

# **PROGRAM REPORT**

**ACADEMIC YEAR  
2008-2009**

## **WOMEN IN SCIENCE AND ENGINEERING (WiSE) PROGRAM**



**THE UNIVERSITY OF SOUTHERN CALIFORNIA**

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## **Executive Summary**

The Women in Science and Engineering (WiSE) Program continues to be USC's premiere diversity initiative, serving as a model both within the University, across the country and internationally. This Fall, Director of the WiSE Program, Vice Provost Jean Morrison, was invited to deliver a presentation on USC's WiSE effort as part of a panel on "Women's Leadership and Diversity" at the Global HR Forum 2008 in Seoul, Korea, focused on exploring creative talents for global collaboration. (See Appendix 1)

In addition to its suite of grantmaking programs designed to support women scientists and engineers at all levels from undergraduate students to senior faculty, WiSE focuses nearly half of its annual budget on support for hiring and retaining tenured and tenure-track faculty in the USC College of Letters Arts and Sciences and the USC Viterbi School of Engineering. For the 2008-09 academic year, WiSE contributions to hiring packages partly enabled the recruitment of 4 new WiSE faculty (2 in Viterbi and 2 in the College) and provided funds for the retention and support of research by WiSE faculty already at USC.

WiSE plays an active role in helping to increase the representation of women faculty candidates by hosting meetings with department chairs and search committees to outline strategies for broadening the scope of searches for outstanding diversity candidates. WiSE leadership also actively meets with women faculty candidates during campus visits. During the 2008-09 academic year, WiSE participated in meetings with 12 formal candidate campus visits (7 in Viterbi and 5 in the College). Several offers to WiSE faculty joining USC in 09-10 have already been successful.

WiSE serves as an advocate for women in science and engineering faculty at USC by creating awareness of faculty diversity issues, and providing professional development and networking opportunities for women scientists and engineers at all levels. On February 4, 2009, WiSE Distinguished Lecturer, Biochemist Dr. Phoebe Leboy, President of the Association for Women in Science (AWIS), delivered an address to the USC community to raise the visibility of issues related to women in science and engineering. In particular, Leboy's talk focused on approaches to making careers in academic science attractive to women. (See Appendix 2)

WiSE continues to sponsor the development of networking groups across campus in a variety of disciplinary fields, for students, faculty and postdoctoral researchers. New in 2009 is "WiSE-Earth," a group and listserv dedicated to women in Earth Sciences, led by Assistant Professor of Earth Sciences, Sarah Feakins and "FUELS" (Female Undergraduates Educating and Leading in the Sciences), a group for undergraduate women launched and led by students and advised by Lecturer in Chemistry, Jessica Parr. Together, the networking groups contribute to a vibrant community of scholars that emphasizes mentorship, hands-on research experience, and outreach.

The WiSE Advisory Board met twice per semester in 08-09 and continues to work with program administration to hone its recruitment and support programs for maximum impact. Areas of particular focus this year include the use of the "Gabilan Assistant Professorship" to increase new faculty hiring and critical evaluation of the WiSE Postdoctoral Fellowship program.

## **WiSE Leadership**

A critical aspect of the success of WiSE is the direct involvement of men and women faculty, at all career levels and from both the USC College and the Viterbi School of Engineering, in planning, evaluating, and guiding the program's development.

With the guidance of its diverse committees, WiSE programs have grown and evolved in response to changing needs. Continued evaluation of the success and utility of programs have helped to keep them relevant and effective.

## **WiSE Advisory Board**

The Advisory Board held four meetings in 08-09: two during the Fall semester (9/18/08 and 10/21/08) and two during the Spring semester (2/5/09 and 4/14/09).

Hiring new faculty continues to be the most important goal, and the Board began an in-depth review of WiSE contributions to this effort, taking into consideration a changing hiring landscape. The Board closely examined the use to date and criteria for awarding "Gabilan Assistant Professorships" as part of junior faculty recruitment. It was determined that the named professorships are desirable and useful for enhancing a start-up package and that merit must be the top priority when evaluating candidates. Flexibility should be emphasized in the use of named professorship; the title need not be tied to a specific sum but can be customized to suit the particular circumstances. It was agreed that Deans need to be made more aware of the opportunity to use the "Gabilan Assistant Professorships" and the various ways in which the honor may be employed. Minor revisions to the guidelines for this recruitment tool were enacted (See Appendix 3)

The Board continues to emphasize the need for enhanced mentoring for junior faculty. In 2008-09, Chair Hanna Reisler, was appointed as one of three directors of faculty mentoring in the USC College. In this role, she is able to work more with WiSE faculty and program chairs to communicate about issues of laboratory space, tenure and promotion and other issues confronting new faculty. It is hoped that some of the successful mentoring processes implemented in the College may be more broadly applicable.

The Board also took a close look at the "Major Support for Current Faculty" grant program to ensure that it is appropriately addressing and the problems that it was created to confront: bridge funding, special leave, teaching release, emergency issues. The Board elected to strengthen and modify the guidelines for the program to better articulate what kind of circumstances are applicable to the "WiSE Justification" portion of the application process. Revisions were made to the program guidelines to better clarify examples of appropriate uses for grant funds. (See Appendix 4)

Given the economic downturn, it is likely that the income on the WiSE endowment will be lower in the 2010-11 year by an estimated 30%. The Advisory Board was faced with the task of prioritizing WiSE programs in light of the reduction of resources. It was determined that the Postdoctoral Fellowship Program has not had the type of impact that was hoped for, given the large investment of resources. The Board elected to launch a new program to recognize excellence in postdoctoral research, based on the model of the Merit Fellowships for doctoral students. The former Fellowship program will be suspended to conserve resources. A formal memo announcing the program changes for Postdocs was distributed in June 2009. (See Appendix 5)

The Board also devised a plan to recognize the 10<sup>th</sup> Anniversary of the WiSE Program at USC during the 2009-10 academic year. The WiSE Program will organize a celebration of women scientists and engineers who visit campus during the year, by inviting departments to participate in designating prominent women lecture or seminar speakers as “WiSE Anniversary Speakers.” WiSE plans to publish a poster and website featuring a calendar of all women seminar speakers in science and engineering planned for the year, that will be available at the beginning of the Fall 2009 semester. WiSE will also provide financial assistance with travel and reception costs for Anniversary Speakers. Initial requests to departments for participation have already been met with enthusiasm.

In 2008-09, the WiSE Advisory Board held its second annual joint meeting together with the WiSE school committees on February 5, 2009, to discuss common issues. The school committees’ input was crucial to the Board’s evaluation of the WiSE Postdoctoral Fellowship Program, which it elected to suspend effective in the new fiscal year.

