



2011-2012



USC: Women in Science and Engineering

Program Report



A decorative graphic featuring a large, light blue circle with a fine diagonal line pattern. Overlapping this are two sets of concentric circles in red, also with a fine diagonal line pattern. The circles are positioned in the top right and bottom left corners, creating a sense of depth and movement.

Women in Science and Engineering

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Executive Summary

The Women in Science and Engineering Program (WiSE) continues to be USC's premiere diversity initiative, serving as a model within the University, as well as across the country and internationally. Since its inception in 2000, WiSE has helped to increase the number of women faculty in WiSE-eligible departments from a total of fifteen, twelve in the six departments of the USC Dana and David Dornsife College of Letters, Arts, and Sciences and three in the eight departments of the USC Viterbi School of Engineering, to forty-six, twenty-five in the USC Dornsife College and twenty-one in the Viterbi School of Engineering. In just over a decade, WiSE has helped to more than triple the number of tenured and tenure track women in WiSE-eligible departments.



Figure 1: WiSE Faculty at the Spring 2012 WiSE Hosted Faculty Networking Meeting.

In addition to its suite of grant-making 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 Dana and David Dornsife College of Letters, Arts and Sciences and the USC Viterbi School of Engineering. Hiring of tenured and tenure track WiSE faculty continues to be the program's primary goal. In 2011-2012 WiSE successfully helped to recruit two new faculty to the USC Dornsife College. Naomi Marcil Levine, currently the NOASS Postdoctoral Fellow at the Moorcraft Lab, Harvard University, will join the Department of Biological Sciences, Marine Environmental Biology Section, as an Assistant Professor. Irene Chiolo, currently a Research Scientist at Lawrence Berkeley National Laboratory, will be joining the Department of Biological Sciences, Molecular and Computational Biology Section, as an Assistant Professor. Total number of WiSE faculty in the natural sciences and math fields in USC Dornsife College and the Viterbi School of Engineering now total 46. (See Appendix 1)



Figure 2: 2011-2012 WiSE Lloyd Armstrong, Jr. Endowed Chair, Professor Hanna Reisler (Chemistry).

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 2011-2012 academic year, WiSE Director, Leana Golubchik, met with the Chairs of all departments in the Viterbi School of Engineering and the USC Dornsife College, including each of the subdivisions in Biological Sciences. WiSE leadership also participated in meetings with 20 formal candidates during their campus visits (8 in Viterbi, 11 in Dornsife, and one through Transformative Hires.). (See Appendix 2) WiSE's newest program, WiSE Support for Facilitating Diversity in Faculty Searches, which was established in 2010-2011, provided \$11,514 to the departments of Electrical Engineering, Biological Sciences, Chemistry, and Earth Sciences and led to the hiring of Naomi Levine as an Assistant Professor.

Current WiSE faculty continues to distinguish themselves with campus-wide and national level recognition for their research. Andrea Hodge, Assistant Professor of Aerospace and Mechanical

Engineering, received a 2012 ONR (Office of Naval Research) Young Investigator Award for a proposal titled, "Tailored Crystallographic Material States for the Design of Novel Interfaces." Susan Friedlander, Professor of Mathematics, was selected as a SIAM (Society for Industrial and Applied Mathematics) Fellow for the Class of 2012. Anna Krylov, Professor of Chemistry, was elected as a 2011 Fellow of the American Physical Society and awarded both a Bessel research award from the Humboldt foundation and a 2012 ACS (American Chemical Society) Physical Chemistry Division Award in Theoretical Chemistry. Meghan Miller, Assistant Professor of Earth Sciences, won a Career Award through the National Science Foundation for her project, "SLAB Structure and Dynamics of Arcuate Shaped Subduction Zones." Dorit Hochbaum, Professor of Industrial and Systems Engineering, won the INFORMS Computer Science Prize for 2011. Ellis Meng, Associate Professor of Biomedical Engineering, was selected as one of the 40 Under 40 in Medtech by the *Medical Device and Diagnostic Industry* magazine. In 2011-2012 Judith Hirsch, Department of Biological Sciences, Neurobiology Division, was promoted from Associate to Full Professor. Astrid Schnetzer, Assistant Professor (Research) in Biological Sciences, Marine Environmental Division, has accepted a tenure track position at North Carolina State University (See Appendix 3)

WiSE faculty also consistently receives recognition for their contributions to the surrounding community. Leana Golubchik was one of 12 women recognized by the USC Remarkable Women Awards, which are administered through the Office of Campus Activities and the Women's Student Assembly.



Figure 3: WiSE Director, Leana Golubchik, after receiving a USC Remarkable Women Award, with her nominators, Urbashi Mitra and Hanna Reisler.

In September 2011, the WiSE Program moved into new offices. The WiSE Suite, located in Grace Ford Salvatori Hall (GFS 304), includes newly renovated administrative offices for the Director and Program Manager, as well as a common area for use by the WiSE Advisory Board, USC Viterbi and USC Dornsife Committees, WiSE Faculty Networking Group, WiSE Graduate and Undergraduate Cohorts, and several WiSE sponsored student and postdoctoral organizations. (See Appendix 4) Upon the full furnishing of the WiSE Suite in February 2012, WiSE expanded its programming efforts with a series of new activities, including monthly talks and a series of open houses to promote WiSE Top-Off Awards, Merit Awards to Current Ph.D. Students, and Merit Awards for Excellence in Postdoctoral Research.



Figure 4: Ph.D. Students meet with Jennifer Chayes, Founding Director of Microsoft Research New England Lab, in the WiSE Suite (2/14/12).



Figure 5: WiSE Open House for Assistants and Staff to Department Chairs in the WiSE Suite (2/28/12).



Figure 6: WiSE Open House for Graduate Studies Advisors in the WiSE Suite (2/22/12).

In order to further aid in the retention of women faculty and to encourage undergraduate and graduate students to pursue careers in the academy, WiSE implemented a new monthly programming series: “WiSE Talks” provide an intimate setting to discuss subjects recommended by the community and are held monthly in the WiSE Suite. Subjects this year included three sessions. Professor and Chair of Electrical Engineering, Sandy Sawchuk, led a discussion on



Figure 7: WiSE Talk, Promotions for Teaching Faculty with Sandy Sawchuk, Chair of Electrical Engineering (2/16/12).

Promotions for the Teaching Faculty, and Sandeep Mitra and Maja Mataric each led a discussion of Awards and Nominations.

WiSE continues to provide professional development and networking opportunities for women. The 2011-2012 WiSE Distinguished Lecture Series featured talks by Nobel Laureate Ada Yonath, the Founding Director of Microsoft Research New England Lab, Jennifer Chayes, Professor Samantha Joye (Marine Sciences, University of Georgia),

and the Center for Applied Mathematical Sciences Distinguished Lecturer and Irene McCulloch Lecturer in Sciences and Engineering, Nancy Kopell. (See Appendix 5) By sponsoring social events in tandem with talks that feature prominent women scholars, the WiSE Distinguished Lecture Series hopes to present the USC community with cutting-edge research; to stimulate discussion among faculty, postdoctoral scholars, graduate and undergraduate students, and staff; to motivate young women to pursue academic careers; to create opportunities for networking among junior scholars; and to promote collegiality within the academic community more generally.



Figure 8: Jennifer Chayes, Founding Director of Microsoft Research New England Lab, in the WiSE Suite (2/14/12).



Figure 9: Nobel Laureate and WiSE Distinguished Lecturer, Ada Yonath, delivers a lecture, “The Chick-or-Egg Question: What Was First the Genetic Code of the Protein?” (2/20/12).

