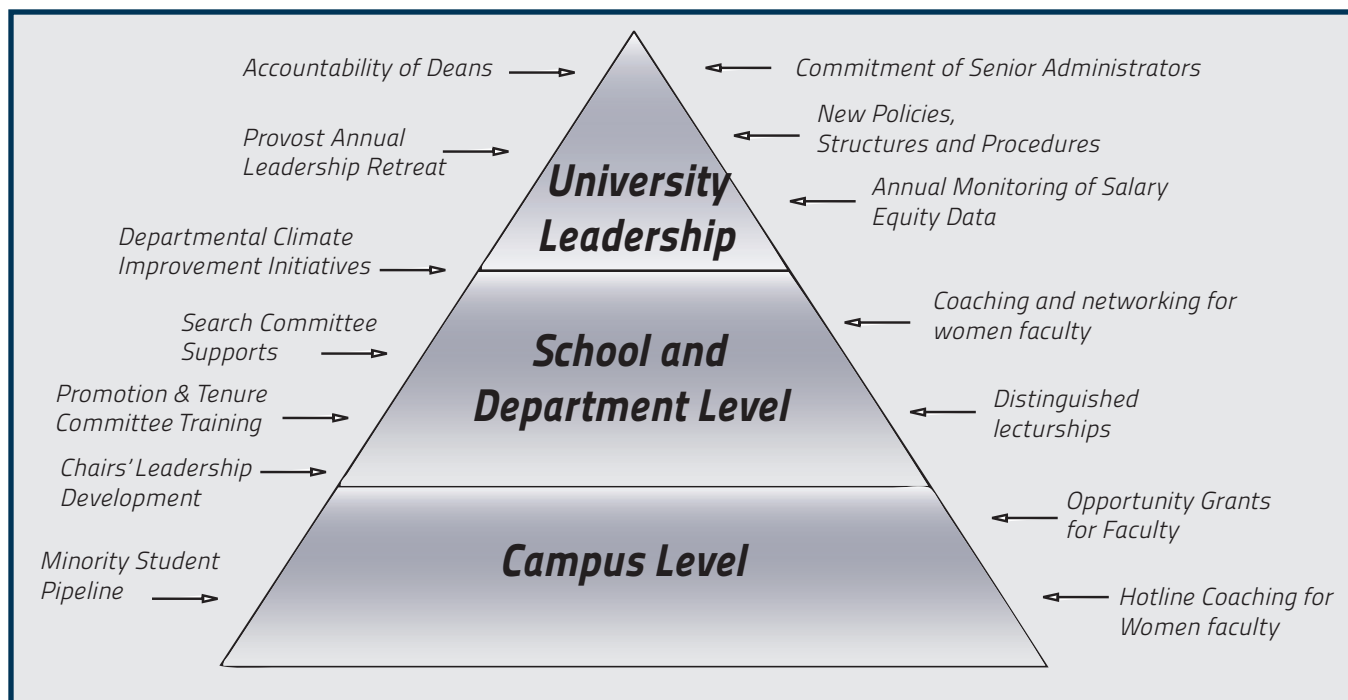
ACES major initiatives were structured to impact at three levels: University Leadership, the School and Department, and Campus-wide. Institutionalization of the initiatives, now called ACES+, began in 2008 and is noted throughout this report.

Purpose and Goals

Assessing and Improving the Progress of Women Faculty at CWRU

The ACES program was launched with the goal of increasing the percent of Science and Engineering women faculty over baseline by 20% over the 5-year period with four primary activities:

1. Targeted Recruitment, using the following indicators
 - ⇒ Increase the percentage of women at the assistant professor level
 - ⇒ Increase women as percentage of endowed chair holders
 - ⇒ Increase women as percentage of all candidates in search pools
 - ⇒ Increase women as a percentage of all candidates invited to visit CWRU
 - ⇒ Increase women as a percentage of candidates offered jobs
2. Advancement and Retention
 - ⇒ Increase the percentage of women faculty at the associate and full professor level through promotion from within
 - ⇒ Increase the percentage of women department chairs and in academic leadership or administration positions at the school level
3. Institutional Climate Change
 - ⇒ To improve qualitative perceptions and ratings of climate through surveys
 - ⇒ Increase resource equity for women faculty, including salary equity, teaching loads, lab space, retention perks, etc.
 - ⇒ Increase the percentage of women invited to campus as distinguished lecturers, visiting speakers/scholars, etc.
4. Faculty Development
 - ⇒ Create and institutionalize coaching and mentoring mechanisms
 - ⇒ Conduct training and education workshops for all faculty
 - ⇒ Create school-level opportunity grants for the career development of women and minorities



Structure of ACES Initiatives for Institutional Transformation

Initiatives

Accountability of Deans

The ACES program called for accountability of Deans by the Provost on a series of criteria tracking progress in the recruitment, advancement and retention of women faculty in the S&E disciplines as well as improved institutional climate. While there was a significant realization of the goal, there was also variability across schools and deans. Overall, CWRU increased the percentage of women faculty in the S&E departments by 17.3% from 2004-08. Graphs showing the comparisons are found in the Research and Evaluation section of this brochure.

