



WOMEN IN SCIENCE AND ENGINEERING  
SYRACUSE UNIVERSITY



# Newsletter Fall 2015

## WiSE-FPP Welcomes Largest Cohort Yet



WiSE is pleased to welcome the 2015-2016 cohort of its Future Professionals Program

(WiSE-FPP). A record number of 52 accepted applicants were nominated by 40 faculty members. WiSE-FPP Associates are PhD students who represent STEM (Science, Technology, Engineering, and Mathematics) disciplines from 16 different departments.

WiSE-FPP is a professional development and academic support program that began in the 2007-2008 from a partnership between WiSE, the Graduate School, the College of Engineering & Computer Science, and the College of Arts & Sciences. WiSE-FPP offers content

workshops, mentoring, networking, career planning and job search preparation opportunities for women graduate students interested in pursuing a career in either the academy or in industry.

We would like to thank WiSE Faculty Director, Dr. Shobha Bhatia (Civil and Environmental Engineering), as well as WiSE-FPP Faculty Advisors, Dr. Laura Lautz (Earth Sciences), Dr. Qinru Qiu (Electrical Engineering and Computer Science), and Dr. Laura VanderDrift (Psychology) for their involvement in program development, selecting nominees and mentoring the WiSE-FPP Associates. All WiSE programs support the persistence and excellence of women in STEM (students and faculty) and are led by women faculty in STEM.

This semester associates have met one another and the WiSE faculty advisors at the fall welcome event, received instruction and

training in scientific writing from Dr. Laura VanderDrift, and worked collaboratively on sharing issues and strategies during an intercultural communication



WiSE-FPP Associate Jacqueline Augustine and Faculty Advisor Dr. Laura Lautz at WiSE-FPP Fall Welcome Event

workshop. Small groups of associates met for breakfast or lunch with visiting physicists Dr. Karen Daniels (North Carolina State University) and Dr. Rick Reis (Stanford University) for conversations about discerning one's career path, work/life balance, and preparing for the postdoctoral experience. Informal mentoring with accomplished scholars is rated as a highly valuable aspects of WiSE programming by Associates.

## WiSE Women of Color in STEM Enters its Second Year



The WiSE Women of Color in STEM program provides a strong

network for undergraduate female students in STEM, connecting them with mentors, and providing needed information and resources to empower their success. This WiSE program addresses the history and challenges of women of color in STEM and connects them to graduate students, faculty and professional women of color in STEM who have already successfully negotiated these challenges. Their network is facilitated to support academic, personal, and interpersonal success through mentoring and monthly meetings.

The first event on September 21st featured former SU postdoctoral fellow, **Dr. Aisha Morris**,



who is now Director of the RESESS program at UNAVCO. UNAVCO is a non-profit university-governed consortium that facilitates geoscience research and education using geodesy. RESESS is a summer internship program dedicated to increasing the diversity of students entering the geosciences. Dr. Morris shared with the women her journey in STEM and the

**“This program is really helpful for any woman in STEM. You might think you’re the only one struggling but you’re not and we’re all here to help and support each other.”**  
~Member of WiSE WoC in STEM

importance of participating in internships and research opportunities.

The September 22nd meeting featured a panel of undergraduate and graduate students, and faculty in STEM who discussed the importance of building a network and

support team during one's undergraduate career. They gave tips for excelling academically, such as cultivating productive study habits and creating connections with professors. This event introduced new students to the group and allowed participants to make suggestions about topics and activities for future events.

At the October 27th meeting, WiSE Program Assistant, **Zesty Gabriel**, facilitated discussions about gaining confidence, developing a professional identity and taking productive risks. This meeting also focused on building solidarity among group members and fostering mutual support. One member commented, “There are so many women who think that they’re in this by themselves when in fact there is an organization rooting for them.” WiSE Women of Color in STEM supports and roots for its members while also equipping them to persist and excel.