In conjunction with WiSE’s stated mission to build a supportive environment for women within the University, WiSE faculty mentor women at all levels – ranging from undergraduate to graduate students to postdoctoral scholars. (See Appendix 6) Fifteen faculty members from the Viterbi School of Engineering and USC Dornsife College mentored twenty students through the WiSE Undergraduate Research Grant Program. Professor Maja Mataric (Computer Science) received three NSF

REU supplements for five middle school teachers from three school districts (LAUSD, South Pasadena, and Norwalk) to develop STEM modules for in-class math and science instructions; gave 2 annual elementary school assemblies involving robot demos with women Ph.D. students as role models for the kids; and initiated and sponsored the USC Robotics Open House in mid-April, which brought up to 1000 local students, teachers, families, and businesses to the Viterbi School for a show-and-tell about robotics research. In addition, on March 8, 2012 WiSE sponsored a trip to take twenty undergraduate, Master’s and Ph.D. students to a Women’s History Month event at Jet Propulsion Laboratories in Pasadena, CA. Students attended, *“Leaders in Space Exploration, Featuring Female Principal Investigators of Space Missions, Interviewed by Patt Morrison.”*



Figures 10 & 11: WiSE Students on a WiSE Hosted trip to JPL Laboratories in Pasadena, CA for a Women’s History Month Event (3/8/12.)

Former WiSE Ph.D. students and Postdoctoral Scholars are attaining national prominence for their research. Debashree Ghosh (Chemistry), a 2010-2011 recipient of a WiSE Merit Award for Excellence in Postdoctoral Research, will start an independent position (Scientist Gr IV(3) or Scientist E1) in the National Chemical Laboratory in Pune, India. Adele Laurent (Chemistry), a postdoctoral scholar under Anna Krylov, has accepted an independent position (Charge de Recherche 2) in the CEISAM laboratory at the University of Nantes. Silvana Constantinescu, Ph.D. in Biological Sciences May 2012, was awarded the Gail Butterfield Student Research Award of the SouthWest American College of Sports Medicine in Fall 2011 and is now a Postdoctoral Fellow and Lecturer at College of Science & Health, Charles Drew Medical School, Los Angeles, CA. Megan McDonald, Ph.D. Mechanical Engineering May 2012, has been hired as a Nuclear Engineer, GS-07, as a civilian working for the Navy at Pearl Harbor. Pao-Chen Li, Ph.D. in Biological Sciences 2011, won the William Trusten Award for Outstanding Graduate Student and is now a Postdoctoral Scholar at the Gladstone Institute at the University of California, San Francisco. Former Ph.D. student in Earth Sciences and recipient of a WiSE Merit Fellowship for Current Ph.D. Students in 2010, Whitney Behr (2011) has been hired as a tenure track professor at the Jackson School at the University of Texas at Austin. Former Ph.D. student in Earth Sciences, Katy Johanesen (2011) will assume a short-term teaching position in Geology this Fall at Norwich University in Vermont. Marcia Abbott, Ph.D. in Biological Sciences May 2010, is a Postdoctoral Fellow at the Stem Cell Center, UC San Francisco. Emily Mower, who earned her Ph.D. in 2010 in Computer Science under the guidance of Professor Maja Mataric, is now an assistant professor of Computer Science at the University of Michigan. Karen R. Kelly, Ph.D. in Biological Sciences May 2007, completed a Postdoctoral Fellowship at the Cleveland Clinic in Ohio and was hired as an Applied Physiologist in the Department of Warfighter Performance, Naval Health Research Center, San Diego, CA. Professor Maja Mataric's former students, Jillian Greczek and Katelyn Swift-Spong, received NSF Graduate Research Fellowships, for 2012-2015 and 2011-2014. Elaine Short, who also worked under Mataric, received a USC Provost's Fellow (2010-2012) and NSF Graduate Research Fellow (2012-2015).



Figure 12: Ashley Maker, Ph.D. student in Chemical Engineering, and winner of a USC Undergraduate Research Mentoring Award.

Current WiSE Ph.D. students and postdoctoral scholars continue to be recognized for their research and accomplishments. Lisa Kanner, a postdoc in the Department of Earth Sciences, published a paper, "High-latitude forcing of the South American summer monsoon during the Last Glacial," in *Science* (February 2012). Rowan Martindale, Ph.D student in the Department of Earth Sciences, and Sarah Greene, who completed her Ph.D. in the Department of Earth Sciences, published a paper, "The Geological Record of Ocean Acidification,"



Figure 13: Lisa Kanner in the field outside of Pacupahuain Cave, in Tarma, Peru with her advisor, Stephen Burns (center) and guide Carlos Morales-Bermudez (right).

in March 2012 in the journal, *Science*. Simin Mehrabani, Ph.D. student in Chemical Engineering and Materials Science, is an Alfred Mann Graduate Fellow. Ashley Maker, Ph.D student in Chemical Engineering and Materials Science, was awarded a USC Undergraduate Research Mentoring Award. Ph.D. student in Mathematics, Rebecca Courter, who expects to complete her degree in August 2012, received a tenure-track position at Pasadena City College. Suet-Ying (Daisy) Mak, Ph.D. student in Physics and past recipient of a WiSE Merit Fellowship for Current



Figure 14: Undergraduate Elizabeth Scott conducting research samples for Professor Karla Heidelberg (Biological Sciences, Marine Environmental Biology).

Ph.D. students, received an honorable mention at the USC Ph.D. Achievement Awards. Current Ph.D. student and past recipient of a WiSE Travel grant, Nadia Korovina, won a poster award at the International Congress of Quantum Chemistry in Boulder.

WiSE undergraduate students show promise as emerging researchers. Hannah Grey, recipient of a WiSE Undergraduate Research Award, together with members of her lab, won first prize in the Physical Science, Mathematics and Engineering Division of the 2011 Undergraduate Symposium for Scholarly and

Creative Work for their project, "Investigating the mechanisms of arsenic removal by microbial layer in a bio-sand filter used for drinking water purification in developing countries." (See

Appendix 13) Katherine Wittig, an undergraduate student who worked with Susan Montgomery (Mathematics) on a WiSE-funded project in 2011, was awarded a Graduate Fellowship by Math for America. She will enter the MAT (Master's of Arts and Teaching) program at USC Rossier School of Education in June 2012. During the summer of 2012, Alexa Sieracki, an undergraduate in Earth Sciences and recipient of a WiSE Undergraduate Research Grant was a Research Assistant at the University of Notre Dame Energy Frontier Research Center. Kristan Culbert, who graduated in December 2011 in Earth Sciences, is a Summer 2012 International Ocean Drilling Program Diversity Intern.

During the 2011-2012 year, WiSE also expanded its involvement in community projects, helping to organize two science sessions at local schools. Partnering with the Young Scientists Program and the Joint Educational Project, WiSE sponsored a workshop lead by Professor Jill McNitt-Grey (Biological Sciences) for an afternoon on Energy and Motion at the 32nd Street Elementary School. YSP's primary objectives -- to increase science activities for a larger number of neighborhood children as a means to encourage them to consider careers in the sciences (STEM), to encourage science literacy, and



Figure 15: Students participating in the Young Scientists Program, sponsored in part by WiSE (4/26/12).

to apply what they are learning in the classroom to the real world – compliment the mission of WiSE. In addition to the session lead by Professor McNitt-Grey, undergraduate women Linda Jules and Antonia Zaferiou presented the short film, *Dance with Newton's Laws*, for which they earned an honorable mention in the USC Science Films Competition. WiSE's participation in the event was featured in the USC News Article, "Science Demystified," May 11, 2012. WiSE also coordinated the participation of two Ph.D. students, Lessa Grunenfelder (Materials Science) and Natalie Kintz (Neuroscience), in the Family Math and Science Night at Overland Elementary School. The annual event aims to inspire children and to make math and science as fun as possible. Appendix 7 acknowledges the contributions of our students to the success of this event. The WiSE Program Manager has also been increasingly responding to emails from local parents and organizations interested in encouraging students' interest in science and engineering. Students have been invited to attend on-campus conferences and poster sessions

hosted by WiSE and faculty sponsored REUs. A program to encourage mentoring of high school students by WiSE undergraduate and graduate students is currently being explored.