During the grant period, two Faculty climate surveys (2004 and 2007) were completed. Findings were that CWRU improved certain key aspects of the climate for women faculty, reducing the perceptions of lower community and job satisfaction, resources and supports reported by women faculty in 2004. Supports for faculty work-life integration were felt to be significantly improved. Salary eq-

uity studies done in 2007 and 2008 indicated substantial progress in achieving salary parity in all schools. Significant discrepancies in the 4 ACES schools found in 2007 were eliminated in 2008 in all but management. Climate survey graphs are found in the Research and Evaluation section of this brochure.

Accountability Institutionalized through the Office of the Provost

The Office of the Provost continues to monitor the institutional climate by administering a Faculty Climate Survey every three years. In 2010 the survey was conducted by the Office of Institutional Research.

ADVANCE Opportunity Grants

Opportunity Grants provided support for S&E women for projects and activities where funding is difficult to obtain through other sources, such as childcare funds needed to attend scientific

"The ACES grant ...has allowed me to help organize and attend an important small conference in my field. Because of this conference, I am now an associate editor on a monograph. With this came increased visibility, and when I came up for my tenure review, my taking leadership to organize that conference was looked upon very favorably."

—Female faculty member

ADVANCE Opportunity Grants Institutionalized through ACES+

ACES+, continues to offer ADVANCE Opportunity Grants. All faculty members are eligible to apply for these grants which provide small amounts of supplemental support of current or proposed projects and activities where funding is difficult to obtain through other sources. The proposal deadline is generally in December with awards made in January/February of each year. An internal advisory board reviews the proposals. More information can be found at www.case.edu/admin/aces/opportunity.html

"The Opportunity grant had a significant impact. It allowed us to go into a new direction: ...which I would not have been able to do otherwise, ...our research now has broader meaning because of the grant. Two papers have resulted from this research so far, but several more are anticipated."

—Female faculty member

meetings, seed money to start new projects, travel to workshops to acquire new skills. From 2003 – 2008 ACES awarded 65 grants to 53 women and one Hispanic male faculty member. The recipients reported that these small grants made big impacts on faculty careers.

Departmental Initiative Grants

ACES also provided Departmental Initiative Grants (DIGs) to promote positive climate change in the departments by strengthening collegiality, increasing visibility or promoting faculty development. DIG proposals required both faculty and department chair input and buy-in. A total of eight proposals were funded between 2005 – 2008 for projects as varied as seminar programs to converting a storage space to a faculty lounge.



Department chairs at the 6th Annual Provost Leadership Retreat

Annual Provost Leadership Retreat

On October 26, 2004 for the first time ever, the President, Provost, deans of the schools of Engineering, Management, Medicine and the College of Arts and Sciences, along with the chairs of 31 S&E departments gathered to discuss issues pertinent to the recruitment, retention, advancement, and leadership of women faculty. The Annual Provost Leadership Retreat was launched with the goal of building a sense of collegiality and common purpose among department chairs and administrators in S&E. The event was a pivotal

source of information regarding institutional and national research, progress in improving the CWRU campus climate for women, best practices for recruitment and retention, and professional networking for department chairs.

Each retreat has had a unique focus developed by the Co-PI's. The initial 2004 retreat included NSF *ADVANCE* program directors, who presented information on key programs and findings from their first round *ADVANCE* project.

- 2nd Annual Provost Leadership Retreat (2005) "Things That Work!"
- 3rd Annual Provost Leadership Retreat (2006) "Leading Change: Creating Tomorrow's University"
- 4th Annual Provost Leadership Retreat (2007) "Competing for the Academic Workforce in a Global Environment."
- 5th Annual Provost Leadership Retreat (2008) "Consolidating Our Gains, Shaping Our Future"

Annual Provost Leadership Institutionalized through Office of the Provost and ACES+

Information about the most current retreat is found at www.case.edu/admin/aces/provostleadership.html. Retreat history, including agendas, photos and presentations from 2004 through 2010 is found at www.case.edu/admin/aces/retreathistory.html.

