



**Quarterly Report  
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## Highlights from Q2 2006-2007

- Workshops for Search Committee Chairs
- Departmental Transformation Awards
- Department of Earth and Environmental Sciences Cluster Hire Initiative
- Changing the Climate at the Lamont Campus
- Symposium on the Science of Diversity

## Project Goals

The mission of the Earth Institute NSF ADVANCE Program at Columbia is to increase the recruitment, retention, and advancement of women scientists and engineers at the University. The goals of the program are to:

- 1) Change the demographics of the science and engineering community at Columbia through innovative hiring practices and by targeting emerging and established women leaders.
- 2) Cultivate an environment that fosters and attracts women leaders in science and engineering.
- 3) Stimulate institutional cultural change based on behavioral and social science research about gender and race.

## Progress Toward Project Goals

### Changing the Demographics

#### *Workshops for Search Committee Chairs*

In the fall of 2006, ADVANCE co-sponsored two recruitment workshops for search committee chairs. A workshop was held for faculty in the School of Engineering and Applied Science (SEAS) on September 27; a workshop for faculty in the Natural Sciences departments was held on September 28. Trish Culligan, a member of the ADVANCE Executive Committee and a Professor of Civil Engineering, led the SEAS workshop, which also included a presentation from Valerie Purdie-Vaughns, a social psychologist at Yale University. Dr. Purdie-Vaughns engaged the SEAS faculty in a lively discussion about the influence of stereotypes on performance and motivation in academia. She also presented data that shows that people are more likely to choose diverse job candidates when they are asked to select a group rather than picking candidates one at a time. As part of an overview of the School's demographic data, Dr. Culligan spoke about gender disparities that persist despite an overall growth in the size of the School's faculty. She highlighted recent increases in the number of faculty offers made to women, progress that is largely due to the efforts of three departments: Industrial Engineering and Operations Research; Electrical Engineering; and Biomedical Engineering. Dr. Culligan concluded her presentation by describing the recruitment and retention resources that are available to departments. The workshop was hosted by the Dean and the Vice Dean of SEAS.

The workshop for faculty in the Natural Sciences was facilitated by Jean Howard, the Vice Provost for Diversity Initiatives. Faculty members gave presentations on institutional demographics, hiring and retention trends over time, and strategies for recruiting women and minorities. ADVANCE Co-PI Mark Cane gave an overview of ADVANCE funding that is available to recruit and retain women scientists.

Faculty were also given pipeline data specific to their department. The discussion focused on best practices for recruiting women with professional spouses. Vice Provost Howard gave an overview of her office's efforts to support dual-career recruiting. Her office recently initiated the Metro New York and Southern Connecticut Higher Education Research Consortium (HERC), a regional faculty hiring network that will assist departments and partners looking for academic jobs in the New York area (scheduled to launch in the spring of 2007).

#### *Departmental Transformation Awards*

ADVANCE provides funding for departments and individuals to augment recruitment efforts and promote the professional development of women leaders. During the fall of 2006 ADVANCE gave funding awards to three departments in the natural sciences: Psychology; Ecology, Evolution and Environmental Biology (E3B); and Earth and Environmental Sciences (DEES). The award to the Psychology department supported an effort to recruit an African American woman in social psychology. E3B was given an ADVANCE award to increase the number of eminent women speakers in the department's seminar series. DEES received funding to support the recruitment of a senior woman in physical oceanography. ADVANCE also provided funding to the Marine Geology and Geophysics division at the Lamont campus to support travel costs associated with the visit of a woman scientist.

#### *Department of Earth and Environmental Sciences Cluster Hire Initiative*

Mark Cane, ADVANCE Co-PI and the Chair of the Department of Earth and Environmental Sciences (DEES), is leading an initiative to hire a cluster of eminent women in the Earth sciences. While the objective of hiring senior women scientists has been a part of the DEES diversity plan for some time, this is the first effort by the department to proactively recruit a cohort of eminent women. The rationale behind the cluster hire is twofold: 1) the department is in need of a critical mass of women scientists, and 2) the proposed hires would significantly increase the intellectual distinction of the department. The effort is being proposed to the Vice Provost for Diversity Initiatives, who is overseeing a \$15 million recruitment campaign to increase the diversity of the Arts and Sciences faculty through target-of-opportunity hiring.