The members of the WiSE Advisory Board are:

Hanna Reisler, Chair  
Professor, Department of Chemistry  
USC College of Letters, Arts and Sciences

David D’Argenio  
Professor, Department of Biomedical Engineering  
USC Viterbi School of Engineering

Leana Golubchik  
Associate Professor, Department of Computer Science  
USC Viterbi School of Engineering

Henryk Flashner  
Professor, Department of Aerospace and Mechanical Engineering  
USC Viterbi School of Engineering

Susan Forsburg  
Professor, Department of Biological Sciences (MCB)  
USC College of Letters, Arts and Sciences

Emily Liman  
Associate Professor, Department of Biological Sciences (Neuroscience)  
USC College of Letters, Arts and Sciences

Susan Montgomery  
Professor, Department of Mathematics  
USC College of Letters, Arts and Sciences

Geraldine Peters  
Research Professor, Department of Physics & Astronomy  
USC College of Letters, Arts and Sciences

Katherine Shing  
Associate Professor, Mork Family Department of Chemical Engineering & Materials  
Science  
USC Viterbi School of Engineering

### School WiSE Committees

Committees composed of faculty in each school serve as advisors on grantmaking by reviewing and evaluating the applications and making recommendations for funding. A summary of the reviews conducted by each committee during the academic year follows:

#### USC College Committee Reviews 08-09

<b>Program</b>	<b>Deadline</b>	<b>Number of Applicants</b>	<b>Number of Awards</b>
Undergraduate Research	28-Aug-08	12	5
Postdoctoral Support	2-Dec-08	8	1
Undergraduate Research	16-Jan-09	8	5
Graduate Merit	3-Mar-09	7	2
Graduate Top-Off	3-Mar-09	11	4 offered / 1 awarded
Undergraduate Research	1-Apr-09	13	5
Postdoctoral Support	28-Apr-09	2	0

#### USC Viterbi School Committee Reviews 08-09

<b>Program</b>	<b>Deadline</b>	<b>Number of Applicants</b>	<b>Number of Awards</b>
Undergraduate Research	1-Aug-08	7	5
Postdoctoral Support	15-Aug-08	1	0
Undergraduate Research	15-Nov-08	3	3
Postdoctoral Support	15-Feb-09	3	1
Graduate Top-Off	15-Feb-09	12	4 offered / 1 awarded
Graduate Merit	3-Mar-09	6	2
Undergraduate Research	1-Apr-09	5	5

The 08-09 school committees include:

#### USC College WiSE Committee

Suzanne Edmands, Chair  
Associate Professor, Department of Biological Sciences (Marine)

Will Berelson  
Professor, Department of Earth Sciences

Anna Krylov  
Professor, Department of Chemistry

Grace Lu  
Associate Professor, Department of Physics & Astronomy

USC Viterbi School of Engineering WiSE Committee

Urbashi Mitra, Chair  
Professor, Ming Hsieh Department of Electrical Engineering

Andrea Hodge  
Assistant Professor, Department of Aerospace and Mechanical Engineering

Ellis Meng  
Assistant Professor, Department of Biomedical Engineering

**Provost's WiSE Program Office**

The WiSE Program is housed in the Office of the Provost, with its physical office located in Grace Ford Salvatori Hall, Suite 315 (GFS-315).

Jean Morrison, Vice Provost for Academic Affairs and Graduate Programs and Professor of Earth Sciences in the USC College of Letters, Arts and Sciences continues to serve as Director of the WiSE Program. Morrison was appointed as Director in 2002.

Assisting with program development and administration as well as coordination of committees, Nicole Hawkes serves as WiSE Program Manager.



WiSE Program Manager Nicole Hawkes (awardee) with WiSE Advisory Board Chair, Hanna Reisler (nominator) at the 2009 "Remarkable Women" Awards ceremony.

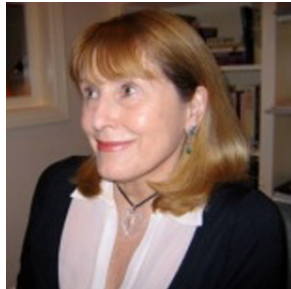
### New WiSE Faculty

For the Fiscal Year 10, several offers to WiSE faculty candidates have been extended and still others are under consideration. To date, two offers in the Viterbi School have been accepted. A list of all current WiSE Faculty (08-09) can be found in Appendix 6. The following are new WiSE faculty who joined USC in 08-09:



Andrea Armani  
(Ph.D. 2007, California Institute of Technology)  
Assistant Professor of Chemical Engineering and Materials Science and Assistant Professor of Electrical Engineering - Electrophysics (*Arrived Fall 08*)

Burcin Becerik-Gerber  
(DDes 2006, Harvard University)  
Assistant Professor of Civil Engineering  
(*Arrived Fall 08*)



Susan Friedlander  
(Ph.D. 1972, Princeton University)  
Professor of Mathematics  
(*Arrived Fall 08*)

Meghan Miller  
(Ph.D. 2006, The Australian National University)  
Assistant Professor of Earth Sciences  
(*Arrived Spring 09*)





**WiSE Program Awards 2008-2009**

Financial awards by program:

<b>Program</b>	<b># Awards</b>
Faculty Recruitment / Faculty Retention	9
Major Support for Current Faculty	4
Lloyd Armstrong, Jr. Chair	1
Supplemental Faculty Support	18
Postdoctoral Support	3
Graduate Top-Off	5
Merit Fellowship for Current Ph.D.	4
Travel Grants	53
Undergraduate Research Grants (See: Appendix 8)	28
Child Care Subsidies	7
Support for Faculty Pregnancy / Childbirth / Adoption	0
Support for Ph.D. and Postdoc Pregnancy / Childbirth / Adoption	2

08-09 Recipients of the Major Faculty Support for Current Faculty award include:

<b>Name</b>	<b>Title</b>	<b>School</b>	<b>Proposal</b>
Sarah Bottjer	Professor of Biological Sciences (Neuroscience)	USC College	Neural Circuits for Vocal Learning: Developmental Changes in Basal Ganglia Pathways
Suzanne Edmands	Associate Professor of Biological Sciences (Marine)	USC College	Sex-specific effects of hybridization in a species lacking degenerate sex chromosomes
Amy Rechenmacher	Assistant Professor of Civil & Environmental Engineering	USC Viterbi School	Enhancement of Laboratory Infrastructure for Increased Safety and Efficiency
Lorraine Turcotte	Associate Professor of Kinesiology and Biological Sciences	USC College	Antiretroviral therapy and skeletal muscle insulin resistance

In addition to its formal suite of grantmaking programs, costs were incurred in support of program activities (such as receptions, lecturers, website maintenance, etc.) and administrative expenses. WiSE also awarded several discretionary grants to support activities that work toward the goal of increasing the representation of women in science and engineering. In 2008-09, these include:

<b>Group</b>	<b>Purpose</b>
Department of Computer Science (Viterbi School)	To share expenses for 8 students to attend the “Grace Murray Hopper Celebration of Women in Computing” event in Keystone, Colorado (October 1-4, 2008)
Women in Physics (USC College)	To share expenses for the Third Annual Conference for Undergraduate Women in Physics at USC (January 19-20, 2008)
Women in Mathematics (USC College)	To support the annual activities of the networking and professional development group among graduate and undergraduate women in math.
Department of Mathematics (USC College)	Support for hosting of Hopf Algebra Conference at USC, February 14-16, 2009 in honor of Professor Susan Montgomery's 65th birthday
Department of Mathematics (USC College)	To share expenses for 5 students to attend the annual “Nebraska Conference for Undergraduate Women in Mathematics” (January 30 – February 1, 2009)
FUELS – “Female Undergraduates Educating and Leading in Science” (USC College)	To launch and support the activities of the networking and professional development group among undergraduate women science majors in the College.
Departments of Earth Sciences (USC College)	To support the “USC Young Researchers Program,” a Summer Research Experience devised and executed by USC graduate students Carie Frantz and Laurie Chong for USC-Area High School Students in Earth Science and Marine Environmental Biology.

### **WiSE Activities 2008-2009**

In accordance with the 2006 recommendations of the WiSE Advisory Board for strategies to improve the institutional climate, WiSE hosted its annual distinguished lecturer to increase awareness and visibility of gender equity issues in science and engineering on February 5, 2009.

Biochemist and President of the Association for Women in Science (AWIS), Dr. Phoebe Leboy, served as the 2009 WiSE Distinguished Lecturer. (See Appendix 2)

Dr. Leboy joined the faculty at the University of Pennsylvania in 1966 and was a Professor of Biochemistry from 1976 until retiring in June 2005. A long-time member of the Penn's Cell and Molecular Biology Graduate Group, she was also a member of the Bioengineering Graduate Group in the School of Engineering and Applied Sciences at Penn. Dr. Leboy chaired the Graduate Group in Molecular Biology, the Department of Biochemistry in the School of Dental Medicine, and the University of Pennsylvania Faculty Senate, and she recently completed a term as chair of the NIH Skeletal Biology Development and Disease (SBDD) Study Section. During 2000-2001 she co-chaired Penn's Task Force on Gender Equity, and in subsequent years served as a liaison from Penn to the MIT/9 University consortium on gender equity in science. Dr. Leboy has received a NATO Postdoctoral Fellowship, an NIH Research Career Development Award; a Fogarty Senior International Fellowship, and a Lindback Award for Distinguished Teaching, as well as several mentoring awards. She received a BS degree from Swarthmore College, a Ph.D.

from Bryn Mawr College, and postdoctoral training at the Weizmann Institute of Science in Israel.

During her campus visit, Dr. Leboy met with faculty and small student groups, engaging in informal conversations. Her talk, “Making Academic Science a Good Career Choice for Women” advocated for greater efforts on the part of institutions to support the advancement of women in science and engineering fields. The lecture and reception was well attended by faculty and students from across the science and engineering disciplines. The lecture was recorded and may be viewed via the WiSE website at the following link: [http://www.usc.edu/programs/wise/events/phoebe\\_leboy.html](http://www.usc.edu/programs/wise/events/phoebe_leboy.html)

Based on the success of a previous program, USC Science and Engineering Librarians, Jean Crampon and Norah Xiao presented a library tour and orientation hosted by the WiSE program for the second year on October 14, 2008. The librarians provided an introduction to available electronic resources and library facilities to assist faculty and students at various points in the research process. Participants in the program enjoyed lunch and conversation in the 2<sup>nd</sup> floor library conference room following the formal presentation. (See Appendix 7)

Additional activities to welcome new WiSE faculty and conduct outreach about WiSE activities and the impact of the program in a variety of venues are documented in the table below:

Date	Event	Participants
9/25/08	WiSE-Hosted Lunch to Welcome New Faculty	WiSE Faculty
10/14/08	WiSE Library Orientation Program and lunch – Seaver Science Library	Led by Science Librarians Jean Crampon and Norah Xiao for USC Faculty, Students and Postdocs
11/5/08	Invited Presentation on the USC WiSE Program at the “Global HR Forum 2008: Creative Talents for Global Collaboration” in Seoul, Korea	Professor Jean Morrison, Presenter
11/18/08	Meeting with Donna Dean (Senior Science Advisor with Lewis-Burke Associates LLC) and Jennifer Grodsky (USC Federal Relations) regarding women in science and engineering at USC and potential funding opportunities.	Jean Morrison, Hanna Reisler, and Nicole Hawkes, participants
1/20/09	AAUW (American Association of University Women) “Women in Technology” Program at the Southern California Regional Occupational Center in Torrance	Professor of Biomedical Engineering, Ellis Meng and WiSE Undergraduate Research Fellow, Roya Sheybani delivered presentations.
2/4/09	WiSE Distinguished Lecture: Dr. Phoebe Leboy “Making Academic Science a Good Career Choice for Women”	Hosted by the WiSE Program – Dr. Leboy met with Jean Morrison, Hanna Reisler, Sarah Bottjer, Emily Liman and other WiSE faculty and students.
4/16/09	Panel presentation “Through the Lens of Gender: A Lunchtime Panel and	Featuring Provost C.L. Max Nikias, Dr. Linda Jones (Director and Chair of the

	Discussion – What Does Gender Have to do with Engineering?” at Doheny Library Intellectual Commons (presented by the Gender Studies Program)	Picker Engineering Program as well as Rosemary Bradford Hewlett Professor of Engineering at Smith College), Professor Maja Mataric and Professor Urbashi Mitra.
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### Recruitment of New Faculty

As in previous years, WiSE leadership offered to meet with women faculty candidates during their visits to campus, both to transmit information about the WiSE program and resources and to provide opportunities for candidates to ask questions about USC and work-family issues that they might not ordinarily feel comfortable discussing as part of their formal interview process. While hiring activities have been less vigorous given the current economic climate, departments continued to take advantage of this offer and senior WiSE faculty met with 12 faculty candidates over the course of 2008-09.

### WiSE Faculty Awards and Distinctions

Articles featuring WiSE faculty are continuously assembled in a chronological archive to chart their outstanding accomplishments. As outlined in Provost’s 2007 initiative on Faculty Recognition (3/19/07), bringing the achievements of USC faculty to the “attention of wider circles will support the ongoing recruitment by all departments of additional excellent faculty and graduate students.” It is our hope that highlighting the outstanding work of WiSE faculty at USC will contribute to our recruitment goals.