Dean's Fellows for Advancing Collegiality

In 2007 ACES conducted a pilot leadership development program in the Case School of Engineering (CSE), using a group-coaching format. Twelve senior faculty members (Fellows) participated in the nine-session program. Fellows learned about the factors that limit the ad-

vancement of women and other under-represented groups as well as issues that hinder faculty retention, gained skill in communicating with and influencing others, and developed a collective, inclusive leadership perspective. The Fellows each developed a change initiative to "Advance Collegiality" and presented their recommendations to the CSE senior leadership.

Advancing Collegiality Institutionalized through CSE and IDEAL

Based on the recommendations of the Dean's Fellows, the CSE Dean created the new position of Associate Dean of Faculty Development for the school to implement the mentoring program. The model was further implemented as Institutions Developing Excellence in Academic Leadership (IDEAL), a Partnership for Adaptation, Implementation and Dissemination grant from NSF *ADVANCE* that collaborates with five public research universities in Northeast Ohio. www.case.edu/provost/ideal.html.



Dean May Wykle, Professor Patricia Higgins, and Dean Cyrus Taylor at the Annual Provost Leadership Retreat



Dean Mohan Reddy and Professor Diana Bilimoria discuss research findings at the Annual Provost Leadership Retreat.

Distinguished Lectureships

The goals of the *ADVANCE* Distinguished Lectureships were to increase the visibility of senior women scientists and engineers on campus and provide networking opportunities for faculty and students. Distinguished Lecturers were invited based on mutual research interests with faculty in the host department for up to two weeks at CWRU. The visit included 3-6 departmental lectures and a public lecture followed by a reception.

Both men and women faculty enthusiastically took advantage of this popular program to bring senior women in S&E to Case. During the 5-year award forty senior women scientists and engineers were hosted as Distinguished Lecturers at CWRU.

Distinguished Lectureships Institutionalized through CLIPs and ACES+

In 2007, the Center for Layered Polymeric Systems (CLIPs), an NSF Science and Technology Center in the Department of Macromolecular Science & Engineering, began institutionalizing the Distinguished Lectureships by funding two lectureships per year for the duration of their 10-year award.

ACES+ Distinguished Lectureships, are available campus-wide to support senior women faculty or underrepresented minority

faculty to visit the CWRU campus for up to four days of collaboration and lectures. The Lectureship includes a \$1,500 honorarium and funds for travel, lodging and a reception. www.case.edu/admin/aces/lectureship.html

Executive Coaching

The ACES executive coaching program used specially trained professional executive coaches drawn from CWRU's Executive Education Center to develop skills among STEM deans, department chairs and women faculty to achieve professional and organizational goals, and to undertake positive change in their respective departments and schools.

An executive coach helps the participant to specifically determine career and leadership vision, goals, plans, and actions by giving advice, resources, and feedback. ACES coaching consisted of a 6-8 sessions for women faculty and 8-10 sessions for deans and chairs. A total of 118 individuals participated in coaching (20 chairs, 3 deans, 2 associate deans, and 3 deputy/associate provosts, 88 female and 2 minority male S&E faculty members).

"I completed my ACES coaching this month and would like to express my thanks to you...for having provided this resource/opportunity. I found the experience beneficial on many levels, in particular for a deeper understanding of the inter-relations of my professional and personal lives...The process was also very helpful for better understanding of how I impact the people around me and vice versa. In sum, it was one of the best resources the University has provided me since I arrived at Case. I would love to have an opportunity to do it again in 5 years and see how things have evolved for me."

—Male department chair

Executive Coaching Institutionalized through ACES+

Executive Coaching continues as part of ACES+ funded by the Office of the Provost. The program now consists of:

- Three coaching sessions are made available for new S&E women faculty.
- Four coaching sessions are made available for all new chairs, irrespective of gender, race or discipline.

Hotline Coaching

Hotline coaching, initiated in spring 2006, provided emergency-type coaching to all campus women faculty on an as-needed basis. Women faculty facing unique opportunities and challenges could 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 2006-08, a total of 24 women faculty received 1-3 hotline coaching sessions. Issues for which hotline coaching was sought included: negotiations, career development assistance, research funding/budget management, work-

"[My hotline coach] and I met and talked yesterday. It was enormously helpful... She has given me some "homework" and we plan to have our second meeting in a month or two when I've had a chance to finish the homework and do some more thinking. Thank you, and ACES, so much for making this possible. It still blows me away that the university is willing to make such an investment in me."

—Female department chair

life integration, and improving collaboration and interpersonal skills. Participants' evaluations of the ACES Hotline Coaching program were extremely positive.

