

ADVANCE at Brown



Our Mission

The ADVANCE Program at Brown University seeks to increase the retention and advancement of women faculty in science and engineering by facilitating the path to career success for all faculty.

Funded with a 5-year grant from the National Science Foundation, the ADVANCE Program supports new initiatives for formal faculty development programs to ensure that all faculty—women and men—have access to the types of resources that cultivate opportunities for success at the highest levels in academia and academic leadership. The overarching goals of the new programs are to provide faculty with institutional and departmental resources that enhance access to peer networks at Brown and in the wider academic community, foster leadership opportunities, and increase opportunities for collaboration and for obtaining grant funding.

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Our Team

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Associate Provost and
Director of ADVANCE



Amy Robb
Research Opportunities Coordinator



Clyde Briant
Vice President for Research &
ADVANCE Steering Committee



Michele Cyr
Director, General Internal Medicine &
ADVANCE Steering Committee



Mary Fennell
Professor of Sociology
Co-PI & ADVANCE Steering Committee



Karen Fischer
Professor of Geological Sciences
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Tayhas Palmore
Professor of Engineering
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Johanna Schmitt
Professor Ecology & Evolutionary Biology
& Co-PI & ADVANCE Steering Committee



Program Website:

<http://www.brown.edu/Administration/Provost/Advance/>



ADVANCE at Brown Initiatives

The desired outcomes of the ADVANCE Program at Brown include reduced faculty attrition (especially women and minority faculty); increased number of women promoted to full professor; decreased time women spend in rank before promotion to full professor; increased number of women rising to leadership positions in administration or in their own academic disciplines; and prevention of mid-career burnout by encouraging collaborative projects.



Faculty Development

ADVANCE supports new initiatives for formal Faculty Development Programs to ensure that all faculty—women and men—have access to the types of resources that cultivate opportunities for success at the highest levels in academic and academic leadership. Our faculty development initiatives seek to provide fair and transparent access to the types of resources that support career success at Brown University and the wider scientific community.

Sponsored Project Support

The **Research Opportunities Coordinator** provides specialized assistance for faculty engaged in sponsored funding. The ROC brokers new collaborations among faculty, notifies faculty of opportunities for sponsored project support, and helps faculty negotiate the funding process. The underlying goal of this initiative is to increase external research funding for faculty, thus promoting their success at Brown as well as within their own scientific discipline. We expect this service to be particularly helpful to Assistant Professors who might not yet have tacit knowledge of negotiating the funding process but mid-career faculty may also find it helpful to work with the ROC as they development new collaborative research initiatives or topics of interest.

Amy Robb started in September 2007 in this position. Amy trained and worked for many years as a women's studies librarian, most recently at the University of Michigan Graduate Library. Prior to that she was the Librarian/Archivist for the American Association of University Women.

Mentoring Program

The Mentoring Program provides a formal mechanism for faculty to connect with mentors outside of their department with whom they can speak candidly about their experiences and learn to negotiate the academic environment at Brown. Mentors will assist with junior faculty with professional development by providing information about university policies, culture and resources.



Leadership Initiatives

The Leadership Program provides different mechanisms of support to encourage women faculty who are interested in pushing their careers to the next level by becoming academic administrators or assuming some role of scholarly scientific leadership in the national community. The leadership initiatives were proposed to provide mechanisms for women faculty interested in administrative or scientific leadership position.

Career Development Awards

Career Development Awards are intended to help faculty increase their exposure to senior colleagues at other institutions who can serve as collaborators, role models and sponsors. These awards could be particularly useful for Assistant Professors who are beginning to build their research program or for mid-career faculty moving in a more collaborative direction or trying to make contacts in a different research area.

Administrator Shadowing Program

The Administrator Shadowing Program is intended to give faculty who might be interested in pursuing an administrative career an opportunity to discover what it is like to be in a high level administrative position. Brown administrators will be asked to participate in the program when they have a special project with which a program participant could coordinate. Brown faculty who are interested in the program will be paired with a Brown administrator to shadow and/or work on a special project. The program provides support for teaching release time to allow time for shadowing.

Scientific Leadership Development Awards

The Scientific Leadership Development Awards were developed to facilitate women's ability to assume positions of leadership within a scientist's own discipline. The awards will provide teaching release time or other support so that women faculty in the sciences will have time to take on an additional responsibility of scientific leadership when such an opportunity arises (such as becoming president or vice president of a scientific society or editor of a journal) without jeopardizing their ongoing research.