The WiSE Advisory Board met twice per semester in 2011-2012 and continues to work with program administration to hone its recruitment and support of programs for maximum impact. Areas of particular focus this year included a continued discussion of the need for reform and expansion of the USC Childcare Program and the mentoring of faculty. Based on the results of an anonymous survey of WiSE faculty, the WiSE Advisory Board has recommended the development of a new WiSE Mentoring Program, which will be developed and implemented in 2012-2013.

Under the guidance of the Chairs of the USC WiSE Dornsife and USC WiSE Viterbi Committees, WiSE has established the deadlines for Undergraduate Research Awards to be August 1, December 1, and April 1. By making the deadlines for the awards consistent between the two schools, WiSE hopes to clarify the applications process for students as well as their mentors. Consistency in deadlines will also facilitate better advertizing of awards. (In previous years Dornsife applications were due August 28, January 16, and April 1, while Viterbi applications were due August 1, November 15, and April 1). Similarly, WiSE has established March 3 as the deadline in both schools for nominations for Top-Off Fellowships, Merit Awards for Current Ph.D. students, and Merit Awards for Excellence in Postdoctoral Research. (In previous years Dornsife applications were due March 3 for both awards, while Viterbi Top-Off Awards were due February 15 and Merit Awards March 3.)

Enhanced communication efforts with WiSE campus constituencies were furthered in 2012 with the continuance of the WiSE listserv and the monthly WiSE newsletter, which condenses and publicizes campus and national news items, opportunities, and events information. 2012 also included the creation of the WiSE Facebook Page, which will be publicized to students and faculty in Fall 2012. Three pages have also been added to the WiSE webpage. The first is dedicated to the WiSE Faculty Networking Group, the second to the USC Young Researchers Program, and a third to providing information on a new WiSE Service – Award and Grants Reviews. In order to assist faculty and postdoctoral scholars with Award and Grant Applications, the WiSE Program will coordinate matching interested candidates with USC faculty members within their areas of research.

WiSE Leadership

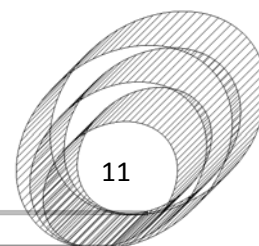
A critical aspect of the success of WiSE is the direct involvement of men and women faculty, at all career levels and from both USC Dornsife and the Viterbi School of Engineering, in planning, evaluating, and guiding the program's development. With the guidance of its diverse committees, WiSE programs 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 2011-2012: two during the Fall semester (10/5/11) and (11/16/11) and two during the Spring semester (2/7/12) and (4/25/12). The board focused its attention on discussing the mentoring of WiSE Faculty and on childcare services. The first meeting in the Spring semester is joint with the USC Dornsife College and Viterbi School committees. The Advisory Board also reviews applications for Major Support for Current Faculty and Merit Awards for Postdoctoral Research.

On the subject of mentoring, the Board began by conducting an anonymous survey to evaluate the needs of the faculty. Based on these results the Board concluded that there is a need for increased WiSE involvement in mentoring. Faculty appreciate the role WiSE as an external organization to departments can play in this process. WiSE mentoring is especially needed during the transition from Associate to Full Professor. In order for WiSE faculty members to fully commit to this time-consuming role, WiSE will need to gain recognition for this work as service to the University.

In a continuance of prior years' discussions, the Board reiterated the need for increased childcare services on campus. The Board was pleased to learn in summer 2012 that an initiative of the Office of the Provost has resulted in Children's Creative Learning Centers (CCLC) assuming management of USC Childcare in August 2012 and the construction of two new additional centers, beginning in 2013. The Board looks forward to seeing this new plan result in increasing the availability of childcare services, particularly in the area of infant



care, for faculty and students and hopes that the time applicants spend on wait lists will decrease.

In 2011-2012, in response to several student and faculty inquiries, the Board reviewed the eligibility requirements of students and faculty in Neuroscience. Faculty eligibility will continue to be based on the individual faculty member's home department. Ph.D. students in Neuroscience working with WiSE-eligible faculty will also be considered WiSE-eligible. Nominations for awards should be made through the faculty member's home department. Thus, a Ph.D. student in the Neuroscience Program working with a faculty member in Biological Sciences will be considered WiSE-eligible. That student can be nominated for a Merit Award for Current Ph.D. students through the department of Biological Sciences. In the unique case of WiSE Top-Off Awards, where incoming Ph.D. students have not yet selected a faculty mentor, all nominations for Neuroscience will be submitted through the Neurobiology Program in Biological Sciences.

In April 2012 it was announced that after 12 years of service, Professor Hanna Reisler will be stepping down as Chair of the WiSE Advisory Board. In Fall 2012, Professor Judith Hirsch will assume this position. WiSE is grateful for the contributions of Professor Reisler, who was instrumental in the formation, development, and implementation of the WiSE Program.

2011-2012, WiSE Advisory Board



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



Suzanne Edmands
Professor, Department of Biological Sciences, Marine Biology Section
USC Dornsife College of Letters, Arts & Sciences



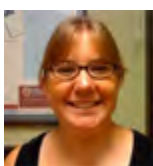
Henryk Flashner
Professor, Department of Aerospace and Mechanical Engineering
USC Viterbi School of Engineering



Susan Forsburg
Professor, Department of Biological Sciences,
Molecular and Computational Biology Section
USC Dornsife College of Letters, Arts & Sciences



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



Jessica Parr
Assistant Professor of Teaching, Department of Chemistry
USC Dornsife College of Letters, Arts & Sciences



Kathy Shing
Professor, Department of Chemical Engineering
USC Viterbi School of Engineering



Gaurav Sukhatme
Professor, Department of Computer Science
USC Viterbi School of Engineering

2011-2012, USC Dornsife WiSE Committee

Committees composed of faculty in each school serve as advisors on grant-making by reviewing and evaluating the applications and making recommendations for funding.

2011-2012, USC Dornsife WiSE Committee



Jill McNitt-Gray, Chair Professor, Departments of Biological Sciences and Biomedical Engineering



David Bottjer
Professor, Department of Earth Sciences



Samantha Butler
Assistant Professor, Department of Biological Sciences



Gerrie Peters
Research Professor, Department of Physics and Astronomy

A summary of the reviews conducted by the USC Dornsife Committee during the academic year follows:

USC College Committee Reviews 2011-2012

Program	Deadline	Number of	
		Applicants	Number of Awards
Undergraduate Research	28-Aug-11	4	3
Undergraduate Research	1-Dec-11	10	4
Graduate Merit	3-Mar-12	6	2
Graduate Top-Off	3-Mar-12	14	4 offered/ 1 awarded
Undergraduate Research	1-Apr-12	6	5

2011-2012, USC Viterbi WiSE Committee

Committees composed of faculty in each school serve as advisors on grant-making by reviewing and evaluating the applications and making recommendations for funding.