Accomplishments by WiSE Faculty reported in 08-09 are listed in the table below:

<u>Name</u>	<u>Title</u>	<u>School</u>	<u>Department</u>	<u>Achievement</u>
Andrea Armani	Assistant Professor	Viterbi	Mork Family Department of Chemical Engineering and Materials Science	Office of Naval Research Young Investigator Award for "Interferometric Optical Biosensor"
				National Science Foundation Instrument Development for Biological Research (IDBR) grant (\$1.2 million over 4 years)
Sarah Bottjer	Professor	College	Biology (Neuroscience)	Named Fellow of the American Association for the Advancement of Science (AAAS)
				Recipient, 2008-2009 USC Mellon Awards for Excellence in Mentoring (Faculty Mentoring Faculty)
Samantha Butler	Assistant Professor	College	Biology (Neuroscience)	NIH/NINDS R01 Grant "Regulation of Axonal Outgrowth In The Developing Spinal Cord" (\$1.8 million over 5 years)
Elaine Chew	Associate Professor	Viterbi	Daniel J. Epstein Department of Industrial and Systems Engineering and Ming Hsieh Department of Electrical	Featured performer (solo piano) on Albany Records CD titled 'Doubles - Music of Peter Child' (2009)

			Engineering	<p>Served on organizing committee of the German-American Kavli Frontiers of Science (GAFOS) Symposium of the National Academy of Sciences and Alexander von Humboldt-Stiftung - 14th meeting 2008 and 15th meeting 2009</p> <p>Served on steering committee and as program chair for the 9th International Conference on Music Information Retrieval (2008)</p> <p>Served as secretary of the Society for Mathematics and Computation in Music and chaired the program committee for the second biennial conference 2009.</p> <p>Visiting Scholar School of Engineering and Applied Sciences and Music Department at Harvard University (2009)</p>
Sarah Feakins	Assistant Professor	College	Earth Sciences	Launched and served as faculty mentor of "WiSE-Earth" group and listserv
Susan Friedlander	Professor	College	Mathematics	<p>Member of the National Academies Board on Mathematical Sciences</p> <p>Chief Editor of the Bulletin of the American Mathematical Society</p> <p>Associate Secretary of the American Mathematical Society</p> <p>Visiting Fellow of Trinity College, Cambridge</p>
Leana Golubchik	Associate Professor	Viterbi	Computer Science	<p>Served as Associate Chair for PhD Programs in the Computer Science Department</p> <p>2008 IBM Faculty Award Recipient</p>
Andrea Hodge	Assistant Professor	Viterbi	Aerospace and Mechanical Engineering	Recipient of 2-year National Science Foundation BRIDGE "Broadening Participation Research Initiation Grants in Engineering " (2008)
Maja Mataric	Professor	Viterbi	Computer Science	<p>Recipient, 2008-2009 USC Mellon Awards for Excellence in Mentoring (Faculty Mentoring Graduate Students)</p> <p>Served as Senior Associate Dean for Research, Viterbi School of Engineering</p> <p>Appointed member of the National Science Foundation Computer and Information Science and Engineering (CISE) Advisory Committee</p> <p>Appointed member of the Willow Garage Inc. Advisory Board</p> <p>General Chair, 2008 International Conference on Robotics and Automation (ICRA)</p> <p>NSF HCC Medium Grant for Personalized Socially Assistive Human-Robot Interaction: Applications to the Autism Spectrum Disorder</p>
Urbashi Mitra	Professor	Viterbi	Ming Hsieh Department of Electrical Engineering	Recipient of "Service Award for Faculty" by the Viterbi School of Engineering for her service as Chair of the Viterbi WiSE Committee.

				Recipient of "Remarkable Women" Award for Faculty by the USC Office of Student Affairs
Susan Montgomery	Professor	College	Mathematics	Served on National Science Foundation Grants Panel on Algebra
				Conference held in her honor on Hopf Algebras at USC (February 2009)
Jean Morrison	Professor	College	Earth Sciences	Served as Vice Provost for Graduate Programs 2008 - promoted and expanded duties to "Vice Provost for Academic Affairs and Graduate Programs" (2009)
Alice Parker	Professor	Viterbi	Ming Hsieh Department of Electrical Engineering	2009 recipient of the American Society of Engineering Education (ASEE) Sharon Keillor Award for Women in Engineering Education
Hanna Reisler	Professor	College	Chemistry	Appointed by the USC College as Director of Faculty Development for the Sciences 2008-09.
Maria Todorovska	Research Professor	Viterbi	Sonny Astani Department of Civil and Environmental Engineering	Named among "18 prominent women in civil engineering" worldwide as role models for aspiring female engineering students by the <i>International Journal of Engineering Education</i> .
Lorraine Turcotte	Associate Professor	College	Kinesiology and Biological Sciences	Elected to the Board of Trustees (Basic & Applied Science) of the American College of Sports Medicine
Shinyi Wu	Assistant Professor	Viterbi	Daniel J. Epstein Department of Industrial and Systems Engineering	Recipient of a grant from the Agency for Healthcare Research and Quality to develop a guide to identify and remediate unintended consequences of implementing health information technology.
				Recipient of a grant from the California HealthCare Foundation to conduct an evaluation of the Lean Transformation project in four public hospitals in California.



Professors Urbashi Mitra and Maja Mataric at the 2008-09 USC Mellon Mentoring Awards Ceremony