Leadership Support Funds

The Leadership Support Fund provides women scientists with the means to attend administrator training or leadership programs provided by other institutions. This program seeks to encourage women scientists to assume positions of leadership and provides access to networks of other leaders in academic and scientific fields. The faculty member may choose a program that best suits her career goals and schedule.



Institutional Transformation

ADVANCE promotes the transformation of the institutional climate at Brown is to develop an innovative program for department chair leadership training that focuses on providing opportunities for faculty success with best practices for retaining women and minority faculty, managing departmental climate, recruitment, within-department mentoring, advertising faculty successes, and preventing mid-career burnout.

Department Chairs Workshop

The goal of the Department Chairs Workshops is to provide chairs with information and skills that will have a positive effect on faculty development and departmental climate, facilitate communication between chairs to share experiences and best practices, and to integrate the broader goals of the ADVANCE Program by weaving information and discussion about issues of diversity and gender to improve the recruitment, retention, and promotion of women faculty.

Our first department chairs workshop, **Mentoring Faculty on Proposal Writing**, brought together colleagues from the Office of the Vice President for Research, Corporate & Foundation Relations, Government Relations & Community Affairs, and two biomedical faculty who provided first-hand insight into mentoring junior faculty and applying for funding as a young and mid-career investigator.

2008 Career Development Awards

The value of making connections with colleagues has long been recognized as extremely important to success in academics. In recent years research has become increasingly collaborative and interdisciplinary, particularly in the sciences. Providing funding for individual faculty to develop peer networks, nationally or internationally, could greatly enhance their social capital and increase their access to opportunity.

Note: The 2007 round of CDAs had 9 applicants with 6 awards granted. The 2008 round had 19 applicants with 9 awards granted.

Marcy Brink-Danan, Assistant Professor of Anthropology & Judaic Studies, \$14,650

Professor Brink-Danan is organizing a day-long conference to bring together outstanding social scientists who study Jewish life through ethnographic methods. The conference will have three components, including a presentation of new research, a discussion of disciplinary theory and a major public presentation.



Erika Edwards, Assistant Professor of Ecology & Evolutionary Biology, \$11,010

Professor Edwards' work combines molecular phylogenetics with anatomical and eco-physiological field studies. She will utilize the award to initiate collaborations with two institutions in South Africa and Madagascar for a research project that will focus on succulent lineages of plants that are endemic to arid regions of South Africa. Erika will also travel to Brazil to speak at the Latin American Botanical Congress and the International Organization for Succulent Plant Study.



Diane Hoffman-Kim, Associate Professor of Molecular Pharmacology, Physiology & Biotechnology, \$14,995

Toward the goal of being a multi-dimensional leader in academic biomedical engineering, Professor Hoffman-Kim proposes three interrelated aims: (1) increase the global visibility of her research program on nerve repair technology and tissue engineering; (2) expand her biomedical engineering teaching to the cutting edge of constructivist pedagogy; and (3) accelerate her leadership development to enhance the effectiveness of women scientists and engineers.



Kate Lapane, Associate Professor of Community Health, \$15,000

Dr. Lapane will host a multidisciplinary summit on off-label antipsychotic use. The aims of the summit include: (1) strengthening ongoing collaboration with investigators; (2) bringing together a network of concerned persons; and (3) fostering a mentoring and networking pipeline.



Carmen Marsit, Assistant Professor of Pathology & Laboratory Medicine, \$13,000

Professor Marsit will hold a day-long retreat focused on epigenetics in human diseases beyond cancer. The goals of the event are to bring together members of the BUCKDM (Brown, University of California, Kaiser, Dartmouth, Minnesota) consortium and to expand this group of investigators to include individuals at Brown and its affiliated institutions.



Meenakshi Narain, Associate Professor of Physics, \$15,000

Professor Narain will start a new research and development program for future particle physics experiments, specifically for the development of advanced solid state tracking detectors to precisely measure trajectory of charged particles for the proposed super LHC (SLHC) and the International Linear Collider (ILC) projects.

Ben Raphael, Assistant Professor of Computer Science, \$11,453

Professor Raphael proposed a series of meetings with colleagues with the aims of: (1) developing mentoring and collaborative relationships with senior scientists; (2) training two female graduate students in a discipline underrepresented by women; and (3) continuing research collaborations.