## Women in Motion



**Shobha Bhatia**  
Civil & Environmental  
Engineering  
Receives Geosynthetic  
Institute Fellowship for her  
work with Geotextile Tubes  
in Dewatering Projects



**Barbara Stripling**  
i-School  
Named 2016-2017  
President of the  
NY Library Association



**Amy Criss**  
Psychology  
Receives Early Career  
Impact Award (FABBS) and  
Young Alumni Award  
(Indiana University)



**Jennifer Stromer-Galley**  
i-School  
Will lead one of NSF's  
four new regional data  
innovation hubs. She was  
also installed as President  
of the Association of  
Internet Researchers.



**Tara Kahan**  
Chemistry  
Awarded an NSF CAREER  
grant to study "Effects of  
Solutes on Reactivity"

## Summer & Fall Faculty Awards

**Marina Artuso** (with Sheldon Stone, Steven Blusk, Tomasz Skwarnicki): "Intensity Frontier Physics Studies with b and c Quarks at LHCb," from the NSF

**Michelle Blum, Heather Coleman, Julie Hasenwinkel, Mary Elizabeth Manning, Shikha Nangia** (with James Henderson, Patrick Mather, Liviu Movileanu, Pranav Soman): "Interactive Biomaterials: REU Site," National Science Foundation (New Award)

**Jannice Friedman**: "Mechanisms of Sexual Selection in Plants with Different Reproductive Strategies," from NSF

**Melissa Ann Green, Lisa Manning** (with Samuel Joseph Scozzafava, Jr., Duncan Brown, and Eric Sedore): "Leading the Way for Research Computing at Syracuse University and Beyond: CC\*DNI Engineer," from the National Science Foundation

**Yun Huang**: "General University Feed Specification (GUFS) for Google Indoor Map," from Google and "Mobile Crowdsourcing System for Campus Safety: CRII: CHS," National Science Foundation

**Yun Huang, Jian Qin** (and Richard Lankes): "Community as Collection," from the Institute of Museum & Library Services

**Loredana Lanzani**: "Holomorphic Singular Integral Techniques for Non-Smooth Domains and Applications," National Science Foundation

**Lisa Manning**: "Quantitative Modeling of Cell Shape Changes During Organogenesis: Collaborative Research," National Institute of General Medical Sciences/NIH/DHHS

**Lisa Manning**: "Immersive DNA Force Sensors and Predictive Mechanical Modeling for Tissue Morphogenesis," from the Gordon and Betty Moore Foundation

**Cristina Marchetti**: "Models of Collective Cell Migration and Sorting," from the Simons Foundation

**Joanna Masingila**: "Say Yes Summer - Summer Enrichment Program #1," and "Say Yes Summer - Summer Enrichment Program #2" from the Syracuse City School District

## New Women Faculty



**Teresa Dahlberg**, Dean  
of the College of  
Engineering and  
Computer Science;  
Professor of Electrical  
Engineering and  
Computer Science



**Jessica MacDonald**  
Assistant Professor  
Biology



**Jennifer Graham**  
Assistant Professor  
Electrical Engineering  
and Computer Science



**Sucheta Soundarajan**  
Assistant Professor  
Electrical Engineering  
and Computer Science



**Sara Eftekhari**  
Assistant Professor  
Electrical Engineering  
and Computer Science



**Mandy Esch**  
Assistant Professor  
Biomedical and  
Chemical Engineering



**Whitney Wood**  
Assistant Professor  
Psychology



**Yi (Grace) Wang**  
Assistant Professor  
Mathematics

## WiSE Fall Distinguished Lecturer and Postdoc Mentor



WiSE hosted Dr. Jennifer Slimowitz Pearl, a Program Director in the Division of Mathematical

Sciences at NSF, Thursday September 24 and Friday September 25, 2015. During her visit she met with graduate students, postdocs, faculty, and administration.

Dr. Pearl's lecture in the Peter Graham Scholarly Commons was on the topic, "*Innovation and Creativity in STEM.*" She highlighted two projects that have brought together stakeholders in innovative and effective ways: the Pulse Community project in the biosciences and the Code.org initiative in computer science. She also discussed strategies employed by the mathematical sciences community in a current effort to broaden doctoral education to support pursuit of careers outside the academy. Dr.