Professor Sarah Bottjer at the 2008-09 USC Mellon Mentoring Awards Ceremony





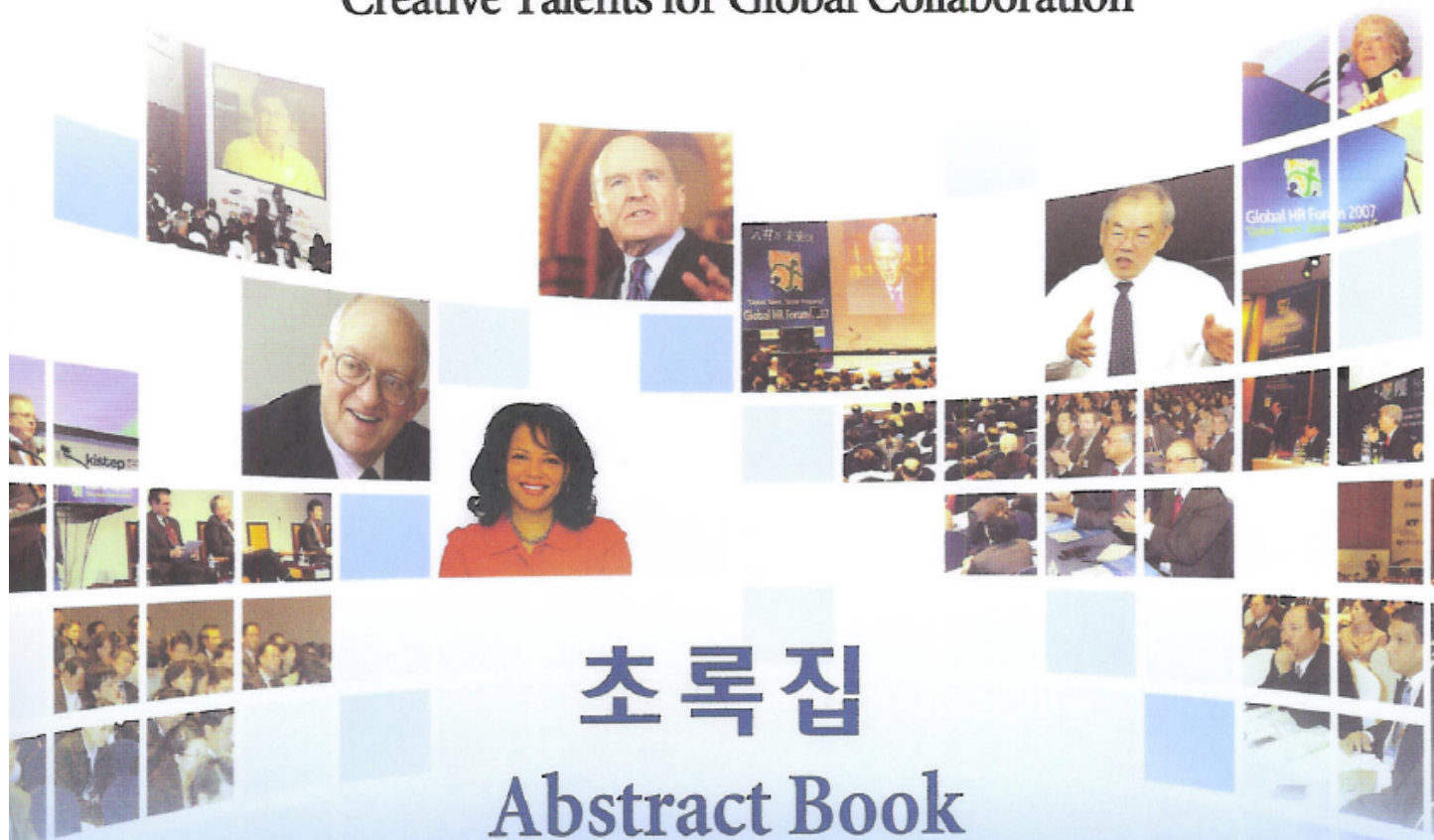
WiSE women award recipients at the 2008 “Remarkable Women” Awards ceremony (left to right): Undergraduate Lisa Werth; Professor Urbashi Mitra; Program Manager Nicole Hawkes and Postdoctoral Researcher Sarah Sabatinos.

# Appendix



# Global HR Forum 2008

Creative Talents for Global Collaboration



11.4 (Tue) ❖ 11.6 (Thu)  
Grand InterContinental Seoul, Korea



## S-2

### Women's Leadership and Diversity

#### Moderator

- ▶ **Hei-Sook Lee**, *Dean of College of Natural Sciences, Ewha Womans university*

#### Speakers

- ▶ **Jean Morrison**, *Professor of Earth Sciences, University of Southern California*
- ▶ **Shim Yoon**, *Vice President, Samsung SDS Incubation Center*

#### Discussants

- ▶ **Young-Sook Yoo**, *Director, Korea Institute of Science and Technology*
- ▶ **Kong-Ju-Bock Lee**, *Director General, National Institute for Supporting Women in Science and Technology(NISWIST)*

The USC Women in Science and Engineering Program



Presents

**2009 WiSE Distinguished Lecturer**

**Dr. Phoebe Leboy**

President, Association for Women in Science (AWIS) and  
Professor of Biochemistry, University of Pennsylvania  
School of Dental Medicine

**"MAKING ACADEMIC SCIENCE A GOOD  
CAREER CHOICE FOR WOMEN"**



**Wednesday, February 4, 2009**

**3:00 p.m. – 4:30 p.m.**

**Hedco Neuroscience Auditorium (HNB 100)**

Reception to follow in HNB 107

Contact WiSE at (213) 821-4400 for more information

Or visit [www.usc.edu/wise](http://www.usc.edu/wise)



## **Appendix 3: Revised Guidelines for WiSE Gabilan Assistant Professorships**

### **The Women in Science and Engineering (WiSE) Program Gabilan Assistant Professorship**

The Gabilan Assistant Professorship is one of the recruitment tools provided by the WiSE program and awarded to new faculty as part of the start-up package. In certain disciplines named professorships for junior faculty add prestige to the appointment and may leverage additional funding and awards. The most important criterion to be used in awarding the professorship is the excellence of the candidate. Other criteria include advancing the goals of the WiSE program and reducing the under-representation of women. The exact way in which the funds are distributed can be flexible and the details negotiated by the dean and the WiSE program director.

#### **Guidelines for Appointment**

**Goal:** To aid in recruiting outstanding junior faculty who will increase the representation of women in science and engineering at USC and to advance their careers towards tenure.

**Amount:** A total of \$50-125 K over 5 years, distributed as agreed by the dean and the WiSE program director. Awards would typically range between \$10-25K per year for five years or until the recipient received tenure.

**Criteria:** The most important criterion is the excellence of the candidate. The Department Chair (or appropriate Section or Program Head) must make the case that the candidate is at the top of the cohort of applicants in the specific field of the application and would be deserving of such honor at any top ranked university in the US. Supplementary materials that can be used in making a compelling case for the excellence of the candidate include, but are not limited to, letters of recommendation, other honors and evidence of excellence, competitive offers, etc. How the recruitment advances the goals of the WiSE program and reduces the under-representation of women are the other considerations.

**Selection procedure:** Because time is important in junior appointments, the Director of the WiSE Program will make the decision expeditiously, in consultation with members of the Advisory Board as appropriate. Chairs are encouraged to consult with the Director of the WiSE Program on the criteria for granting the Gabilan Assistant Professorship and the supplemental materials that would be useful in making the case.

