



January 13, 2012
Issue 3: 32

Women in Science and Engineering

www.usc.edu/programs/

CONGRATULATIONS

Professor Anna Krylov (Chemistry) won the 2012 ACS Physical Chemistry Division Award in Theoretical Chemistry and the Bessel research award from the Humboldt foundation. She was also elected a 2011 Fellow of the American Physical Society. Congratulations, Anna!

IN THIS ISSUE

UPCOMING WISE DEADLINES

-2-

COMMUNITY ANNOUNCEMENTS

-2-

FACULTY

-4-

GRAD STUDENTS

-5-

UNDERGRADUATE STUDENTS

-6-

IN THE NEWS

-9-

UPCOMING WISE EVENTS

WISE-HOSTED FACULTY NETWORKING MEETING

Meetings held the last Thursday of the month at 12pm. This month's meeting will be sponsored by WiSE and held at the University Club.

January 26, 2012.
University Club, Banquet Room
Lunch Provided

WISE ADVISORY BOARD MEETING

February 7, 2011
University Club, Room B

WISE UNDERGRADUATE RESEARCH SCIENCE POSTERS

Fall 2011 Results Available to be viewed at:

http://www.usc.edu/programs/wise/programs/undergrad_research/science_posters/

To see all the USC WiSE Grant Programs, including ongoing grants without specific deadlines, please [click here](#).



WISEPROG@USC.EDU

UPCOMING WISE DEADLINES

WISE SUPPORT FOR FACILITATING DIVERSITY IN FACULTY SEARCHES

Applications due: January 15

The WiSE Program provides competitively awarded support to WiSE-eligible departments at USC that propose and implement creative ideas for “casting the net widely,” thus increasing the representation of women in science and engineering faculty searches. Activities for which funding may be requested are expected to vary from department to department, as effective approaches would depend on individual disciplines.

For more information, please visit:

http://www.usc.edu/programs/wise/programs/facilitating_diversity_in_searches/

MAJOR SUPPORT FOR CURRENT FACULTY

Applications due: January 27

This competitive program offers awards of up to \$25,000 and is aimed at offsetting subtle biases, barriers, and career interruptions that have been shown to hinder the advancement of women faculty in science and engineering at research universities.

For more information, please visit:

http://www.usc.edu/programs/wise/programs/faculty_support/

COMMUNITY ANNOUNCEMENTS

From Maja Mataric:

I would like to advertise a great available nanny. Elenia Segura speaks perfect English, drives, is discrete, soft spoken, and is wonderful with kids and housekeeping. She took care of our kids for a week while our own nanny was away visiting her family. Our kids loved her, and the house was spotless. (She has that wonderful quality of always working. Some people do and some don't, and we all know what kind we prefer. :) I recommend her most strongly. She is available 9am-3pm every day and her number is 323 343-1760.



**** INVITATION TO SUBMIT TO THE CELEBRATION OF WOMEN IN COMPUTING IN SOUTHERN CALIFORNIA! ****

<http://www.cs.hmc.edu/cwic-socal/>

Application deadline: Monday, January 23, 2012

The Celebration of Women in Computing in Southern California (CWIC-SoCal) conference will be held April 14-15, 2012 at the Embassy Suites in Santa Ana, CA. The purpose of this celebration is to bring together women from Southern California who are interested in computer science and information technology to network, learn, and have fun. Attendees will include women at all stages of their education and careers, from high school through career-level. Attendees early in their education will have the opportunity to find mentors and learn about careers and advanced education in computing, while those later in their education and careers will have the opportunity to share their work, mentor those just getting started, and meet new friends and colleagues.

We invite the submission of proposals for participation in the following session categories:

STUDENT PRESENTATIONS – We invite technical presentations from students at all stages of their education (high school, undergrad, or grad). If you have been involved in a research project, internship, co-op, service-learning, or other interesting experience related to computer science or information technology, this is an opportunity to share that experience with others and perhaps inspire them to pursue similar opportunities. Student talks will be approximately 15 minutes long. Please submit a 2-page (max) description (abstract) for your talk. Please indicate whether you are a graduate student or an undergraduate/high school student, as these two categories will be reviewed separately. If your talk is not accepted for presentation, your abstract will automatically be reviewed for presentation as a lightening talk or a poster.