#### Cultivating an Environment that Fosters and Attracts Women

##### *Changing the Climate at the Lamont Campus*

ADVANCE is working with the Director of Columbia's Lamont-Doherty Earth Observatory to improve the climate for women scientists at the Lamont campus. Throughout the fall of 2006 the Director met with women scientists in small groups to discuss strategies for improving the climate at Lamont. ADVANCE is also working with the Director to evaluate proposals from outside consultants with expertise in institutional change, gender equity, and organizational behavior.

In November 2006 the Director convened a meeting with the Lamont women's forum to discuss the University's part-time policy for research scientists. While part-time policies affect both women and men, women with small children tend to be disproportionately affected by limitations on part-time options. The Director is putting together a committee that will consider options for expanding part-time benefits for parents on the research staff.

## Institutional Change

### *The Science of Diversity*

As part of our ongoing effort to stimulate institutional change using behavioral and social science research, ADVANCE sponsored a “Symposium on the Science of Diversity” on November 17, 2006. The full-day symposium included sessions on cognitive bias, judgment and decision-making; the effects of subtle environmental changes on individuals; structuring inclusive environments; and translating research into action. The objectives of the symposium were to identify factors that lead to bias and to provide strategies for universities seeking to create more inclusive environments.

Speakers included experts in the field of social psychology, business, and law. Science and engineering faculty members moderated the sessions.

The main points that were made at the symposium include:

- Stereotypes can influence decisions about scholarly acceptance and recognition.
- Women and underrepresented minorities are more likely to exceed performance expectations when they are told that their ability is not fixed, but rather a product of their engagement and interest.
- Reviewers are more likely to choose diverse candidates when they hire in groups than when they must hire people one at a time.
- Ambiguous evaluation processes can inadvertently discriminate against women and underrepresented minorities.
- Institutional leaders can create inclusive environments by placing people with knowledge, credibility, and accountability in positions that oversee processes where biases operate.



Symposium speaker  
Nalini Ambady (Tufts Univ)

Several hundred faculty and students attended the event. A number of university leaders also attended, including the Provost, the Dean of the School of Arts and Sciences, and the Director of the Lamont-Doherty Earth Observatory.

Video clips and PowerPoint presentations are available on the symposium website at:  
<http://www.earth.columbia.edu/advance/symposium.htm>

## **Looking to the Next Quarter: Upcoming Initiatives**

### 1) Changing the demographics

- Applications for the ADVANCE Marie Tharp Visiting Fellowship are due on January 5, 2007.

### 2) Cultivating an environment that fosters and attracts women leaders:

- ADVANCE is working with the School of Engineering and Applied Science to plan a professional development workshop for junior faculty. While the workshop will be open to all junior faculty, it is intended to provide women and minorities with the tacit knowledge that is required to get tenure at Columbia. The workshop is scheduled for January 19, 2007.
- As part of an effort led by the Vice Provost for Diversity Initiatives, ADVANCE is working to create new faculty development programs for women scientists in the Arts and Sciences.
- ADVANCE is co-sponsoring a conference on “Careers in Science and Engineering: Supporting a Diverse Workforce.” Modeled after a similar conference held at Princeton, the goal of this event is to encourage students and post-docs to consider careers in science and engineering.

### 3) Stimulating institutional change:

- The new Assistant Dean for Faculty Development and Diversity at the School of Engineering and Applied Science starts in January 2007.
- The ADVANCE Advisory Board meeting is scheduled for February 15, 2007.
- ADVANCE will be working with the Commission on the Status of Women on an initiative to reevaluate the romantic advisory policy for the University.