Kristi Wharton, Associate Professor of Molecular Biology, Cell Biology & Biochemistry, \$14,315

Professor Wharton will continue two multidisciplinary collaborations with a focus on obtaining preliminary data necessary to winning large external grants. The research areas include the visualization of signaling molecule movement in vivo in real time and elucidating the molecular underpinnings of a mechanism controlling cell signaling that appears to be at the crux of a crippling bone disease, Fibrodysplasia Ossificans Progressiva. Additionally, Kristi will attend the Keystone Symposia Conference and the EMBO Conference.



Jessica Whiteside, Assistant Professor of Geological Sciences, \$14,500

Professor Whiteside will bring together researchers whose work on lakes and related systems are at the forefront of current work in order to forge a scientific network of colleagues whose synergisms have the potential to catalyze a major leap forward of our understanding of ancient lake systems.

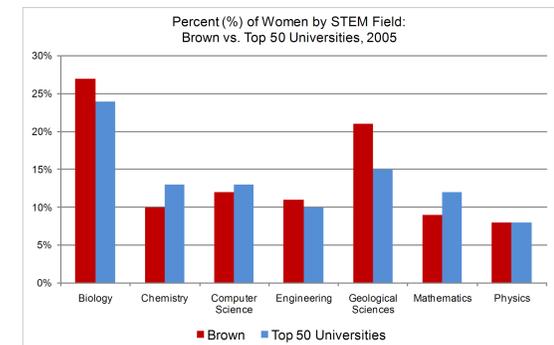


Data Behind Brown's Initiatives

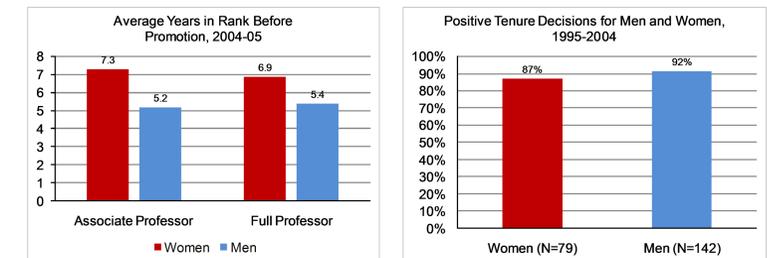
The Program Initiatives encompass faculty in 13 science and engineering departments at Brown:

- Applied Mathematics
- Chemistry
- Cognitive and Linguistic Sciences
- Computer Science
- Engineering
- Geological Sciences
- Mathematics
- Physics
- Ecology & Evolutionary Biology (Division of Biology & Medicine)
- Molecular Biology, Cell Biology & Biochemistry (Division of Biology & Medicine)
- Molecular Microbiology & Immunology (Division of Biology & Medicine)
- Molecular Pharmacology, Physiology & Biotechnology (Division of Biology & Medicine)
- Neuroscience (Division of Biology & Medicine)

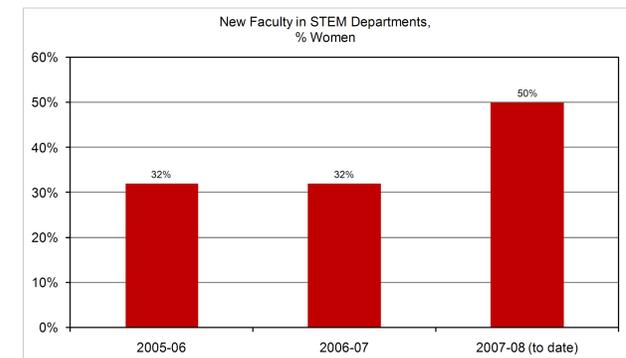
Brown is similar to its peers with respect to the percentage of women faculty in science, technology, engineering, and math (STEM) departments.



Like other universities, women at Brown spend more years in rank before promotion and are less likely to be tenured than men.



Brown has increased its efforts to recruit more women and minority and has had some success.



The data suggest that Brown is moving in the right direction with respect to hiring women faculty in STEM departments and Brown has the opportunity to become a leader with respect to the development of its women faculty. To help women achieve their full potential, Brown's ADVANCE Program seeks to eliminate the current gender differences in all aspects of retention and promotion by formalizing and making transparent the institutional mechanisms that facilitate success.

Note: Brown University data provided by the **Office of Institutional Diversity** and the **Office of Institutional Research**. Data on the top 50 universities obtained from the **Nelson Diversity Survey**: <http://cheminfo.ou.edu/~djin/diversity/top50.html>.