Ellis Meng, Chair
Associate Professor, Department of Biomedical Engineering



Andrea Armani
Assistant Professor, Mork Family Department of Chemical Engineering and Materials Science



Michelle Povinelli
Assistant Professor, Ming Hsieh Department of Electrical Engineering



Geoffrey Shiftlett
Associate Professor, Department of Aerospace and Mechanical Engineering

A summary of the reviews conducted by the USC Viterbi Committee during the academic year follows:

USC Viterbi Committee Reviews, 2011-2012

Program	Deadline	Number of	
		Applicants	Number of Awards
Undergraduate Research	28-Aug-11	8	5
Undergraduate Research	1-Dec-1	4	4
Graduate Top-Off	3-Mar-12	12	4 offered/ 2 awarded

Graduate Merit	3-Mar-12	7	2
Undergraduate Research	1-Apr-12	4	4

(See Appendix 8.)

WiSE Program Office

The WiSE Program is housed in the Office of the Provost. In September 2011, the WiSE Program moved into new offices. The WiSE Suite, located in Grace Ford Salvatori Hall (GFS 304), includes newly renovated administrative offices for the Director and Program Manager, as well as a common area for use by the WiSE Advisory Board, USC Viterbi and USC Dornsife Committees, WiSE Faculty Networking Group, WiSE Graduate and Undergraduate Cohorts, and several WiSE sponsored student and postdoctoral organizations. (Appendix 4)

WiSE Program Staff



Leana Golubchik, Professor of Computer Science and Electrical Engineering in the Viterbi School of Engineering serves as Director of the WiSE Program. Golubchik was appointed as Director in September 2010.



Sarah Fried-Gintis, Ph.D., serves as the WiSE Program Manager and assists with program development and administration, disbursement of fellowships and grants, and coordination of committees. Fried-Gintis joined WiSE in February 2011.



Hadia El-Bardisy, Budget/Business Analyst for the Office of Undergraduate Affairs, assisted with the disbursement of grants during the Program Manager's parental leave.

Erica Green, Ph.D. student in the USC Department of Computer Science, assisted with administrative duties during the Program Manager's parental leave.



New WiSE Faculty

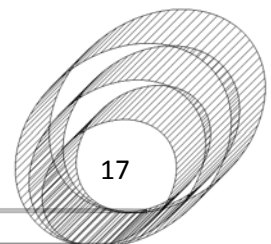
The following new WiSE faculty joined USC in 2011-2012:



Julie Higle joined the Daniel J. Epstein Department of Industrial and Systems Engineering as a Full Professor and Department Chair. Prior to USC, Higle was Chair of the Integrated Systems Engineering Department at the University of Ohio. She completed her Ph.D. in Industrial and Operations Engineering at the University of Michigan, Ann Arbor.



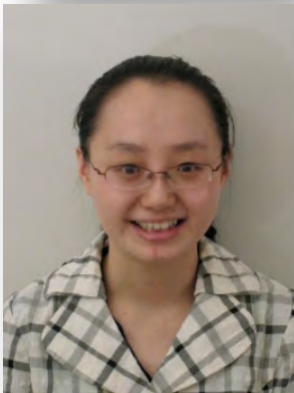
Mahta Moghaddam joined the Ming Hsieh Department of Electrical Engineering as a Full Professor. Prior to USC, Moghaddam was a Professor of Electrical Engineering, Computer Science, and Applied Physics at the University of Michigan, Ann Arbor. She completed her Ph.D in Electrical Engineering, at the University of Illinois, Urbana.





The following faculty will join USC in Fall 2012:

Sami Assaf will be joining the USC Department of Mathematics as an Assistant Professor. Prior to USC, Assaf was a C.L.E Moore Instructor at the Massachusetts Institute of Technology. She completed her Ph.D. in 2007 in Mathematics at the University of California at Berkeley.

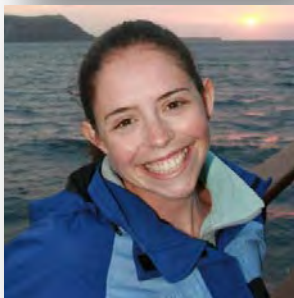


Minlan Yu will be joining the USC Department of Computer Science as an Assistant Professor. Prior to USC, Yu was a postdoctoral Fellow and the University of California, Berkeley. She completed her Ph.D. in Computer Science at Princeton University.

The following faculty were successfully recruited in 2011-2012 and will join USC in 2012-2013:



Irene Chiolo will be joining the USC Department of Biological Sciences, Molecular and Computational Biology Division, as an Assistant Professor. Prior to USC, Chiolo was a Research Scientist at Lawrence Berkeley National Laboratory. She completed her Ph.D. at the University of Milan. Dr. Chiolo will join USC in Spring 2013.



Naomi Marcil Levine will be joining the USC Department of Biological Sciences, Marine Environmental Biology Section as an Assistant Professor. Prior to USC, Levine was the NOAA Postdoctoral Fellow at the Moorcroft Lab, Harvard University. She completed her Ph.D. in Chemical Oceanography at the Massachusetts Institute of Technology. Dr. Levine will join USC in Fall 2013.

WiSE Financial Awards, 2011-2012

The WiSE program administration has adhered closely to the original structure of funds allocation outlined by the 2000 WiSE Task Force: \$500k for Recruitment/Retention; \$100k for Undergraduate Research; \$250k for Ph.D. Student and Postdoctoral Support; and the remaining funds to support new additional programs. Actual distribution of funds may vary slightly each year depending on the return of investment income on the WiSE endowment and on the number of candidates who accept WiSE awards.

Formal Program Awards

Program	# Awards
Faculty Recruitment / Faculty Retention	5
Major Support for Current Faculty	3
Lloyd Armstrong, Jr. Chair	1
Support for Facilitating Diversity in Faculty Searches	4
Faculty Bridge Funding	5
Supplemental Faculty Support	19
Merit Award for Excellence in Postdoctoral Research	3
Graduate Top-Off	3
Merit Fellowship for Current Ph.D.	4
Travel Grants	60
Undergraduate Research Grants (See: Appendix 9)	26
Child Care Subsidies	9
Support for Faculty Pregnancy, Childbirth , and Adoption	0
Support for Ph.D. and Postdoc Pregnancy, Childbirth, and Adoption	9

Recipients of Major Faculty Support for Current Faculty

Name	Title	School	Proposal
Sarah Feakins	Assistant Professor of Earth Sciences	USC Dornsife	International Collaborative Research Sabbatical: Plant Biomarker Isotope Biogeochemistry
Ellis Meng	Associate Professor of Biomedical Engineering	Viterbi SoE	Wirelessly Powered Implantable Drug Infusion Pumps for Small Animals Research
Meghan Miller	Assistant Professor of Earth Sciences	USC Dornsife	Imaging the Mediterranean From Broadband Seismic Data

Discretionary Awards

In addition to its formal suite of grant-making 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 2010-2011, these awards included:

Group	Purpose
Women in Electrical Engineering Ph.D. Group (Viterbi)	To support the annual activities of the networking and professional development group among doctoral women in electrical engineering.
Women in Mathematics (USC Dornsife)	To support the annual activities of the networking and professional development group among doctoral and undergraduate women in math.

Departments of Earth Sciences (USC Dornsife)	To support the “USC Young Researchers Program,” a Summer Research Experience devised and executed by USC graduate students for USC-Area High School Students in Earth Sciences and Marine Environmental Biology.
Women in Computing	To support the annual activities of the networking and professional development group among doctoral and undergraduate women in Computer Science.
Computer Science Department	To support travel of USC undergraduate and Ph.D. students to the Grace Hopper Celebration of Women in Computing.



Figure 16: Undergraduate student members of Women in Computing.

