ADVANCE at Brown
Interim Report
November 2008 - January 2009

Significant Accomplishments

The ADVANCE program at Brown continued our work with institutional partners and individual faculty members to implement faculty development programs that promote access for women faculty and success for all Brown faculty. Peer Mentoring Groups begun in mid-October continued on their own momentum with requests for additional leadership/professional development sessions. We awarded our third round of Career Development Awards. Our third Visiting Scholar was positioned to interact with faculty, students, and institutional leadership. We initiated a gendered analysis of the utilization of space in Brown's science, engineering, and math departments, and solicited individual faculty mentors for the 24 new assistant professors who came to Brown this fall. Our sponsorship of the Earth Science Women's Network's "Building Leadership Skills for Success in Scientific Organizations" at the National Oceanic and Atmospheric Administration conference in December gave forty women the opportunity to learn about academic leadership.

1. Peer Mentoring Groups

Three peer mentoring groups for women faculty are up and running since mid-October. The groups (Biological Sciences, Physical Sciences, and Mid-Career Women) engage 21 tenured and tenure-track faculty members, and are loosely modeled on the experiences of Ellen Daniell's "Every Other Thursday" problem-solving group at the University of California at Berkeley (see http://www.nyas.org/publications/readersReport.asp?articleID=47). Discussion topics have included balancing work and family responsibilities; gaining inter/national exposure for research; negotiating with department chairs; and laboratory management. From the initial experiences of these groups, the ADVANCE office will offer one or two leadership/professional development sessions on "Negotiating with your department chair for what you need," and/or laboratory management for mentoring group participants this spring. We are partnering with the Sheridan Center for Teaching and Learning, and the office of the Associate Dean for Public Health to create ad hoc workshops in response to immediate needs this spring, but our hope is to craft a series of workshops tailored for Brown faculty members and based on other institutions' models

(Howard Hughes Medical Institute, and ADVANCE programs at the University of Washington and the University of Wisconsin).

2. **Career Development Awards**

We received 24 applications for the third round of the Career Development Awards. A total of thirteen were awarded. Award recipient projects include:

Ruth Colwill, Associate Professor of Psychology, $15,000
Dr. Colwill will use the funds to prepare an NSF grant proposal to support a new research program on the social behavior, communication, and cognition of the Eastern coyotes, and to build a peer network to enhance her competitiveness for NSF funding in this area.

Sarah Delaney, Assistant Professor of Chemistry, $15,000
Dr. Delaney will initiate a research collaboration between her own laboratory and that of Professor Eric D. A. Stemp from Mount Saint Mary's College. She will also travel to the 238th American Chemical Society National meeting to present the results of their collaborative research.

Paja Faudree, Assistant Professor of Anthropology, $15,000
Dr. Faudree will use these funds to organize and host two interrelated initiatives: a seminar series featuring extended visits by very prominent senior figures in the field of linguistic anthropology and a day-long symposium feature both senior colleagues and junior women in the field who would benefit from mentoring opportunities.

Richard Freiman, Assistant Professor of MCB & Mary Hixon, Assistant Professor of Pathology & Laboratory Medicine, $15,000
Professors Freiman and Hixon will establish a mentoring relationship with Dr. Barbara Vanderhyden, Corrine Boyer Chair in Ovarian Cancer Research and Professor at the University of Ottawa, in the area of ovarian cancer biology. One of the main objectives of this mentoring relationship is to jointly organize a one-day mini-symposium.

Amy Greenwald, Associate Professor of Computer Science, $15,000
Dr. Greenwald will work to build collaborative relationships with e-commerce research labs with such corporation as Google, Microsoft, and Yahoo!

Meredith Hastings, Assistant Professor of Geological Sciences, $15,000
Dr. Hastings will develop collaborations with Professors Lonnie Thompson and Ellen Mosely-Thompson of the Byrd Polar Research Center at the Ohio State University. The aim of this work will be to identify and obtain an initial collection of tropical ice core samples from a site in Peru.