FACULTY/RESEARCHER PRESENTATIONS – We also invite technical presentations from faculty and researchers in academia and industry. Come share a project new or old that will get people excited about CS. These presentations will be approximately 20 minutes long. Please submit a 2-page abstract for your talk.

LIGHTENING TALKS - We invite short “lightening talks” from anyone who is interested. These talks are about 5 minutes long, designed to highlight something cool you’ve done, an idea you’ve had, or whatever else gets you excited about computing. Lightening talks are less formal than presentations, and they are your opportunity to talk about whatever you think is interesting. Please submit a 1 page (max) abstract for your talk.

POSTERS AND DEMOS - We invite posters from all students. Have you worked on an interesting project at school? It’s easy to do a poster. Share your ideas and experiences with others. If your project is interactive, we encourage you to also bring a demo. Please send a one-page description (abstract) of your project or research. Please indicate whether or not you have a demo, and if so, what resources you will need (power, table, etc.) to give your demo.

In addition, if you have an idea for a Panel or a Workshop for the conference, please send email directly to the Program Chairs (Christine Alvarado and Jenn Wortman Vaughan) at the address cwicsocal2012@easychair.com describing your idea using the subject “CWIC-SoCal Panel/Workshop idea”.

All submissions must be in PDF or Microsoft Word format and should be submitted via the EasyChair system at this link. If you do not have an EasyChair account, you will need to create one before you submit. Submissions are not anonymous. The deadline for submissions is Monday, January 23, 2012. Participants will notified by March 1, 2012.

If you have questions, please contact the Program co-Chairs:

Dr. Christine Alvarado, alvarado@cs.hmc.edu.

Dr. Jenn Wortman Vaughan, jenn@cs.ucla.edu

FACULTY: OPPORTUNITIES OF INTEREST

2012-2013 HERS LEADERSHIP INSTITUTES

Applications due: TODAY, January 13, 2012.

The application and further details can be found on the WIM website at:
<http://www.usc.edu/org/wim/programs.html> - then click on HERS Institutes.

WIM oversees the selection of USC candidate(s) to attend one or more of the prestigious Higher Education Resource Services (HERS) Institutes. In addition to the Summer Institute at Bryn Mawr—a month-long summer program typically mid-June to mid-July, there is the Wellesley Institute for Women in Higher Education Administration—a series of five weekends spread from October through April, and the Institute for Women in Higher Education Administration at the University of Denver—one week plus series of three weekends from August through November.

NSF'S CAREER-LIFE BALANCE INITIATIVE

<http://www.nsf.gov/career-life-balance/>

The Director of the U.S. National Science Foundation (NSF), Dr. Subra Suresh, recently introduced NSF's Career-Life Balance Initiative (<http://www.nsf.gov/career-life-balance/>). This is a long-term plan to develop a set of forward-looking policies and practices to balance career and family life demands in the U.S. science, technology, engineering, and mathematics (STEM) enterprise. Establishing such a culture is paramount to recruiting and retaining a high-quality STEM workforce at our nation's academic institutions. Although these policies apply to both men and women, they may yield a higher participation of women in STEM-related disciplines, since family-related issues are among the factors responsible for the under-representation of women in the STEM enterprise.

In the mathematical and physical science (MPS) disciplines, the number of women earning doctoral degrees increased from 1,366 in the year 2000 (23.6 percent of doctoral degrees awarded) to 2,024 (28.5 percent) in the year 2008. Furthermore, in the year 2008, women constituted 22.2 percent of all MPS doctorates employed in academia, specifically, 18.3 percent of tenured positions and 28.6 percent of tenure-track positions. Finally, in the year 2008, 43 percent of women employed in these areas were 10 years or less from their doctorate, versus 25 percent of the men.