### Application Guidelines

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**Goal:** Supplemental funding for major research projects through WiSE offers a way to offset barriers and life-cycle related obstacles that have been shown to slow or interrupt the careers of women faculty. Some of these barriers are subtle and can range from difficulties in meeting teaching and research demands while simultaneously raising a small child, to a reduced chance for new funding opportunities because of a lack of access to a network group. Activities for which funding may be requested vary from case to case. They may include, but are not limited to, supporting a student or a technician during maternity leave, purchasing an equipment item, inviting a collaborator, obtaining teaching release for a semester, providing bridge funding to relieve a temporary funding gap, etc. Faculty are encouraged to consult with the WiSE program office to determine the eligibility of a proposed activity. Funds may also be requested to take advantage of special opportunities that are not funded through regular agencies and programs. Other activities that can be shown to benefit or advance the professional career and reputation of women faculty in science and engineering at USC may also be considered. These may include, among others, organizing a workshop, inviting a distinguished visitor, etc. If a special case arises outside the submission deadline, the WiSE faculty is encouraged to contact the WiSE Program Director to explore options for submission. (For further clarification of guidelines and examples see ["Appendix of Frequently Asked Questions" \(#faq\)](#))

**Eligibility:** Any USC faculty member in the sciences or engineering is eligible to apply (applicants must have faculty appointments in the departments of the Viterbi School of Engineering or the natural science and math departments of the USC College of Letters, Arts, and Sciences: Biology, Chemistry, Earth Sciences, Mathematics, Kinesiology, Physics & Astronomy). Recipients of a WiSE grant for Major Support are ineligible to apply for another within 3 years of receipt. Proposals should demonstrate a strong justification for how receipt of funds will serve to increase the representation of women in science and engineering. Those contemplating a proposal are encouraged to discuss the eligibility of their proposal with the Director of the WiSE Program, Jean Morrison at [morrison@usc.edu](mailto:morrison@usc.edu) (<mailto:morrison@usc.edu>) or 213-740-3551.

**Application Process:** Applications materials should be submitted electronically to WiSE using the online system. All documents should be in Microsoft Word or Adobe PDF format. A complete application includes the following required documents:

1. Abstract (one page or less) briefly describing the primary objective of the proposed research or activity and its significance in general terms.
2. Detailed Proposal (four pages or less) describing the research or activity and including the relevant literature, if appropriate. Proposals should be addressed to a broad audience of reviewers from across disciplines.
3. WiSE Justification (one page or less) describing how the proposed activities will further the goals of the WiSE Program to increase the number of women in science and engineering, such as offsetting barriers and life-cycle related obstacles.
4. Sources of Support (one page) listing other sources of internal and external support awarded during the last three years or pending. For each, provide the title, period, amount, sponsor, and describe the relationship of each to the current proposal.
5. Budget (one page plus one explanatory page) outlining proposed expenses. Provide a budget explanation on a separate page: clarifying the role of any individuals for whom salary support is requested; explain how travel funds will be used; justify the need for any equipment.
6. Applicant's up-to-date curriculum vitae
7. Recommendation of Reviewers (one page or less) recommending peers inside and outside of USC who are qualified to assess the proposed research or activity. Anyone perceived as NOT qualified by the applicant to act as a reviewer should be listed separately.
8. Statement of Support from the applicant's Dean that endorses the proposal, affirms the

availability of necessary facilities and space to perform the proposed research, and affirms that the applicant satisfies the requirements for submission.

9. Statement of Support from the applicant's Department Chair that affirms the availability of necessary facilities and space to perform the proposed research. If funding is awarded, chair must state the assumed responsibility for any overdrafts.

### **Additional Information:**

#### **Reviews**

Completion and submission of all required elements of the proposal including any institutional review committee's need to approve the research (i.e. human subjects, warm blooded animals, human blood/infectious diseases, recombinant DNA). Review must be requested prior to application submission and approval received prior to granting final funding.

#### **Grant Conditions**

- Faculty applicants should seek support from external sponsors concurrently and not rely exclusively on the WiSE program.
- Requests in excess of \$25,000 in total funding must be approved by the WiSE Director prior to submission.
- The duration of the grant can range from one to three years.
- Permanent equipment required for a research project and purchased with WiSE funds becomes the property of the University.
- Awards will include fringe benefits, but awards are not assessed indirect costs.
- Awards are not transferable to other institutions.

#### **Notification**

If an award is approved by the WiSE Advisory Board and the Provost's Office, faculty will be notified of the amount and conditions of the award by May 1. Copies of the award notification will be sent to the appropriate department chairs and deans.

#### **Reporting and Acknowledgement**

Awardees must submit a brief report (including an accounting of expenditures and any external support received) within thirty days of termination of the grant period. These reports will be evaluated by the WiSE Advisory Board and, with the investigator's permission, portions of the report may be reprinted to build support for the Program among the University community. Any publication or creative endeavor arising from work supported by the WiSE grant should acknowledge the "WiSE Program at the University of Southern California."

#### **Selection Process and Criteria**

Proposals submitted to the WiSE Program will be reviewed by the WiSE Advisory Board. Normally, proposals will be reviewed by USC faculty members. However, if the necessary expertise does not exist on campus, external reviewers may be engaged. In reviewing proposals, the committee will consider:

1. **The intrinsic quality of the proposed research or activity**
  2. **The merit of the WiSE Justification**
  3. Evidence that the project can be successfully completed
  4. The likelihood that the activities might lead to external funding
  5. The possibility that the activities will open avenues for further investigation
  6. The extent to which the proposed activities serve to advance the goals of the WiSE program.
- (The first two criteria listed in **bold red** are the most important).

## Appendix: Frequently Asked Questions

**Q:** Among the several categories of proposed activities, what are the funding priorities?

**A:** Those activities that can help offset barriers and life-cycle related obstacles and those related to opportunities that arise unexpectedly and are therefore not funded through regular agencies, have the highest priority. Other activities will be considered, but prior contact with the WiSE Program Director is strongly advised before submitting a proposal.

**Q:** What types of activities may fall under the category of those "that can help offset barriers and life-cycle related obstacles"?

**A:** Examples of the activities intended by this language include:

- Teaching release for a semester
- Hiring a technician during maternity leave
- Providing bridge funding during a funding gap related to family-career balance
- Providing seed money for a new initiative
- Providing seed money to recover from a career interruption

**Q:** The guidelines state that the program can fund "activities related to opportunities that arise unexpectedly and are therefore not funded through regular agencies." Which kind of activities fall under this category?

**A:** Examples of the activities intended by this language include:

- Inviting a collaborator who can enhance the research program
- Help in hiring a postdoctoral fellow with special expertise who has just become available
- Purchase a new piece of equipment that will assist in the next funding cycle

**Q:** The guidelines state that the program will consider proposals for "activities that can be shown to advance the professional standing and reputation of women faculty in science and engineering at USC." Which activities fall under this category?

**A:** These activities should be aimed at reducing the so-called "leaky pipeline" to women's advancement in academia. Original approaches to solving the problem of under-representation of women are encouraged. Examples of the activities intended by this language include:

- Invite successful faculty for longer visits, which include specific plans for meetings with other women faculty, postdocs, and graduate students
- Fund workshops on how to help faculty advance into leadership positions
- Fund workshops on career planning for graduate students and postdoctoral fellows

**Q:** How many proposals will be funded each year?

**A:** The amount of funding varies from year to year, depending on the availability of funds and other program commitments. At the most, we expect to fund three proposals per year at approximately \$25,000/each. However, program priorities may not allow us to fund any proposals in a given year. Funding duration may last between one and three years. An applicant who has received funding cannot apply again for three years.