Hotline Coaching Institutionalized through ACES+

Hotline Coaching continues as part of ACES+ funded by the Office of the Provost. CWRU women and men faculty facing unique opportunities and challenges are now eligible to receive 1 or 2 sessions of short-term, quick-

turnaround hotline coaching on an as-needed basis.

Faculty Development, Mentoring and Networking

ACES Mentoring was introduced in January 2004 as a mentoring committee structure consisting of three individuals: (1) one from inside the department, (2) external to the department, and (3) external to the university. The mentoring initiative, designed to be complemented by the executive coaching component, was labor



Jeffrey Duerk, chair of Biomedical Engineering, and Provost W.A. "Bud" Baeslack, III



Margaret Stager, chair of Pediatrics at Metro-Health Hospital, and Dorothy C. Miller, Director of the Flora Stone Mather Center for Women

intensive to manage and was replaced in 2007 with an informal mentoring initiative which included communication seminars, peer/near peer monthly discussions and bi-monthly lunches with ACES Co-PI's. In response to feedback in 2006, an annual mentoring of senior faculty workshop was also initiated.

Beginning in 2004 Faculty Development workshops took place twice yearly in cooperation with the Flora Stone Mather Center for Women. Featuring leading scholars, the topics included mentoring, gendered communications, negotiating, using emotional intelligence, dealing with difficult situations, and planning a successful academic career. Professional Networking events were held once a year and included speakers like Bernice Sandler, a University Wide Meeting for Women Faculty and the Annual ACES Theatre Party. These events allowed informal networking and socializing across departments and college/schools and were consistently popular and well attended.

In addition, professional networking and development for department chairs was offered through participation in the University of Washington's ADVANCE Leadership Workshop. A total of ten CWRU department chairs, two per year from July 2004 – July 2008, attended the training and found it to be timely and useful.

Since 2004 the Flora Stone Mather Center for Women, in conjunction with ACES and with co-sponsorship from the Office of the Provost, has annually hosted a Women of Achievement Luncheon, to acknowledge women faculty who have attained tenure, promotion, named professorships and administrative posts. In 2005 "Spotlight Series Prize Awards" were added to recognize the contributions of women faculty scholars. In Fall 2008, the Spotlight Prize event was combined with the Women of Achievement luncheon.

Faculty Development Institutionalized through Office of the Provost, Flora Stone Mather Center for Women and ACES+

The Role of Senior Leadership workshop initiated through ACES has continued to be presented each summer as an orientation for Full Professors at Case Western Reserve University. Faculty mentoring has become a priority focus of the Faculty Development Council, chaired by the Deputy Provost.

The ACES+ Annual Theatre Party continues as an informal networking and socializing evening across departments and college/schools with a nearly full house each year attending a production of the MFA students in the CWRU Department of Theatre and Dance.

Faculty Development workshops are now offered twice yearly through the Faculty



President Barbara Snyder, Deputy Provost Lynn Singer, and Professor Emeritus John Angus

Academic Careers in Engineering & Science (ACES)



Professor Lawrence Sayer, Chemistry, and Donald Feke, Vice Provost for Undergraduate Education, present at the 2006 Annual Provost Leadership Retreat.

Leadership Development Institute (FLDI). Launched in 2010 the FLDI serves as a resource for women faculty in the areas of leadership training and professional development by providing programming such as national speakers, campus workshops and informal lunchtime discussions. Addressing issues unique to women faculty at different ranks, topics include managing a research budget, lab supervision, committee participation guidelines, work life balance, mentoring, enhancing communication skills, effective negotiating and techniques for interacting with chairs and administrators. Initially funded by the Office of the Provost (through 2012) the Institute will become a permanent part of the FSM Center in 2013.

The Flora Stone Mather Center for Women continues to host the Women of Achievement Luncheon and Spotlight Awards annually. www.case.edu/provost/centerforwomen/academics/achievement.html

Faculty Search Training

New guidelines for faculty search committees were developed to incorporate best practices for faculty recruitment from research universi-

ties nation-wide. Recommendations for diversifying the candidate pools, including accountability on the part of deans and department chairs for efforts to diversify the candidate pool, were approved by the Provost in May 2004.

Trainings were provided to S&E search committees and self-help web tools and resources were developed and made available to the entire campus, and the first online voluntary Affirmative Action Survey for Faculty Candidates was launched as a mechanism to track trends in faculty recruitment.

In Fall 2005 ACES proposed, and the Provost

mandated, attendance at a faculty cultural competency workshop within the first fiscal year of a faculty hire. Debuting with 100% compliance in 2005 this session has subsequently become an important means of faculty orientation and information dissemination. The



Mark Chance, director, Center for Proteomics and Bioinformatics, and James W. Kazura, director, Center for Global Health and Diseases

90-minute interactive presentation focused exclusively on faculty-specific situations in the department, lab and classroom.