WiSE Activities

Based on the success of prior programs, USC Science Librarians, Jean Crampon, Najwa Hanel, and Norah Xiao presented a library tour and orientation hosted by the WiSE program for the fifth year on September 22, 2011. The librarians provided an introduction to the 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 2nd floor library conference room following the formal presentation. (See Appendix 9)



Figure 17: Anitha Kurup and Hanna Reisler during a discussion following Kurup's presentation (2/23/12).

On February 23, 2012 WiSE sponsored a talk entitled, "Women Scientists and Engineers in India," by Dr. Anitha Kurup, Associate Professor in the School of Social Sciences at the National Institute of Advanced Studies, Bangalore, India. Dr. Kurup discussed her current research project, "A Comparative Study of Women Scientists and Engineers: Experiences in India and the US." (See Appendix

10)

On April 12, 2012, WiSE co-sponsored a discussion for students and faculty with Valerie Weiss, scientist turned filmmaker, whose recent film, **Losing Control**, was released this Spring. Weiss discussed transitioning from science to directing. (See Appendix 16)



Figure 18: Valerie Weiss, Director, of the film **Losing Control**.



Figure 19: Fall 2012 WiSE Hosted Faculty Networking Meeting (10/5/12).

In keeping with past years, the WiSE Networking Group continued to meet on the last Thursday of every month, beginning the Fall and Spring semesters with formal luncheons at the University Club on September 29, 2011 and January 26, 2012.

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	Location
9/29/11	WiSE Hosted Luncheon to Welcome New Faculty (Fall 2011)	WiSE Faculty	USC University Club
1/26/12	WiSE Hosted Luncheon to Welcome New Faculty (Spring 2012)	WiSE Faculty	USC University Club
11/14/2012	USC STEM Consortium	Leana Golubchik	USC Davidson Center
11/14/2012	Mellon Mentoring Program	Leana Golubchik	USC Davidson Center
	Meeting with Title IX Officer	Leana Golubchik	USC SSL
1/27/2012-1/28/2012	USC Faculty Senate Retreat	Leana Golubchik	Santa Monica, CA
9/9/11	WiSE Informational Session, USC's Women and Science and Engineering Floor	Sarah Fried-Gintis	USC Mark's Halls Lounge
12/7/11	Roundtable Discussion on the Status of Women and Girls in California	Sarah Fried-Gintis	Mount St. Mary's College
11/10/11	USC Grad School Parental Leave Task Force	Sarah Fried-Gintis	USC Graduate School

WiSE Faculty Achievements and Special Activities

Articles featuring WiSE faculty are continuously assembled in a chronological archive on the WiSE website and are included in the WiSE monthly newsletter in order to chart their achievements and activities. It is the hope that highlighting the outstanding work of WiSE faculty at USC will continue to contribute to the program's recruitment goals. (See Appendix 12.)

APPENDIX 1:

Current WiSE Faculty 2011-2012 (Tenured and Tenure-Track)

USC DORNSIFE COLLEGE

Life Sciences

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

Physical Sciences / Mathematics

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

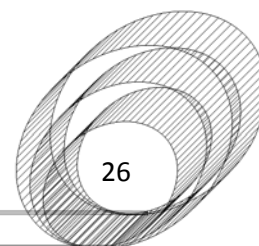
USC VITERBI SCHOOL OF ENGINEERING

Veronica Eliasson	Assistant Professor	Aerospace and Mechanical Engineering
Andrea Hodge	Assistant Professor	Aerospace and Mechanical Engineering
Eva Kanso	Associate Professor	Aerospace and Mechanical Engineering
Ellis Meng	Associate Professor	Biomedical Engineering
Katherine Shing	Associate Professor	Chemical Engineering & Materials Science
Andrea Armani	Assistant Professor	Chemical Engineering & Materials Science
Malancha Gupta	Assistant Professor	Chemical Engineering & Materials Science
Burcin Becerik-Gerber	Assistant Professor	Civil and Environmental Engineering
Amy Rechenmacher	Assistant Professor	Civil and Environmental Engineering
Maja Matarić	Professor	Computer Science
Leana Golubchik	Professor	Computer Science
Yan Liu	Assistant Professor	Computer Science
Minlan Yu	Assistant Professor	Computer Science
Mahta Moghaddam	Professor	Electrical Engineering
Urbashi Mitra	Professor	Electrical Engineering
Alice Parker	Professor	Electrical Engineering
Michelle Povinelli	Assistant Professor	Electrical Engineering
Julie Higle	Professor	Industrial and Systems Engineering
Dorit Hochbaum	Professor	Industrial and Systems Engineering
Elaine Chew	Associate Professor	Industrial and Systems Engineering
Shinyi Wu	Assistant Professor	Industrial and Systems Engineering

APPENDIX 2:

Faculty Candidates Interviewed on Campus

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 20 faculty candidates over the course of 2011-2012. The list of candidates is below:



APPENDIX 3:

WiSE Faculty Accomplishments

WiSE faculty continued to receive many contracts and grants, and in particular many took advantage of the stimulus grants awarded by several funding agencies. Below we list additional accomplishments, honors, and special activities by WiSE Faculty reported in 2011-2012.

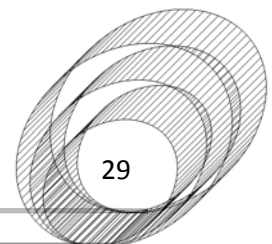
Tenure Track Faculty

Name	Title	School	Department	Achievements
Susan Forsburg	Professor	Dornsife	Biological Sciences - Molecular and Computational Biology	Serves on the Council for Extramural Grants of the American Cancer Society, the CSRS review panel of NIH, and the Public Affairs Advisory Committee of the American Society for Biochemistry and Molecular Biology.
Leana Golubchik	Professor	Viterbi	Computer Science	2011/2012 USC Remarkable Women Award
Anna Krylov	Professor	Dornsife	Chemistry	2012 ACS Physical Chemistry award in theory
				2011 Fellow of APS
				2011 Bessel Research Award from the Humboldt Foundation
				Invited to give Lowdin Lecture on Quantum Chemistry in Uppsala, Sweden
Maja Mataric	Professor	Viterbi	Computer Science, Neuroscience, and Pediatrics	Appointed Vice Dean for Research, Viterbi School of Engineering, July 2011 (previously Senior Associate Dean for Research)
				NSF Expeditions in Computing grant, with Yale University (lead), MIT, and Stanford, awarded April 2012, 5-year award (6 awarded nationally)
				Georgia Institute of Technology Robotics Ph.D. Program Review and Advisory Board (2012)

Lorraine Turcotte	Professor	Dornsife	Biological Sciences- Human and Evolutionary Biology	Elected President of the American College of Sports Medicine, Southwest Chapter
Ellis Meng	Associate Professor	Viterbi	Biomedical Engineering	Selected as one of the 40 Under 40 in Medtech by the <i>Medical Device and Diagnostic Industry Magazine</i> .
Andrea Armani	Assistant Professor	Viterbi	Mork Family Department of Chemical Engineering and Materials Science	IEEE Senior Member
				23 conference presentations; 3 presentations at SPIE Photonics West were included in a list of 20 “hot topics” presentations from over 10,000 presentations – only group to have >1 presentation in the list.
				H. -S. Choi*, D. Neiroukh*, H. K. Hunt, A. M. Armani, “Thermo-optic coefficient of polyisobutylene ultrathin films measured with integrated photonic devices”, <i>Langmuir</i> 28 (1), 849-854 (2012). Highlighted, ACS Noteworthy Chemistry
Sarah Feakins	Assistant Professor	Dornsife	Earth Sciences	Feakins, S.J., Warny, S. and Lee, J.E., (2012) Hydrologic cycling over Antarctica During the Middle Miocene warming, <i>Nature Geoscience</i> ,
Karla Heidelberg	Assistant Professor	Dornsife	Biological Science, Marine Environmental Biology	Grant: \$1,270,00 over for years (2012-2016) from the Gordon and Betty Moore Foundation. With David Caron, “Comparative Functional Analyses of Mixotrophy Among Microbial Eukaryotes.”
				Visiting International Science Fellow – State of Victoria, Department of Primary Industries and Fisheries, Australia (3 weeks, June 2011)
Andrea Hodge	Assistant Professor	Viterbi	Aerospace and Mechanical Engineering	2012 Office of Naval Research Young Investigator Award
				2012 Defense Advanced Research Projects Agency Young Faculty Award