**Q:** Even after reading through the guidelines, I am not sure whether my proposal is eligible. Who can I contact?

**A:** Please contact the WiSE Program Director, Jean Morrison at [morrison@usc.edu](mailto:morrison@usc.edu) (<mailto:morrison@usc.edu>) or 213-740-3551 or the WiSE Program Office at [wiseprog@usc.edu](mailto:wiseprog@usc.edu) (<mailto:wiseprog@usc.edu>) or 213-821-4400.



## Appendix 5: Program Announcement on Changes to WiSE Postdoctoral Support



### MEMORANDUM

#### Office of the Provost

Women in Science  
and Engineering

WiSE

To: Deans, Department Chairs, and Faculty in the WiSE-eligible fields of the USC College of Letters, Arts and Sciences and the USC Viterbi School of Engineering

From: Jean Morrison, WiSE Program Director  
Nicole Hawkes, WiSE Program Manager

Date: June 19, 2009

Subject: Changes to WiSE Programs for Postdoctoral Researchers

The Women in Science and Engineering (WiSE) Program is delighted to announce the implementation of a new program for USC Postdoctoral Researchers:

#### *The WiSE Merit Award for Excellence in Postdoctoral Research*

The new program is aimed at providing junior researchers with postdoctoral appointments at USC with an opportunity to be recognized for their achievements. Up to four, \$3,000 awards will be given each year to candidates nominated from the WiSE-eligible Departments of the USC College and the Viterbi School of Engineering. The WiSE Program hopes the awards will provide support and motivation to researchers on an academic trajectory and further increase the representation of women in science and engineering.

Detailed descriptions of the program as well as guidelines for making nominations are contained on the attached pages and on the WiSE website (<http://www.usc.edu/programs/wise/>).

Acting on the recommendations of the College and Viterbi WiSE Committees and the WiSE Advisory Board effective for the 2009-10 academic year, the existing WiSE program for Postdoctoral Support (offering matching funds in the amount of \$25,000 a year for two years, toward a minimum salary of \$40,000) will be suspended. Current recipients of the WiSE Postdoctoral Award will continue to receive salary support for the duration of the two-year Fellowship period however, no new applications for this program will be accepted.

We invite you to contact us with questions or comments about the program changes at [wiseprog@usc.edu](mailto:wiseprog@usc.edu).

Cc: Hanna Reisler  
Chair, WiSE Advisory Board



# WiSE Merit Awards for Excellence in Postdoctoral Research

**Deadline:** March 3

(In the event that a deadline falls upon a weekend or a university holiday, that deadline will move to the first workday following the posted date.)

**Award Amount:** \$3,000

**Directions:** Department chairs submit application materials electronically in digital form to the WiSE program office at [wiseprog@usc.edu](mailto:wiseprog@usc.edu).

The WiSE Merit Awards for Excellence in Postdoctoral Research are offered to current Postdoctoral researchers at USC who demonstrate exceptional work in their field. Candidates must be working under the mentorship of a faculty member in a WiSE-eligible department of the USC College or Viterbi School of Engineering. A maximum of four awards will be given each year. Candidates are nominated by the faculty and each department may nominate up to two candidates. Each WiSE Award will be for \$3,000.

## Purpose

The purpose of the WiSE Merit Award for Excellence in Postdoctoral Research is to provide junior researchers an opportunity to be recognized for their achievements. The WiSE Program hopes the awards will provide support and motivation to researchers on an academic trajectory and increase the representation of women in science and engineering.

## Selection Criteria

The WiSE Advisory Board will evaluate the excellence of the candidate's research, the trajectory of progress, and other attributes that demonstrate how the Award for Excellence in Postdoctoral Research may encourage the candidate to pursue a career in academic science and engineering.

## Application Guidelines

**Goal:** The primary goal of the WiSE Merit Award for Excellence in Postdoctoral Research is to encourage outstanding postdoctoral researchers at USC to pursue careers in academic science and engineering, thereby increasing the representation of women in these fields. The WiSE Program awards up to four WiSE Merit Award for Excellence in Postdoctoral Research each year to recognize exceptional achievements in research. Each WiSE Merit Award for Excellence in Postdoctoral Research will be for \$3,000. This award is not to be used in lieu of any other funding or salary.

**Eligibility:** In order to be eligible for a WiSE Merit Award for Excellence in Postdoctoral Research, the researcher must be employed as a postdoctoral researcher full-time by a faculty member in the WiSE-eligible fields of the USC College or Viterbi School of Engineering. The researcher must be nominated by their faculty advisor based on the quality of their research. Nominations by faculty should be sent to their department chair for ranking and submission to the WiSE Program.

**Nomination Process:** Each Department may nominate up to two candidates, endorsed and ranked in order by the Department Chair. Nomination materials should be submitted electronically to the WiSE Program office by email at [wiseprog@usc.edu](mailto:wiseprog@usc.edu). The following information must be submitted for each nominee:

1. Two letters of recommendation, one of which must be from the candidate's research advisor, detailing the exceptional work of the candidate, as well as explaining how the WiSE Award will serve to increase the representation of women in science and engineering.
2. A written one-page statement by the candidate, describing their current research accomplishments
3. The candidate's current CV listing accomplishments and publications
4. A brief cover letter of nomination and endorsement by the department chair ranking the candidates.

## Appendix 6: Current WiSE Tenured and Tenure-Track Faculty 08-09

### The USC College of Letters, Arts and Sciences

#### Life Sciences

Sarah Bottjer	Professor	Biological Sciences (Neuro)
Susan Forsburg	Professor	Biological Sciences (MCB)
Miriam Susskind	Professor	Biological Sciences (MCB)
Suzanne Edmands	Associate Professor	Biological Sciences (Marine)
Katrina Edwards	Associate Professor	Biological Sciences (Marine)
Judith Hirsch	Associate Professor	Biological Sciences (Neuro)
Emily Liman	Associate Professor	Biological Sciences (Neuro)
Michelle Arbeitman	Assistant Professor	Biological Sciences (MCB)
Samantha Butler	Assistant Professor	Biological Sciences (Neuro)
Liang Chen	Assistant Professor	Biological Sciences (MCB)
Karla Heidelberg	Assistant Professor	Biological Sciences (Marine)
Xuelin Wu	Assistant Professor	Biological Sciences (MCB)
Xianghong Zhou	Assistant Professor	Biological Sciences (MCB)
Wiebke Ziebis	Assistant Professor	Biological Sciences (Marine)
Jill McNitt-Gray	Professor	Kinesiology
Lorraine Turcotte	Associate Professor	Kinesiology