The new Faculty Search Guidelines were implemented campus-wide in 2006 and faculty search committee training was made available to the entire campus. In July 2007, the Faculty Diversity Specialist position evolved into the Manager of Faculty Diversity and Development to include more specialized departmental interventions such as meeting facilitation, mediations and retreats.

***Faculty Search Training
Institutionalization through
The Office of Inclusion, Diversity and
Equal Opportunity***

In Fall 2005 the position of Faculty Diversity Specialist was made permanent in the Office of the Provost and in 2008 the position, as Manager of Faculty Diversity and Development, became a permanent part of the Faculty Diversity Office, now part of the Office of Inclusion, Diversity and Equal Opportunity.

Faculty Cultural Competency training, now called "Diversity and Inclusion at Case Western Reserve", is designed for faculty to achieve a better understanding and appreciation of differences in others and stressing the importance of an equitable, welcoming climate for all faculty, staff, and students and it remains a requirement.

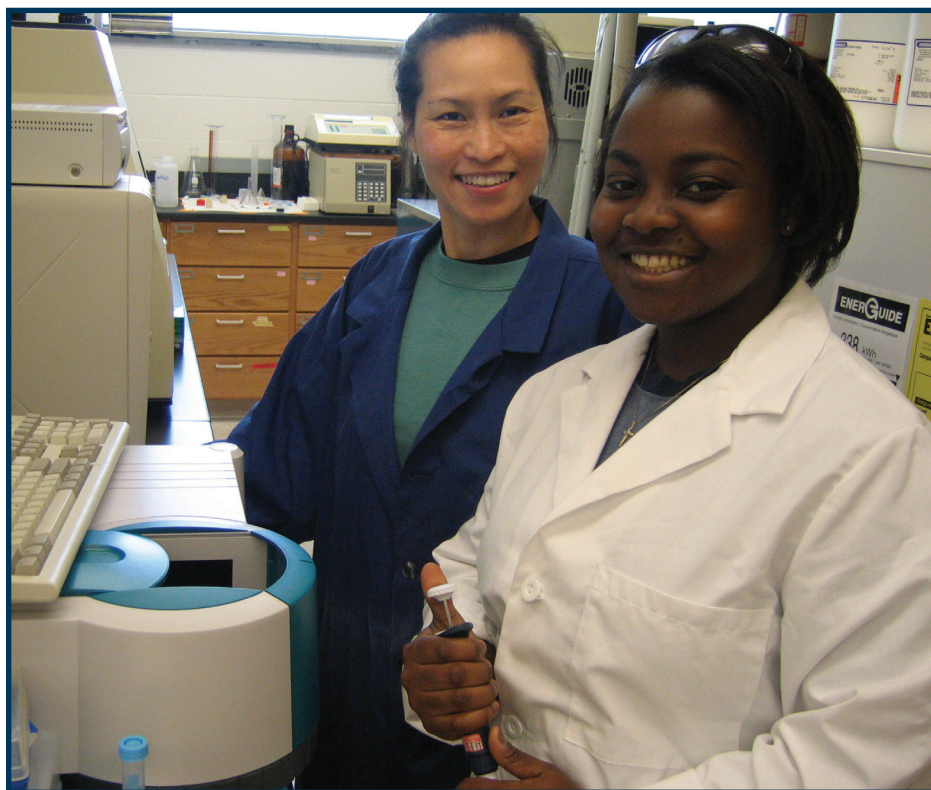
www.case.edu/diversity/faculty/fdo.html.

Minority Pipeline: Faculty Exchange and Summer Undergraduate Research

To increase the CWRU relationship with Fisk University and provide additional role models for minority women students at Case, ACES sponsored a yearly visit to campus from an S&E woman faculty member from Fisk or another historically Black College or University.

The Summer Undergraduate Research Program (SURP) for minority women students in S&E provided an opportunity for a student to spend ten weeks working in a research laboratory or research program, attend lectures by science and engineering faculty, and give a poster presentation. SURP included a stipend, plus support for housing, meals, travel, and supplies. In 2004 ACES began actively recruiting from Historically Black Colleges and Universities and by 2008 over 150 applications were submitted to the program.