Heather Leslie, Assistant Professor of Environmental Studies, $15,000
Dr. Leslie will work with a range of colleagues and mentors on a variety of projects having to do with her research focus of the ecology, policy, and management of coastal marine

ecosystems. Collaborators include Dr. Steve Gaines at UC Santa Barbara, a senior marine ecologist with interests in marine community ecology, biogeography, and reserve design. Dr. Chris Harley of University of British Columbia will work with Heather on heat stress and substrate effects. Dr. Miriam Fernandez is an evolutionary biologist at Pontificia Universidad Católica de Chile in Santiago and has been a potential collaborator with Dr. Leslie for several years.

Crystal Linkletter, Assistant Professor of Community Health, $15,000
Dr. Linkletter will build collaborations with mentors and establish herself nationally and internationally in the areas of spatial modeling of social networks and contact-based disease transmission modeling. She will work with colleagues at the Center for Statistics and the Social Sciences (CSSS) at University of Washington. She will also meet with Dr. Stanley Wasserman, Indiana University, Dr. Hugh Chipman, Acadia University, and Dr. Tom Britton, Stockholm & Dr. Tom Snijders, University of Oxford and University of Groningen.

Tayhas Palmore, Professor of Engineering, $15,000
Dr. Palmore seeks to support two goals: (1) gain visibility in the field of synthetic biology through new research in her lab and as a consequence of this new research, (2) introduce synthetic biology to her own research community of bioelectrochemists and materials scientists.

James Russell, Assistant Professor of Geological Sciences, $15,000
Dr. Russell will use these funds to develop larger collaborative frameworks around research programs on El Niño-Southern Oscillation (ENSO) in Indonesia. Colleagues with whom Professor Russell will work include Delia Oppo, at Wood's Hole Oceanographic Institution; Amy Clement of the University of Miami; Rosamond Naylor at Stanford; and Meredith Kelly at Dartmouth. Jim will also develop international collaborations within Indonesia.

Tricia Serio, Associate Professor of Molecular Biology, Cell Biology, & Biochemistry, $19,500
Dr. Serio will work with Dr. Suzanne Sindi, a Prager Assistant Professor in Applied Mathematics, to develop and experimentally validate a stochastic model for the competition between different conformations of a single prior protein in live yeast cells.

Leah VanWey, Associate Professor of Sociology, $15,000
Dr. VanWey will work with Dr. Cheryl Palm of the Earth Institute at Columbia University, to expand her influence in both in the broad field of human-environment science and in policy debates about development and environment.

Anastasia Volovich, Assistant Professor of Physics, $15,000
Dr. Volovich will host senior leaders in the field of twistor string theory and its applications to QCD, which has benefitted greatly from the close interaction between mathematicians, string theorists, and collider physics experts. She will attend the Strings 2009 in Rome and co-organize a one-day annual "New England String Meeting" at Brown.

3. **Initiated space study**

Associate Provost Pam O'Neil and Managing Director Susan Overton met with the University's Facilities Management Director of Planning and Inventory Manager to begin compiling and analyzing data for our space allocation study. The Facilities Management office collects data on the amount of grant dollars spent per square foot of space for each faculty member with laboratory space at the University. The ADVANCE office is supplying faculty members' ranks, gender, and start date at Brown. We are working with Facilities staff members to find a way to measure the comparable quality of laboratory and departmental space controlled by male and female faculty members.

4. **Visiting Scholar Sue Rosser**

In late January, the ADVANCE program co-sponsored with the Sarah Doyle Women's Center a campus visit by Dr. Sue Rosser, Dean of the College of Liberal Arts and Professor of History, Technology, & Society at Georgia Tech. Dr. Rosser presented a session for Brown WISE and G-WISE students, in which she outlined her career path and its reflection of the rewards and pitfalls for women scientists in the academy. In her public lecture, "Institutional Transformation and Women Scientists," Dr. Rosser outlined ways in which higher educational institutions' engagement with the issues of women in the sciences can widen the path to success for all faculty, and the challenges of institutionalizing ADVANCE goals. She also met with a group of eight faculty members from departments in biomedicine, engineering, geological sciences, and physics to discuss "issues commonly faced by (women) scientists" at Brown.