MPS Divisions encourage practices to support career-life balance, including: no-cost extensions or temporary suspensions of NSF awards due to family leave; flexible start dates for NSF awards; supplements for additional personnel to sustain research when principal investigators are on family leave; options for remote panel participation; local child care recommendations for panelists; flexible postdoctoral fellowships to accommodate dual-career placements; and instructions for panelists describing family-friendly practices.

MPS continues to seek creative approaches to address career-life balance issues. I encourage you to send MPS-specific ideas to MPSplans@nsf.gov and general ideas to career-life-balance@nsf.gov. I look forward to working with the NSF Director, the MPS staff, the MPS Advisory Committee, and all of you to implement future recommendations in order to advance career-life balance in the STEM community.

Sincerely,

Edward Seidel

Assistant Director, Directorate for Mathematical and Physical Sciences

GRADUATE STUDENTS: OPPORTUNITIES OF INTEREST

2012 COMPUTER HUMAN INTERACTION MENTORING (CHIME) WORKSHOP

May 5-6, 2012, Co-located with CHI 2012 in Austin, TX

Application deadline: TODAY, January 13th, 2012

The 2012 Computer Human Interaction Mentoring (CHIME) Workshop, co-sponsored by the Computing Research Association's Committee on the Status of Women in Computing Research, the Coalition to Diversify Computing, and the National Science Foundation is a discipline-specific workshop for mentoring underrepresented students in HCI. The workshop provides a unique opportunity for underrepresented researchers (women, minorities, students with disabilities) in HCI to interact with leaders in their field, network, learn about the latest trends in HCI, and present their work to the HCI community for constructive feedback.

We invite graduate students who work in the field of HCI to submit applications for scholarships to attend the workshop. The scholarship will cover travel, lodging and food for the days of the CHIME Workshop, and student registration fees to attend the CHI 2012 conference after the workshop.

Application for Participation:

To apply for participation and scholarship, you must: 1) fill out an application online, 2) write a short statement, and 3) have your research advisor send us a letter of support for your participation in the workshop.

For more information, visit our website at <http://chime.hci.cs.vt.edu/>.

THE 2012 CRA-W GRAD COHORT WORKSHOP

April 13-14, 2012 in Bellevue, WA

Application deadline: February 1, 2012

<http://www.cra-w.org/gradcohort>

CRA-W is announcing the formation of the 2012 Grad Cohort for Women. Cohort activities will kick off with a workshop April 13-14, 2012 in Bellevue, WA, this year generously funded by Microsoft, along with significant support from Google as well as contributions from Yahoo!, IBM, and other contributors. This workshop is the cornerstone of CRA-W's efforts to increase the ranks of senior women in computing by building and mentoring nationwide communities of women during their graduate studies.

At the Grad Cohort Workshop, we will welcome new women graduate students in their first year of graduate school into the community of computing researchers and professionals by providing them with a broad range of strategies and role models. Strategies and mentoring for students in their second and third years of graduate school will also be provided.

All of the students will meet for two days with 10 to 15 senior computing researchers and professionals who will share pertinent information on graduate school survival skills, as well as more personal information and insights about their experiences. The rewards of a research career will be emphasized. The workshop will include a mix of formal presentations and informal discussions and social events. Through this workshop, students will be able to build mentoring relationships and develop peer networks that will form the basis for ongoing activities during their graduate careers.

Eligibility:

*Women students in their first, second or third year of graduate school in computer science and computer engineering or a closely related field at a US or Canadian institution.

UNDERGRADUATE STUDENTS: OPPORTUNITIES OF INTEREST

GOLDWATER SCHOLARSHIP FOR OUTSTANDING UNDERGRADUATE STUDENTS IN MATHEMATICS, THE NATURAL SCIENCES, OR ENGINEERING

Application deadline: TODAY, January 13, 2012 4:30 P.M.