The hands-on, intensive program encouraged 5 – 8 minority undergraduate students to pursue research careers in science and engineering each year. Students are assigned a faculty mentor with related research interests and learn new skills and gain valuable



Professor Irene Lee, Department of Chemistry, and SURP Student Julianna Anguandah working in the Lee lab.

experience by contributing to ongoing research activities. A total of 33 students were part of the program over five years, with seven of the students continuing on to graduate work in S&E at CWRU. www.case.edu/admin/aces/summerresearch.html

***SURP Institutionalized through
the Office of the Provost and ACES+***

The Summer Undergraduate Research Program for underrepresented minority students continues with the support of the Office of the Provost as a collaboration between the Howard Hughes Medical Institute in the Department of Biology and ACES+.

Student feedback:

"...[this program was] the first time I had been involved in an intense research project. The experience boosted my confidence and ability to critically think as scientist and a problem solver...I was also trained on how to present data as well as myself during professional discussions...I am very grateful and thankful for all opportunities provided me through this program."

—Juliana Anquandah, Summer 2006

"This program is useful because it portrays women in a field that is male dominated and these women are successful, they have PhD's and they have their own labs...to see successful minority women in positions of power, it encourages women to not be discouraged due to the male dominance in the science field...and prepares [them] to face various struggles (i.e. no respect from male counterparts) in their quest for obtaining a doctorate degree."

—Karen Pemberton, Summer 2006



2004 summer undergraduate research students' poster presentation

Evaluation & Research

Evaluation and Research Activities (2003–2008)

ACES undertook several research and evaluation studies (see table below).

Other formative internal evaluations included evaluation of program initiatives (e.g., executive coaching), event evaluations (e.g., faculty development workshops), an Advisory Board Review in 2005 whose recommendations were used to modify ongoing activities, and two internal summer retreats of the ACES team to evaluate ongoing progress. External reviews included a mid-program site visit from an NSF *ADVANCE* panel, and a summative evaluation by external evaluators.

ACES Dissemination: Selected Conference Presentations and Publications

Members of the ACES team attended ADVANCE-related conferences and other professional meetings to learn about and disseminate best practices (a total of 41 posters, presentations, and conference symposia). A number of journal articles and book chapters were published from ACES initiatives – selected publications appear below. Detailed research reports are located at www.case.edu/admin/aces/resources.html

Journal Articles

Bilimoria, Diana & Abigail J. Stewart. (2009). "Don't Ask, Don't Tell": The Academic Climate for Lesbian, Gay, Bisexual and Transgender Faculty in Science and Engineering, *NWSA (National Women's Studies Association) Journal*, 21, 2: 85–103.

Bilimoria, Diana, Joy, Simy & Liang, Xiangfen (2008). Breaking Barriers and Creating Inclusiveness: Lessons of Organizational Transformation to Advance Women Faculty in Academic Science and Engineering, *Human Resources Management*, 47, 3: 423–441.

Zandee, Danielle P. & Bilimoria, Diana (2007). Institutional Transformation through Positive Textual Deviance, *International Journal of Sociology and Social Policy*, 27, 11/12: 469–482.

Bilimoria, Diana, Perry, Susan, Liang, Xiangfen, Higgins, Patricia, Stoller, Eleanor & Taylor, Cyrus (2006). How Do Female and Male Faculty Members Construct Job Satisfaction? The Roles of Perceived Institutional Leadership and Mentoring and their Mediating Processes, *Journal of Technology Transfer*, 32, 3: 355–365.

Research on Faculty in S&E and the University

- Interviews and focus groups of S&E faculty
- Faculty climate surveys (2004 and 2007)
- Annual salary equity studies
- Science department case study
- Annual exit surveys
- New faculty satisfaction surveys
- COACHE junior faculty surveys
- Sloan work-life survey
- Department chair interviews
- Applicant pool diversity study

Evaluation of ACES-related Institutional Outcomes Assessing changes in the workforce participation of women faculty with regard to:

- Recruitment
- Tenure
- Promotion
- Retention
- Compensation
- Resource equity
- Leadership positions
- Endowed chairs

Evaluation of Specific ACES Interventions

- Executive coaching
- Mentoring workshops
- Networking events
- Faculty development workshops
- Leadership development retreats
- Student gender awareness training

ACES Evaluation and Research Activities (2003–08)

Book Chapters

Bilimoria, Diana, Hopkins, Margaret M., O'Neil, Deborah A, & Perry, Susan (2007). Executive Coaching: An Effective Strategy for Faculty Development, in Stewart, Abigail J., Janet Malley, and Danielle LaVaque-Manty (Eds.), *Transforming Science and Engineering: Advancing Academic Women*, Ann Arbor: University of Michigan Press, pp. 187-203.