Research Faculty

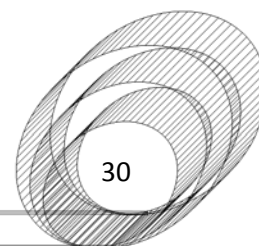
Gerrie Peters	Research Professor	Dornsife	Physics and Astronomy	Served in the NASA peer review panels to select proposals for observing time on the Hubble Space Telescope for Cycle 20 of their Guest Observer Program.
				Director of Judging for the California State Science Fair.
				Invited book chapter on the evolution of high mass stars for a major compendium of 6 books entitled Planets, Stars, and Stellar Systems to be published in August 2012 by Springer.



APPENDIX 4:

WiSE Sponsored Student, Faculty, and Postdoctoral Organizations and WiSE Related Groups

- USC WiSE Faculty Networking Group
- USC WiSE Postdoctoral Networking Group
- FUELS (Female Undergraduates Educating and Leading in Science)
- WiSE Parents Group (MiSE)
- USC Women in Physics
- USC Women in Chemistry
- USC Women in Mathematics
- USC Women in Physics
- USC Women in Kinesiology
- USC Women in Computing
- USC PhD Women in Computing
- USC Graduate Women in Biology
- USC Ph.D. Women in Electrical Engineering
- USC WiSE Undergraduate Floor, New Residential College
- Women in Engineering (WIE) at the Viterbi School of Engineering
- USC WiSE Viterbi Graduate Women's Networking Group
- Society of Women Engineers, University of Southern California



APPENDIX 5:

Article on Ada Yonath's Visit

8/10/12

Nobel laureate visits USC, inspires students | USC News

USC News

Nobel laureate visits USC, inspires students

By Robert Perkins and Ambrosia Brody

March 2, 2012

Ada Yonath, one of just four women ever to win the Nobel Prize in Chemistry, told USC students last month what it takes to be a successful scientist: curiosity, passion and perseverance.

Yonath, professor of structural biology at the Weizmann Institute of Science in Israel, ought to know: She received the prize in 2009 in recognition of her pioneering work studying the structure and function of the ribosome, which assembles proteins in the cell.

With a laid-back lecturing style and wild, curly gray hair whose appearance she teasingly compared to a ribosome, Yonath spoke to packed rooms at USC. She gave two presentations on campus – an in-depth scientific talk presenting genetic code and its products in a chicken-or-the-egg conundrum and the other an inspirational discussion on how to be a scientist.

The events were hosted by the Department of Biological Sciences and the Department of Chemistry at the USC Dornsife College of Letters, Arts and Sciences, the USC Office of the Provost and the USC Women in Science and Engineering.

"One can accomplish important, useful and appreciated work in many ways," Yonath said. "The most important thing is how much curiosity and passion we have.

"If you really want to understand something, if you really love the feeling that you understand the subject today a little bit more than yesterday – that is the driving force."

Prior to earning the Nobel Prize, she was working despite worldwide skepticism and at certain points watched experiments evaporate before her eyes. It was her determination to solve problems that motivated her to continue in the field.

"I really wanted to understand how ribosomes worked and to try and solve the problem by looking for another route," she said. "I wasn't sure whether I was going to [find the solution], but I thought I should do the best I could."

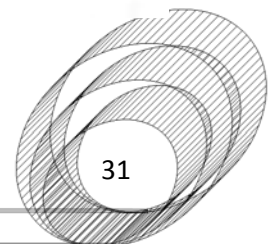
Xiaojiang Chen, professor of biological sciences and chemistry at USC Dornsife, said, "Back then, many people thought Ada was a dreamer."

He added that talking about solving the ribosome's structure in the '80s was like talking about landing on the moon in the '20s.

Yonath, a native of Jerusalem, reminded students that being a successful scientist does not require working in

news.usc.edu/#/article/29204/Nobel-Laureate-Visits-USC-Inspires-Students

1/2



the best laboratories or winning medals, but she again emphasized a passion for the work.

"When you start your life in science and immediately start thinking about prizes, then you don't win, you might be very miserable," she said. "If you like what you do and have the ability to do it, there is a good expectation that you will enjoy it and maybe get a Nobel Prize, but that really should not be as important as the work itself."

Iris Dror, a fourth year Ph.D. student in computational biology at USC Dornsife, was inspired by Yonath's talk.

"She helps you see things in the right perspective," Dror said. "Everyone in science experiences a few failures, but it is easier not to get stuck on those failures when you are doing something that is exciting for you and that keeps you curious."

Yonath's advice and personal experiences also resonated with Carolina Dantas, a second-year Ph.D. student in molecular biology.

"When you hear stories like Ada Yonath's, who has worked so hard to pursue a dream just for the fact that she loves what she is doing, it inspires you to never give up," Dantas said.

Yonath also had a word of advice for the women in the audience.

"It is possible to be a scientist and to have children," she said, urging women studying the sciences not to give up on their dreams for a career and a family.

She spoke proudly of having made enough time to spend with her family while doggedly pursuing a scientific quest that many thought impossible.

At the end of one lecture, she showed a photograph of a framed award for "Grama of the Year," bestowed by her granddaughter Noa.

"I think this is my biggest prize," she said.



Professor Ada Yonath discusses the chicken-or-the-egg conundrum at a USC event.

APPENDIX 6:

WiSE Mentors



Figure 20: Karla Heidelberg and an undergraduate and graduate student.



Figure 21: Members of Hanna Reisler's Lab.



Figure 22: Members of Anna Krylov's Lab.



Figure 23: Members of Michelle Povinelli's Lab.



Figure 24: Members of Andrea Armani's Lab.



Figure 25: Members of Malancha Gupta's Lab.



Figure 26: Members of Susan Forsburg's Lab.



Figure 27: Members of Andrea Hodge's Lab.

APPENDIX 7:

WiSE in the Community

Received: May 1, 2012

Sarah,

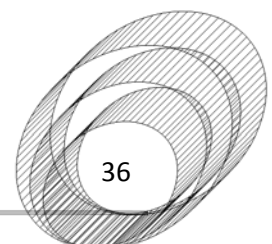
I just wanted to drop you a note to thank you again for introducing Lessa Grunenfelder and Natalie Kintz to our event (unfortunately Dr. Jessica Parr had to back out at the last minute due to an illness). Last Thursday more than 390 students and their families attended our Family Math & Science Night. The event was hugely successful, partly due to the amount of community involvement. Both Lessa and Natalie hosted workshops for 18 kids plus their parents. I have heard only positive feedback from the students and their parents.

It is inspiring to us, our families and our students to know that there are individuals in our community that are willing to come and educate our kids. As California continues it's budget cuts to schools, science is becoming less and less of a priority. Our students need roll models like Lessa and Natalie now more than ever.

Thank you for having your hand in this. It really means the world to us here at Overland Elementary School.