#### Physical Sciences / Mathematics

Hanna Reisler	Professor	Chemistry
Anna Krylov	Professor	Chemistry
Sarah Feakins	Assistant Professor	Earth Science
Meghan Miller	Assistant Professor	Earth Science
Jean Morrison	Professor	Earth Science
Susan Friedlander	Professor	Mathematics
Susan Montgomery	Professor	Mathematics
Jia Grace Lu	Associate Professor	Physics & Astronomy
Elena Pierpaoli	Associate Professor	Physics & Astronomy

### The USC Viterbi School of Engineering

Andrea Hodge	Assistant Professor	Aerospace and Mechanical Engineering
Eva Kanso	Assistant Professor	Aerospace and Mechanical Engineering
Ellis Meng	Assistant Professor	Biomedical Engineering
Katherine Shing	Associate Professor	Chemical Engineering & Materials Science
Andrea Armani	Assistant Professor	Chemical Engineering & Materials Science
Burcin Becerik Gerber	Assistant Professor	Civil and Environmental Engineering
Amy Rechenmacher	Assistant Professor	Civil and Environmental Engineering
Leana Golubchik	Associate Professor	Computer Science
Maja Mataric	Professor	Computer Science
Urbashi Mitra	Professor	Electrical Engineering
Alice Parker	Professor	Electrical Engineering
Michelle Povinelli	Assistant Professor	Electrical Engineering
Elaine Chew	Associate Professor	Industrial and Systems Engineering
Shinyi Wu	Assistant Professor	Industrial and Systems Engineering

**The USC Women in Science and Engineering Program**



**Together with the USC Science and  
Engineering Library**

**Presents**

**2008 Fall Library Program and  
Orientation for  
WiSE Faculty, Students, and Postdocs**

Back for the 3<sup>rd</sup> year by popular demand! Join USC Science and Engineering librarians Norah Xiao and Jean Crampon for an introduction to electronic resources and library facilities that may assist with various points in the research process. The program is appropriate for seasoned researchers as well as those new to the USC campus. Following a formal presentation and tour, join colleagues for a complimentary lunch and conversation in the 2nd Floor library conference room. Topics to be discussed include:

1. Use of new databases and search engines
2. Helpful resources for literature review
3. Resources for citation analysis (yours and others)
4. Discussion of pre and/or post print storage and rights

**Tuesday, October 14, 2008  
11:00 a.m. – 1:00 p.m.  
Science and Engineering Library**

Contact WiSE at (213) 821-4400 for more information  
Or visit [www.usc.edu/wise](http://www.usc.edu/wise)

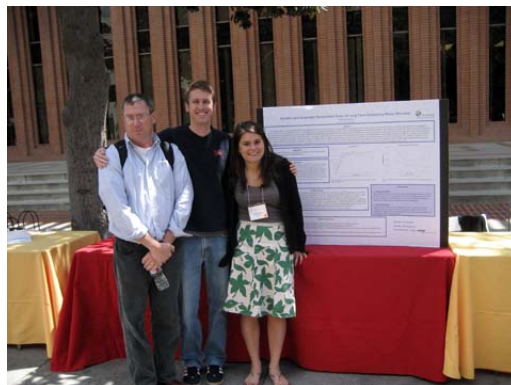
Space is limited, and RSVP is required to [hawkes@usc.edu](mailto:hawkes@usc.edu)  
Confirmed participants should meet at the circulation desk



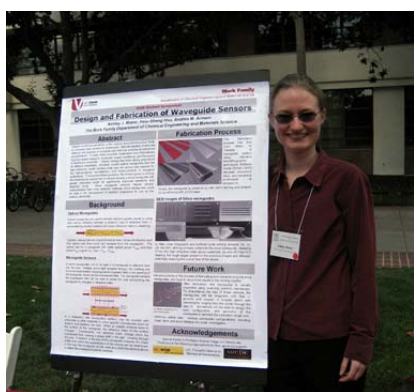
**Appendix 8: WiSE Undergraduate Research Fellows 08-09**  
**Presentations at the 2009 Undergraduate Symposium for Scholarly and Creative Work**  
**April 15, 2009**



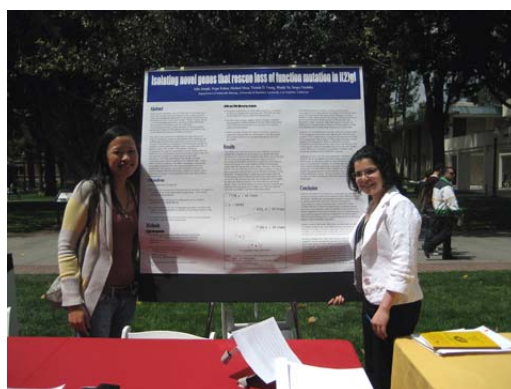
Cara Magnabosco (Biology)  
 Faculty Mentor, Douglas Capone



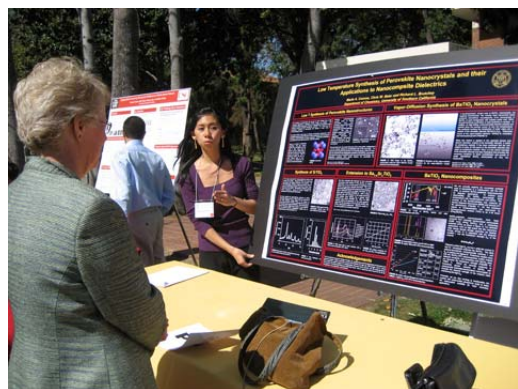
Marlo Gawey (Earth Sciences) with  
 Her Graduate Student mentor, Tim Riedel and her  
 Faculty Mentor, Will Berelson



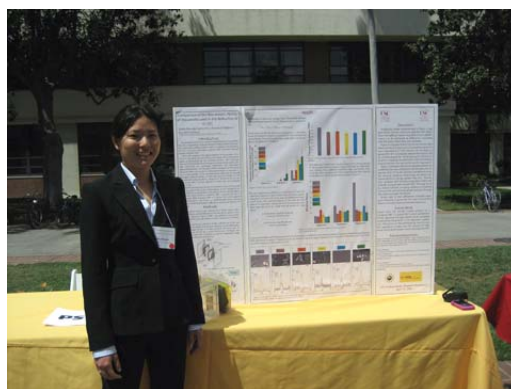
Ashley Maker (Chemical Engineering)  
 Faculty Mentor, Andrea Armani



Negar Kahen (Biology) with her Graduate  
 Student Mentor, Wendy Vu  
 Faculty Mentor, Sergey Nuzhdin



Marie Cuevas (Chemistry) explains her research to  
 WiSE Director Jean Morrison  
 Faculty Mentor, Richard Brutchey



Shelly Masuda (Civil Engineering)  
 Faculty Mentor, Massoud Pirbazari