Jordan, C. Greer & Bilimoria, Diana (2007). Creating a Productive and Inclusive Academic Work Environment, in Stewart, Abigail J., Janet Malley, and Danielle LaVaque-Manty (Eds.), *Transforming Science and Engineering: Advancing Academic Women*, Ann Arbor: University of Michigan Press, pp. 225-242.

Liang, Xiang fen & Bilimoria, Diana (2007) 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: Upping the Numbers*, Northampton, MA: Edward Elgar Publishing, pp. 317-333.

Workforce Outcomes

Increases in the workforce participation of women S&E faculty and new departmental leadership at CWRU through ACES are depicted in the graphs above and on page 15.

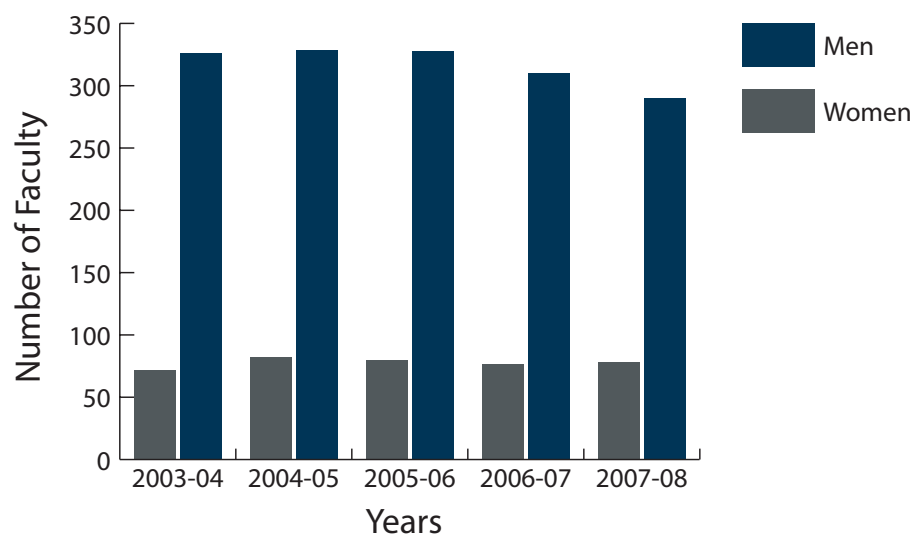
ACES Institutional Outcomes

ACES efforts also resulted in the creation of new positions, new policies, permanent programs and activities. A brief re-cap follows:

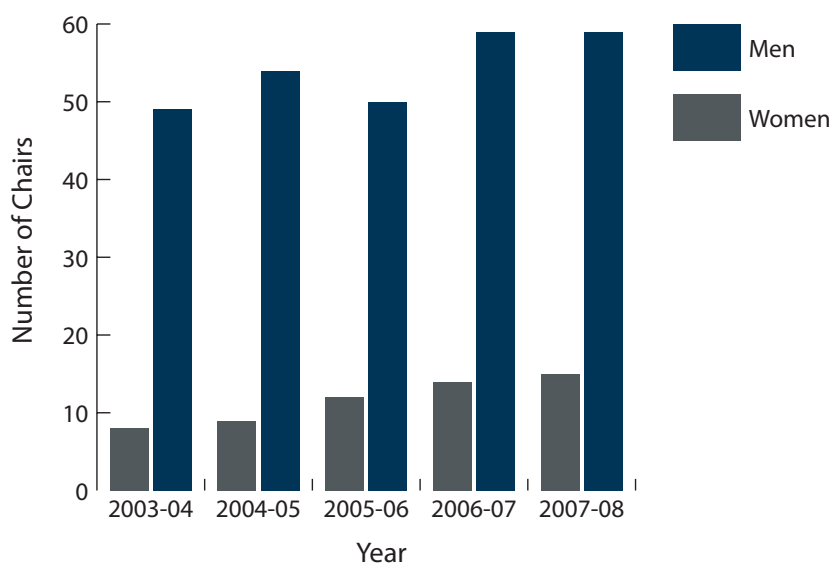
New Positions

- Vice President of Diversity, Inclusion and Equal Opportunity
- Associate Dean for Faculty Development in the Case School of Engineering
- Assistant Dean of Faculty Development and Diversity in the School of Medicine (search in progress)
- 2 new endowed chairs for women faculty in S&E with partial funding in place for a third chair
- Manager of Faculty Diversity and Development in the Office of Inclusion, Diversity and Equal Opportunity

Number of Tenure Stream Faculty in S&E Departments by Gender and Year



Number of S&E Faculty holding Endowed Chairs by Gender, School and Year



- Graduate student in the Flora Stone Mather Center for Women
- Research Analyst in the Office of Institutional Research