With kindness,

Donna Jones
Family Math + Science Night
Overland Elementary School
10650 Ashby Avenue
Los Angeles, CA 90064



APPENDIX 8:

WiSE Award Recipients

MEMORANDUM

To: Michael Quick, Executive Vice Provost and Interim Dean
USC Dana and David Dornsife College of Letters, Arts, and Sciences

Yannis Yortsos, Dean
USC Viterbi School of Engineering

From: Leana Golubchik, WiSE Program Director
Sarah Fried-Gintis, WiSE Program Manager

Date: July 31, 2012

RE: 2011-2012 WiSE Award Recipients

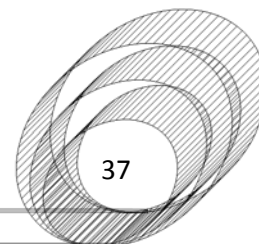
With the 2011-2012 fiscal year now complete, the USC Women in Science and Engineering (WiSE) Program would like to acknowledge the following student and faculty recipients of WiSE Awards.

WiSE Major Support for Current Faculty

- Ellis Meng, Associate Professor of Biomedical Engineering
Viterbi School of Engineering
“Wirelessly Powered Implantable Drug Infusion Pumps for Small Animals Research”
- Sarah Feakins, Assistant Professor of Earth Sciences
USC Dornsife College
“International Collaborative Research Sabbatical: Plant Biomarker Isotope Biogeochemistry”
- Meghan Miller, Assistant Professor of Earth Sciences
USC Dornsife College
“Imaging the Mediterranean from Broadband Seismic Data”

WiSE Merit Awards for Excellence in Postdoctoral Research

- Kathryn Allen, Chemistry, USC Dornsife College
- Ekaterina Romanova, Chemistry, USC Dornsife College



- Heather Russell, Mathematics, USC Dornsife College

WiSE Merit Fellowships for Current Doctoral Students

- Winnie Kam, Civil and Environmental Engineering, Viterbi School of Engineering
- Angeliki Metallinou, Electrical Engineering, Viterbi School of Engineering
- Beate Burkhart, Chemistry, USC Dornsife College
- Jessica Hartel, Biological Sciences, USC Dornsife College

WiSE Graduate Top-Off Fellowships for Doctoral Students

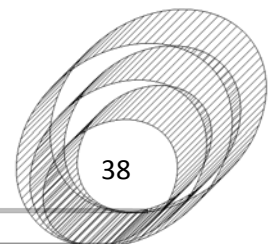
- Jennifer Hastings, Computer Science, Viterbi School of Engineering
- Audra Bardsley, Earth Sciences, USC Dornsife College
- Jennifer Smolke, Aerospace and Mechanical Engineering, Viterbi School of Engineering

WiSE Undergraduate Research Awards

- Meha Agrawal, Computer Science (Professor Cyrus Shahabi)
- Nancy Benner, Chemistry (Professor Thieo Hogen-Esch)
- Emily Burke, Biological Sciences (Professor Sarah Bottjer)
- Shira Epstein, Electrical Engineering (Professor John Choma)
- Hanna Gray, Civil and Environmental Engineering (Professor Massoud Pirbazari)
- Sarah Hester, Astronautical Engineering (Professor Joseph Kunc)
- Jessica Kuo, Biological Sciences (Professor Sergey Nuzhdin)
- Julia Lazzari-Dean, Chemistry (Professor Mohamed El-Naggar)
- Joahanna Macaranas, Chemistry (Professor Barry Thompson)
- Linda Peng, Biological Sciences (Professor Xuelin Wu)
- Jennifer Rohrs, Biomedical Engineering (Professor David D'Argenio)
- Aye Thu, Biomedical Engineering (Professor Ellis Meng)
- Aditi Yokota-Joshi, Civil and Environmental Engineering (Professor Massoud Pirbazari)

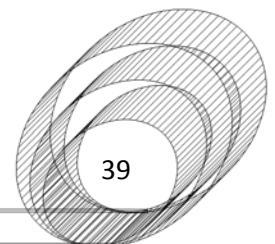
Please join us in congratulating these outstanding scholars. The selection process for the 2011-2012 WiSE Awards was very competitive and included many excellent candidates. We know that you share our pride in honoring the accomplishments of these scientists, engineers, and mathematicians.

CC: Steve Lamy, Jill McNitt-Gray, Jim Moore, Dani Byrd, Ellis Meng, Hanna Reisler, Judith Hirsch, Timothy Pinkston, George Sanchez, Sally Pratt, Meredith Drake Reitan, Mark Todd, Maja Mataric, Stephan Haas, Donal Manahan



APPENDIX 9:

Library Orientation Flyer



The USC Women in Science and Engineering Program



Together with the
USC Science and Engineering Library

Presents

2011 Fall Library Program and Orientation for WiSE Faculty, Students, and Postdocs

Back again by popular demand! Join USC Science and Engineering librarians Jean Crampon, Najwa Hanel, and Norah Xiao 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.

Topics to be discussed include:

1. Update of new databases and search engines
2. Helpful resources for literature review
3. Resources for citation analysis (yours and others)
4. Specific guidance for your personal research needs

Thursday, September 22, 2011

11:00 a.m. – 1:00 p.m.

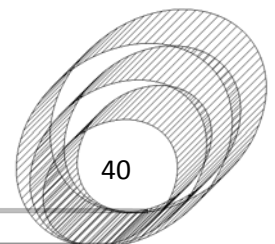
Science and Engineering Library

Space is limited, and **RSVP is required** to wiseprog@usc.edu
Confirmed participants should meet at the circulation desk

Contact WiSE at (213) 740-0996 for more information
Or visit www.usc.edu/wise

APPENDIX 10:

Anitha Kurup Flyer



The USC Women in Science and Engineering Program



Presents

Dr. Anitha Kurup

National Institute of Advanced Studies,
Bangalore India



“Women Scientists and Engineers in India”

**Thursday, February 23, 2012
12:00 p.m. – 1:00 p.m.**

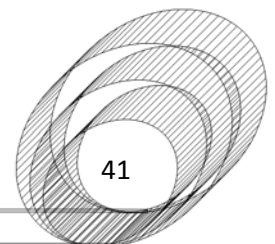
Hedco Neuroscience Auditorium (HNB 100)

Contact WiSE at (213) 740-0996 for more information.

www.usc.edu/wise

APPENDIX 11:

Valerie WiSE Event



Event Calendar



Losing Control

A Discussion with Filmmaker Valerie Weiss

Date: Thursday, April 12, 2012

Time: 2:00 PM to 3:00 PM

Campus: University Park Campus

Venue: Montgomery Ross Fisher Building

Room: Room 340

Email: wiseprog@usc.edu

[Add event to my calendar](#)



Summary:

Valerie Weiss, writer and director of *Losing Control*, discusses her film and her transition from scientist to filmmaker.

Description:

Losing Control is a fresh, funny independent film which explores the universal idea that, at some point, we all fear that there is a “right” way to find love, and that we might be going about it the wrong way. Told in a lighthearted and clever tone, *Losing Control* is the story of a charmingly neurotic Harvard graduate student whose life doesn’t seem to be working out the way she planned. Frustrated by life’s unpredictability and determined to apply scientific principles to her love life, she sets off on a series of wild dating adventures — a journey that ultimately leads to her understanding that nothing can be controlled and that life is indeed more about the ride than the destination.

A former Ph.D. candidate in Biophysics at Harvard, writer-director Valerie Weiss earned her doctorate and then never touched another experiment again. She walked away from science as Dr. Weiss to follow her passion for filmmaking. Upon graduation, she moved to Los Angeles, where she completed the American Film Institute Directing Workshop for Women. There she created her comedic sci-fi short *Transgressions*, which has won several awards, including a BAFTA. *Losing Control* is her feature film debut.