5. **Faculty Mentoring Program launched**

In January, the ADVANCE office, in collaboration with the offices of the Provost, Dean of the Faculty, and Dean of Biological and Medical Sciences, introduced an "opt out" mentoring program for all 23 new tenure track faculty members at the University. The Brown Faculty Mentoring Program offers tenure-track faculty members the opportunity to form a mentoring relationship with a senior faculty member from a different department, but the same field. 25 senior faculty members responded to our call for mentors. Mentors and "Mentees" will be "matched" based on responses to a short questionnaire. ADVANCE Managing Director Susan Overton will work with Associate Deans of the Faculty, Biology, and Public Health to provide

ongoing support and training for mentors and mentees to sustain these mentoring relationships. Suggested discussion topics for mentors and mentees include preparation for tenure; choosing committee and service assignments; attending conferences and joining professional associations; the campus environment for faculty who are members of under-represented groups; and work/family balance.

6. **Earth Sciences Women's Network Workshop success**

Assistant Professor of Geological Sciences and Environmental Studies Meredith Hastings started the Earth Sciences Women's Network (ESWN), a peer-to-peer networking organization for women in the Earth Sciences. As of January 2009, the organization has over 700 members across the globe. ESWN's mission is to connect women in the Earth sciences, promote career development, provide informal mentoring and support, and facilitate professional collaborations.

On December 13-14, 2009, ESWN hosted a workshop at a National Oceanic and Atmospheric Administration (NOAA) conference, entitled "Building Leadership Skills for Success in Scientific Organizations." The ADVANCE program at Brown was one of three sponsors of the workshop. Forty-one women, from academic, public, and private institutions attended the workshop. The workshop's opening session was facilitated by Sandy Shullman of the Committee On the Advancement of women in Chemistry (COACh); Sandy lead discussion of the importance of developing leadership skills among female scientists, and outlined and demonstrated several strategies to become an effective leader. Additional workshop sessions included a panel of four senior scientists—Tim Killeen (NSF), Margaret Leinen (Climos), Pamela Matson (Stanford University), and Susan Solomon (NOAA)—who shared insights from their own career paths and observations about the role for women scientists in future leadership positions; and another session on individual leadership assessment and development strategies.

A post-workshop survey of the participants (90% response rate) revealed an overwhelmingly enthusiastic response, with nearly all participants stating that the workshop was highly valuable to their careers, and that they would recommend others to attend the workshop if offered again (rank of 9.5).

Areas of Difficulty/Resistance

1. Leadership Awards

We issued Requests for Proposals for three Leadership Awards programs:

- The **Advancing Leaders** Program gives women faculty who might be interested in pursuing an administrative career the opportunity to discover what administrative work entails, to learn about the process of decision-making at various levels in the university, and to build their own leadership skills by providing an opportunity to work with a senior level administrator on an institution-wide project.
- The **Leadership Support Fund** provides institutional and/or women faculty leaders with the means to attend Academic Administration Training or Leadership Programs provided by other institutions.
- **Scientific Leadership Awards** are designed to facilitate women's participation as inter/national leaders in their disciplines, by encouraging women scientists to take on a leadership role in a professional association or as editor of a scholarly journal. The awards can be used to support teaching release time or to provide assistance in obtaining lab/research oversight for the faculty member's work at Brown.

Two (Leadership Support and Scientific Leadership) out of the three programs have rolling deadlines and thus far, no applicants. We will utilize the Leadership Support Program to encourage women faculty leaders and some department chairs to attend the LEAD workshop in Fayetteville, Arkansas this coming June. Research Opportunities Coordinator Amy Robb is promoting the Scientific Leadership Awards by forwarding information about journal editorships and professional association leadership opportunities to targeted Brown women faculty members. The "Advancing Leaders" Program had a December 1st deadline, but did not produce any faculty applicants; we will modify our approach, identifying and matching specific faculty members with the projects proposed by three senior administrators.

Project Evaluation Update

We are awaiting an analysis of the results of a faculty survey administered by our External Evaluator, Janet Billson, this past fall.