About the Goldwater Scholarship

The Goldwater Foundation awards up to 300 scholarships nationally. Each scholarship covers expenses for undergraduate tuition, fees, books, and room and board, up to a maximum of \$7,500 annually. Junior-level recipients are eligible for a maximum of two years of support, and senior-level recipients are eligible for a maximum of one year of support, for use starting in Fall 2012. It is expected that students selected as scholars intend to pursue a doctoral degree.

Eligibility

- (1) Science, math, or engineering majors who will be USC juniors or seniors in 2012 - 2013
- (2) Must be in the upper fourth of your class with a recommended GPA of 3.5 or higher
- (3) U.S. Citizen or Permanent Resident

Application Process

USC may nominate a maximum of four candidates, dividing the nominations between the Viterbi School of Engineering and the Dornsife College of Letters, Arts & Sciences.

Application Available online at:

www.act.org/goldwater

Contacts

USC Goldwater Advisor:

Noosha Malek, Director, Academic & International Fellowships, nmalek@usc.edu

If you have questions about the nomination process in your school, please contact:

Math or Science Majors: contact Noosha Malek

Engineering Majors: Louise Yates, Senior Associate Dean, Admissions and Student Affairs

Viterbi School of Engineering: (213) 740-4530 yates@usc.edu

FLUID POWER SCHOLARS PROGRAM: A PAID INDUSTRY SUMMER INTERNSHIP!

Application deadline: February 3, 2012

<http://www.ccefp.org/get-involved/students/fluid-power-scholars-program>

The Fluid Power Scholars Program is a collaborative effort between the Center for Compact and Efficient Fluid Power (CCEFP) and companies in the fluid power industry who are corporate members of the CCEFP. This highly selective summer program identifies and connects the very best undergraduate engineering students across the United States to the fluid power industry with the purpose of training the next-generation of fluid power leaders.

This is a highly competitive program, open to undergraduates who have successfully completed at least two years in an accredited engineering program in the United States. The Scholars program begins with an intensive three and 1/2 day instructional program in fluid power, taught at the Fluid Power Institute at the Milwaukee School of Engineering (MSOE), and follows with internships in the fluid power industry. The Fluid Power "Bootcamp" at MSOE will be held May 21-24, 2012. Students should expect to spend 10-11 weeks as a intern in their host company. Up to ten undergraduate students will be selected as Fluid Power Scholars by a committee of faculty and industry representatives. In addition to their paid internships, scholars will receive stipends for travel and living expenses associated with their work at MSOE.

VANDERBILT UNIVERSITY NSF- RESEARCH EXPERIENCE FOR UNDERGRADUATES (REU) PROGRAM
IN NANOSCIENCE AND NANOENGINEERING

Application deadline: February 15, 2012.

The Vanderbilt Institute for Nanoscale Science and Engineering (VINSE) focuses on interdisciplinary nanoscale research at the interface of biology, chemistry, physics, and engineering. More than 40 faculty participants from the School of Engineering, College of Arts and Science, and the School of Medicine inspire students by creating an atmosphere of excitement and creativity. Each REU participant will work directly with VINSE faculty members and their research groups and be part of the larger VINSE community.

PROGRAM INCLUDES

- Hands-on research in state-of-the-art facilities
- Seminars, workshops, and field trips
- Group social activities and banquet
- Optional outreach opportunities to high school students

ELIGIBILITY

- Undergraduate students majoring in science or engineering
- U.S. Citizen or permanent resident
- Minorities and women strongly encouraged to apply

AWARD

- \$5,000 stipend
- \$400 travel allowance
- Room and board

Selections will be based on a combination of research interests, academic qualifications, and faculty recommendations.
For more information or to apply go to: www.vanderbilt.edu/vinse/reu

SUMMER 2012 RESEARCH INTERNSHIPS AT THE NASA LANGLEY RESEARCH CENTER

Application deadline: February 1, 2012.

<http://www.nianet.org/larss/>

**Female students and under-represented minorities, first-generation college students, and students from economically-disadvantaged backgrounds to apply.