Pearl concluded her lecture with a discussion of Design Thinking as a tool for creative problem solving and gave examples of how this strategy has empowered her own approach to her NSF work.

Dr. Pearl also met with a group of women postdocs and math graduate students. Dr. Pearl discussed her own career trajectory and the steps she took to explore



Dr. Jennifer Slimowitz Pearl

careers other than the professoriate. She highlighted her use of "informational interviews" to learn about other types of careers within a

university setting. She discovered that there were many different ways she could harness her math degree towards interesting and fulfilling work. In regards to her experience she stated, "Sometimes knowing what you

don't want to do is even more important than knowing what you do want to do."

One woman in attendance noted that she found this advice from Dr. Pearl particularly helpful: "Don't think that choosing one option automatically excludes all other options—be your own voice and propose compromises."

WiSE would like to particularly thank the Postdoctoral Faculty Advisory Committee: Dr. Loredana Lanzani (Mathematics), Dr. Marina Artuso (Physics) and Dr. Kate Lewis (Biology).

*If you are a woman postdoc in STEM at Syracuse University or SUNY-ESF and would like to be part of a postdoctoral network, please contact WiSE Program Specialist, Stephanie Wyatt (smwyatt@syr.edu)*

## Bhatia Recognized



WiSE and the University community have long recognized the many contributions of WiSE Faculty Director, Dr.

**Shobha Bhatia**, to advancing equity and inclusion especially for women in STEM at Syracuse University. On June 11, 2015, Dr. Bhatia was nationally recognized as a "University Change Agent" at the 2015 WEPAN Change Leader Forum (Women in Engineering ProActive Network). This award recognizes an individual who has made a positive impact on their institution with regard to the climate for women in STEM fields.

Interim Dean Chilukuri K. Mohan of the College of Engineering and Computer Science and Dean Karin Ruhlandt of the College of Arts and Sciences stated in their nomination letter, "Dr. Bhatia's longstanding work to improve the climate and representation of women in the STEM has a profound and highly positive impact on Syracuse University."

## Faculty Awards Continued

**Susan Parks, Leanna Matthews:** "The Impacts of Noise on Reproductive Advertisement of an Aquatically Breeding Pinniped," Marine Mammal Commission and "Understanding the Underwater Mating Strategies of Pacific Harbor Seals (*Phoca vitulina*)," National Geographic S

**Beth Prieve:** "Building the Next Generation of Clinical Researchers - American Auditory Society," from the National Institute on Deafness & Other Communication Disorders/NIH/DHHS

**Qinru Qiu** (with Elizabeth A Krietemeyer, Jianshun Zhang, Jian Tang): "Development of Software and Database of Green Design Studio for Sustainable Buildings - Phase 1: Training and Feasibility Study," from the Shenzhen Institute of Building Research Co., Ltd. And "Distributed Brain-Inspired Information Processing on Intel Xeon Phi Coprocessor and its Application to Intelligent Text Recognition," from Intel Corporation

**Karin Ruhlandt** (with Bruce Hudson, Ivan Korendovych, Michael Sponsler): "An International Research Experience for Chemistry Undergraduate Students in Austria (iREU): REU Site," from the National Science Foundation

**Jennifer Schwarz:** "Near the Onset of Rigidity in Living and Nonliving Matter," from NSF

**Ruth Small, Marilyn Arnone:** "School Libraries as Innovation Spaces, School Librarians as Innovation Mentors: Stimulating Students' Curiosity, Inquiry and Innovative Thinking," from the Institute of Museum & Library Services

**Lori Wilkins** (with Paul Gold): "Durable Changes in Cognition and Astrocytic Bioenergetics After Drug Experience," from the National Institute on Drug Abuse/NIH/DHHS

**Thakshila Wimalajeewa** (with Pramod Varshney): "High Quality/Low Dimension Data for Sensor Integration," from ANDRO Computational Solutions, LLC

**Emily Zale** (with Joseph Ditre): "Increasing Cessation Motivation and Treatment Engagement among Smokers in Pain," from the National Institute on Drug Abuse/NIH/DHHS

The mission of WiSE is to support the persistence and excellence of women in STEM from freshman to faculty.