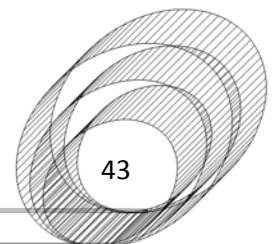
This event is co-sponsored by the USC Dornsife College’s Office of Diversity and Strategic Initiatives and USC Women in Science and Engineering (WiSE)

APPENDIX 12:

WiSE Faculty in the News

- The research of Ellis Meng, Professor of Biomedical Engineering and Chair of the Viterbi WiSE Committee, appeared in the November 2, 2011 issue of USC News -- "Scientist's Revolutionary Drug Pump Draws NSF Support."
- The research of David Bottjer, Professor of Earth Sciences and member of the USC Dornsife WiSE Committee, appeared in the October 7, 2011 issue of USC News -- "And the Microbes Shall Inherit the Earth."
- The research of Maja Mataric, Senior Associate Dean for Research and Professor of Computer Science, was featured in the October 17, 2011 Los Angeles Times article "Robots Built to Help Autistic Children."
- Professor Katrina Edwards was featured in the September 7, 2011 USC News article, "A Search for Life at the Earth's Extremes."
- The research of Professor Anna Krylov and her lab was featured in a press release, "A Surprising New Kind of Proton Transfer," through the Lawrence Berkeley National Laboratory (March 18, 2012).
- Professor Anna Krylov's paper, "Ionization of dimethyluracil dimers leads to facile proton transfer in the absence of hydrogen bonds," which was coauthored by Dr. Ksenia Bravaya, a recent USC Ph.D. graduate and former recipient of a WiSE postdoctoral award, and in collaboration with the Krylov Group and Dr. Musa Ahmed from Lawrence Berkeley National Laboratory, recently appeared in *Nature Chemistry* (March 2012).
- The research of Anna Krylov was featured in the USC Dornsife News article, "A Paradigm Shift in Understanding Chemical Reactions" (March 22, 2012).

- The research of Anna Krylov was featured in the ScienceNews article, “Protons on the Move Find Novel Molecular Route” (March 22, 2012).
- In July 2012 the research of Professor Sarah Feakins, Department of Earth Sciences, was featured on NASA’s website in an article entitled, “Study Finds Ancient Warming Greened Antarctica.” The month prior, she also gave a radio interview on the same subject for RadioLIVE New Zealand.



APPENDIX 13:

WiSE Students at the 2011 Undergraduate Symposium for Scholarly and Creative Work

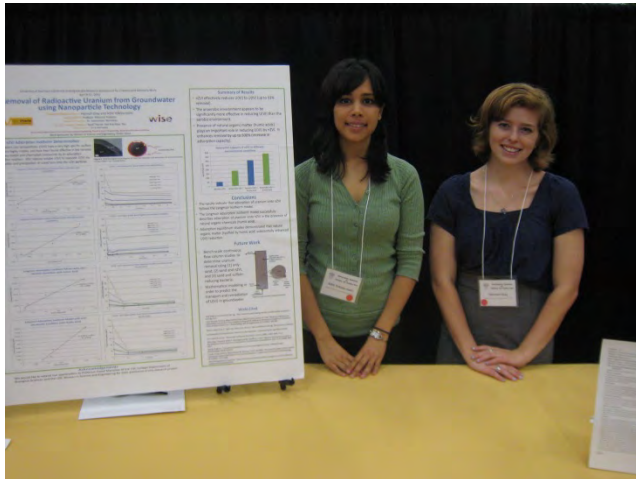


Figure 28: Hannah Grey and Aditi Yokota-Joshi, project entitled, "Removal of Radioactive Uranium from Groundwater Using Nanoparticle Technology."

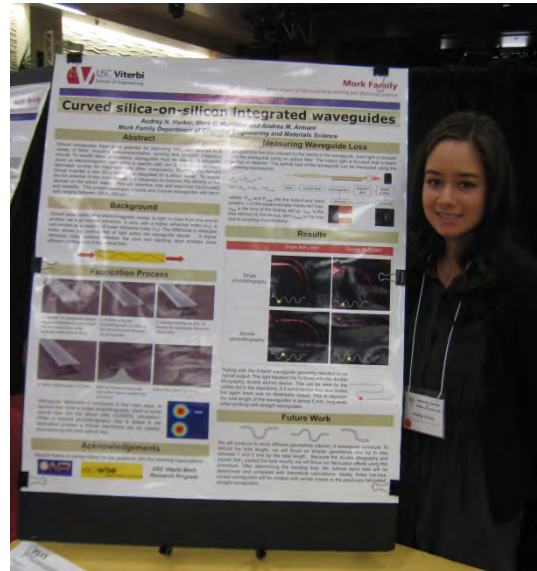


Figure 29: Audrey Harker, project entitled, "Curved Silica-on-Silicon Integrated Wavelengths."

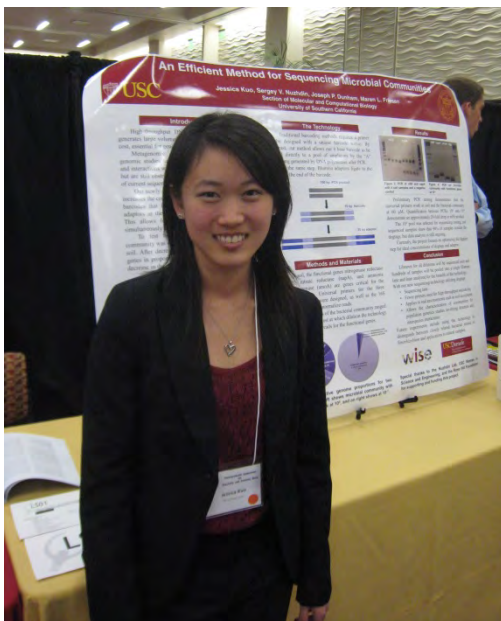


Figure 30: Jessica Kuo, project entitled, "An Efficient Method for Sequencing Microbial Communities."

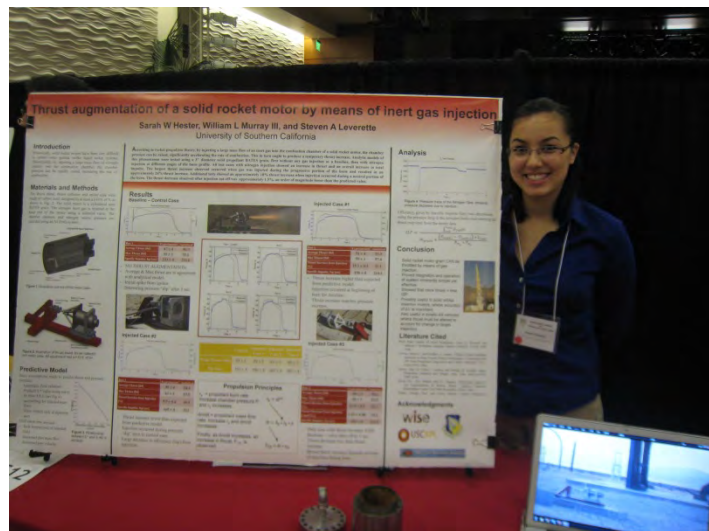


Figure 31: Sarah W. Hester, project entitled, "Thrust Augmentation of a Solid Rocket Motor by Means of Inert Gas Injection."

Compiled by:

Sarah Fried-Gintis, Ph.D.

Program Manager, Women in Science and Engineering

August 2012