Langley Aerospace Research Student Scholars (LARSS) Program

LARSS is a paid, year round (3 sessions) research internship program for undergraduate and graduate students pursuing degrees in science, technology, engineering, and mathematics (STEM). It is also a unique and highly competitive research internship program. For the 2011 summer session, we received 759 applications; about 200 applicants from 92 colleges and universities in 37 states were accepted. LARSS is also a nationally ranked internship program. In 2011, the staff of Vault-Career Intelligence reviewed over 800 national internships and named LARSS one of its top 10 best internship programs. For 25 years, the LARSS program has helped to preserve U.S. leadership in engineering and science by providing exceptional students the opportunity to work with Langley researchers on some of the nation's most important, difficult, and challenging problems that require multi-disciplinary and collaborative solutions.

The 10-week summer session begins on Monday, June 4, and ends Friday, August 10, 2012. Students participate in a variety of tours, lectures, and social events designed to achieve the "outcomes" established for the LARSS program. The summer session culminates with students presenting the results of their research in a variety of forums to various audiences.

Please visit the recently updated LARSS website. For a better understanding of the program's research focus, please "click on" project abstracts and student testimonials. Do not hesitate to contact the LARSS program staff (Ms. Debbie Murray and Ms. Sarah Pauls) if you have questions or need additional information. 757.864.2491 and by email at thomas.e.pinelli@nasa.gov.

IN THE NEWS

'GEEK' PERCEPTION OF COMPUTER SCIENCE PUTTING OFF GIRLS, EXPERT WARNS

By Jessica Shepherd

January 10, 2012

The Guardian

One of the world's leading computer scientists, Professor Dame Wendy Hall, has warned that girls are increasingly shunning her subject at school and university.

Hall, who invented a forerunner to the world wide web, said the problem of a scarcity of girls studying computer science was "getting worse" despite huge efforts from the scientific community to address the issue.

For the complete article, please [click here](#).

HOW UNIVERSITIES FAIL WOMEN INVENTORS, CONFIRM GENDER BIAS

By Angie Chang

January 1, 2012

Forbes

Bloomberg's Scott Shane wrote about how studies have shown "Male academics are much more likely than their female counterparts to start companies to exploit their inventions".

For the complete article, please [click here](#).

SUCCESS SECRETS FOR WOMEN

By Carla Rover

December 30, 2011

Huffington Post

There's a disturbing trend in technology right now. Bright, highly-qualified women, regardless of where they start climbing the ladder at technology companies, rarely end up at the top. Few women found technology startups, or at least, few women who found them get funded. It isn't a matter of an orchestrated push to keep women out of the boardroom by some misogynist club of investors and company heads. Qualified women aren't rising to the top because they are advancing the hard way -- without mentors, the right meeting skills, and, often, without the right mindset.

For the complete article, please [click here](#).

BERKELEY ISSUES PLAN TO IMPROVE DIVERSITY IN ENGINEERING

by Jeffrey Mervis

December 21, 2011

ScienceInsider

Promising "disruptive progress," the engineering college at the University of California (UC), Berkeley, has named an associate dean for equity and inclusion to help it increase the number of students and faculty members from underrepresented groups.

For the complete article, please [click here](#).

IT DOESN'T ADD UP

By Rachel Kaufman
December 16, 2011
Science Careers

Much attention has been given to the gap in performance between boys and girls in mathematics skills. In a new study published in the Notices of the American Mathematical Society, Jonathan Kane, a professor of mathematical and computer science at the University of Wisconsin, Whitewater, and Janet Mertz, a professor of oncology at the University of Wisconsin, Madison, examine this gender gap and test several popular explanations. Their cross-cultural analysis seems to rule out several causal candidates, including coeducational schools, low standards of living, and innate variability among boys -- a proposal made famous in a 2005 speech by Lawrence H. Summers, who was Harvard University's president at the time. "We have pretty clear data debunking the greater male variability hypothesis," Mertz says.