New Policies

- Automatically approved pre-tenure extension policy
- Modified work duties (paid parental leave) for faculty and staff
- Partner (dual career) hiring policy (helped recruit/retain 14 faculty members between 2004 - 2008)
- Domestic partner benefits
- See policies in the Faculty Handbook www.case.edu/president/facsen/frames/handbook/index.htm

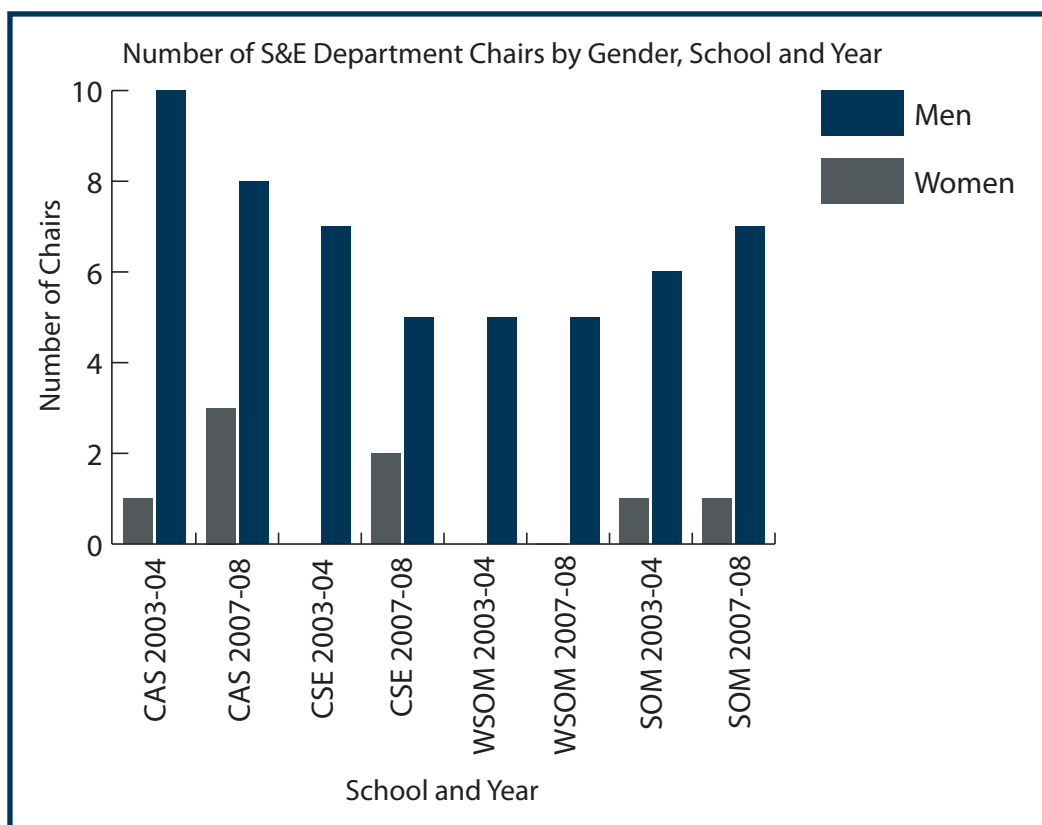
New Permanent Programs and Activities

- Office of Faculty Development in the Case School of Engineering
- CWRU-Fisk University partnership established in the Office of the Provost
- Ethnic Studies program
- Summer research program for minority S&E students established in the Office of the Provost

- Annual Provost's leadership retreat for all deans and chairs in the university
- Required cultural competency awareness training for all new faculty
- Faculty search committee training and support
- Annual Spotlight Series on Women's Scholarship & Women of Achievement Lunch
- WISER (Women in Science & Engineering Roundtable) program embedded in FSM Center for Women Students
- *ADVANCE* Opportunity grants
- Faculty climate survey (every three years)
- Bi-annual COACHE junior faculty survey

Faculty Development

- Twice-yearly university-wide faculty development & networking workshops for women faculty
- Professional coaching for new chairs, deans and new women S&E faculty
- Annual orientation for newly tenured & newly promoted faculty
- Expanded new faculty orientation
- Improved junior faculty mentoring





NSF-*Advance* Institutional Transformation at Case Western Reserve University

*Promoting a campus-wide culture of equity,
participation, openness, and accountability*



With generous support from the National Science Foundation, NSF-*Advance* (grant #0245054) the Academic Careers in Engineering and Science (ACES) program at Case Western Reserve University seeks to contribute to the development of a national science and engineering workforce that includes the full participation of women at all levels of faculty and academic leadership.