## Save the Date



**Dr. Marcia McNutt incoming President of the National Academy of Sciences will offer the 2016 Norma Slepecky Memorial Lecture**

On April 15, 2016 WiSE will welcome a very special guest for the annual Norma Slepecky Lectureship, the incoming president of the National Academy of Sciences (NAS), Dr. Marcia McNutt. She will accede to her new position having served as the editor-in-chief of the *Science* family of journals since 2013.

Dr. McNutt is a geophysicist who studied physics at Colorado College before earning her Ph.D. in earth sciences at Scripps Institution of Oceanography, University of California, San Diego. Her area of expertise is marine geophysics. According to the NAS, Dr. McNutt's work involves employing "a variety of remote sensing techniques from

ships and space to probe the dynamics of the mantle and overlying plates far from plate boundaries on geologic time scales." The NAS goes on to say that Dr. McNutt "has made important contributions to the understanding of the rheology and strength of the lithosphere."

Dr. McNutt's career has included holding professorships at the Massachusetts Institute of Technology (MIT) and Stanford University, directing the Joint Program in Oceanography & Applied Ocean Science & Engineering, a collaborative effort between MIT and the Woods Hole Oceanographic Institution, and serving as president and chief executive officer of the Monterey Bay Aquarium Research Institute. In 2007, she received the Maurice Ewing Medal for "her contributions to deep-sea exploration."

Prior to *Science*, Dr. McNutt was director of the U.S. Geological Survey (USGS) where she distinguished herself during the response to the Deepwater Horizon oil spill, and for which the U.S. Coast Guard presented her with its Meritorious Service Medal. She also

spearheaded finalization of the ground station for Landsat 8 in February of 2013, building on Landsat's 40-year record of observing via satellite changes affecting the global

**Dr. Norma Slepecky** was a distinguished auditory neuroanatomist at Syracuse University and a member of the Institute for Sensory Research.



The Norma Slepecky Lectureship and Undergraduate Prize were endowed by her family, friends and colleagues to honor her after her death in 2001. **The Slepecky Undergraduate Research Award** is offered to the student who demonstrates excellence in scholarship and submits the best manuscript or presentation from a professional meeting in the natural sciences or engineering. Information regarding submission criteria can be found on the WiSE website listed below. Look for further information regarding the application process in the spring.

## Upcoming Events

<b>Dec 1st (Tuesday)</b> 12:30 - 1:30pm Life Sciences (LSC) 102	<b>Postdoc Brown Bag Lunch</b> Open to all Postdoc Women in STEM
<b>Dec 3rd (Thursday)</b> 5:30 - 7:00pm Link Hall 369	<b>Women of Color Meeting with focus on REUs (Summer Research Programs)</b> Undergraduate Women of Color
<b>Dec 11th (Friday)</b> 6:00 - 8:00pm Home of Dr. Shobha Bhatia	<b>Fall Dinner and Discussion</b> WiSE-FPP and invited Faculty
<b>Jan 12th (Tuesday)</b> 8:30am - 3:30pm Link Hall 369	<b>Excellence in Scientific Writing Workshop - Cosponsored with GSO</b> Women and Underrepresented Men PhD Students in STEM (must pre-register) Contact swalesta@syr.edu for more information
<b>March 29 (Tuesday)</b> 7:30 pm Hendricks Chapel	<b>University Lecture - Gulp: Adventures on the Alimentary Canal</b> <b>Writer Mary Roach in Conversation with Dr. Sandra Hewett (SU Biology)</b> Free and Open to the Public
<b>April 15th (Friday)</b> Time and Location TBA	<b>Norma Slepecky Lecture and Undergraduate Research Award Ceremony</b> Free and Open to the Public
<b>May 2nd (Monday)</b> Multiple Events Time and Locations: TBA	<b>Dr. Debra Goldberg (UMich) Visit</b> Sponsored by Biology Department, WiSE and SU ADVANCE (Details Forthcoming)

*Check out our  
Calendar  
suwise.syr.edu  
or  
Visit us  
on Facebook:  
SU WiSE*



### WiSE Leadership

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