For the complete article, please [click here](#).

WOMEN AT WORK: GIVING THE TECH INDUSTRY A MAKEOVER WILL DRAW MORE WOMEN

By Leah Eichler
December 9, 2011
The Globe and Mail

Women in technology love to talk about the lack of women in technology, especially those who reside at the top. So on Jan. 1, 2012, when Virginia Rometty takes the helm of IBM Corp. as its first female chief executive officer, joining Meg Whitman as the CEO of Hewlett-Packard Co. as one of the few women in charge of a high-profile tech company, we should interpret this as success, right?

For the complete article, please [click here](#).

LESS TALK, MORE ACTION: 2012 WILL BE THE YEAR FOR WOMEN IN TECH

By Emily K. Schwartz
December 9, 2011
ForbesWomam

If 2011 was the year for talk surrounding women in tech, here's hoping 2012 will be the year for action.

This week, Belinda Parmar became the latest to voice her legitimate concerns about "Why Girls Don't Want Careers In Tech." Her piece in Fast Company echoed many of the sentiments I've written about before, including what many consider to be the greatest barrier to girls pursuing STEM careers: the notion that these positions are often not creative or nurturing roles.

For the complete article, please [click here](#).

STUDY SAYS WOMEN LAG IN U.S. STEM DEGREES

By Bill Toland
December 08, 2011
Pittsburgh Post-Gazette

American women have the ability and educational preparation to graduate from college with a science, technology, engineering or mathematics degree, but women are still underrepresented in so-called STEM undergraduate fields, according to a new survey from the Bayer Corp.

For the complete article, please [click here](#).

OLIN COLLEGE ATTRACTS GRANTS FOR WOMEN IN STEM RESEARCH

By Michelle Lang
November 29, 2011
Masshightech.com

Franklin W. Olin College of Engineering in Needham has added \$180,000 to its pool of undergraduate research awards for women, courtesy of a grant from the Clare Booth Luce Program of New York's Henry Luce Foundation Inc.

The grants will support up to 24 female students, for a three-year time period beginning in 2013, with funding for research with a faculty advisor.

The Clare Boothe Luce Research Scholars will gain financial support to pursue research during the summer, with costs of summer housing, a stipend and four research course credits covered by the award, as well as research-related conference and travel costs. The award recipients also gain mentor access and support through Olin College.

For the complete article, please [click here](#).

USC RESEARCHERS LAUNCH COLLABORATION ON STEM EDUCATION

By Merrill Balassone
November 15, 2011
USC News

It's become an urgent mantra: The United States must produce more scientists and engineers to maintain its edge in an increasingly competitive global economy.

On Nov. 14, USC researchers and administrators from seemingly disparate disciplines strategized how to foster interest among the nation's students in science, technology, engineering and math - the so-called STEM fields - and encourage the pursuit of careers that will keep the nation on the forefront of innovation.

The daylong summit was the debut of the USC STEM Education and Research Consortium, a new initiative conceived to bring the university's interdisciplinary research to bear on concerns about the nation's future STEM workforce.

"This is the start of something big," said Gisele Ragusa, research associate professor at the USC Rossier School of Education and the USC Viterbi School of Engineering, who spearheaded the consortium.

For the complete article, please [click here](#).

THE MAN WHO LOVES WOMEN WHO LOVE SCIENCE

By Nell Scovell
November 3, 2011
Huffington Post

Why can't all men be like Nobel Laureate Paul Greengard?

Shortly after he was awarded the 2000 Nobel Prize in Physiology or Medicine for his work on transmitters in the brain, Dr. Greengard decided to endow a scientific prize of his own -- one most of his fellow Nobel laureates could never even hope to win. Awarded annually by Rockefeller University, The Pearl Meister Greengard Prize spotlights achievement in the field of biomedical research by an outstanding woman. Named after Greengard's mother, the \$100,000 prize is one man's attempt to put a plus in a column that carries a lot of minuses.

For the complete article, please [click here](#).