Spotlight on STEM Women

Dr. Ioana Pavel joined the Department of Chemistry at Wright State University (WSU) in 2008. A recipient of a LEADER Consortium Mini-grant and other research awards, Dr. Pavel completed graduate training in Atomic Physics (M.S.) and Physical Chemistry (Ph.D.) at The University of Würzburg in Germany after receiving a bachelor’s in science from Babeș-Bolyai University, Romania. At WSU, she teaches graduate and undergraduate courses in her area of research expertise, including General Chemistry, Introduction to Nanoscience and Nanotechnology, and Physical Chemistry for Life Sciences. In addition to publishing more than 35 articles in top-ranked journals, Dr. Pavel is actively engaged in her profession as a member of the American Chemical Society. She has been invited to present her work at national and international conferences numerous times. Dr. Pavel actively engages undergraduates in the research process, including co-authoring manuscripts with advanced students.

What are your current research interests?

“My research interests are strongly anchored in the toxicology and bio-nanotechnology areas with a special emphasis on surface-enhanced Raman spectroscopy (SERS). My research group is currently working on engineering nanosensors for a number of applications.”

What do you like most about being a scientist?

“I enjoy very much teaching and I am very passionate about my research. I love research and I am always excited about new challenges and ideas. With regard to teaching, it gives me great satisfaction to know that my students are successful in their careers and that I facilitated this process.”

What would you say to women considering a career in your field?

“One needs to be creative, bold, hardworking, patient, and passionate about this type of work. My slogan is: Work hard for your dreams and be grateful for what you have!”

Dr. Ioana Pavel, Asst. Prof., Chemistry, WSU

Taking Initiative: LEADER Consortium Functional Mentoring Network

Dr. Jayne Robinson (UD), Chair of the LEADER Consortium’s Mentoring Committee, is pleased to announce the LEADER Consortium Functional Mentoring Network (FMN) program. Dr. Robinson and members of the committee—Dr. Karen Townsend (CSU), Dr. Peggy DesAutels (UD), and Dr. Tamera Schneider (WSU)—have developed a program for STEM women that focuses on identifying mentoring opportunities that target specific functional needs.

The model for the FMN evolved out of climate survey data suggesting that STEM women in the consortium have varied and specific needs when it comes to mentoring. The FMN program will facilitate matching mentees and mentors on the basis of their interests and expertise. STEM women who are seeking mentoring and those who wish to provide their expertise as mentors can learn more about the program and apply online via the LEADER Consortium’s website: www.wright.edu/leader/mentoring_page.html.

To receive an electronic brochure providing more details about the program, e-mail: Dr. Stephanie Goodwin, Program Director for the LEADER Consortium at: leader_mentoring@wright.edu.
Around the Consortium

Recent Events
Dr. Meigan Aronson, Stonybrook University, participated in a professional networking event in the LEADER Consortium’s “Talking Shop” series on May 5th. The program, organized by Dr. Heidi Ries at AFIT and held on the WSU campus, was attended by women from several institutions. Dr. Aronson spoke about her own career trajectory, sparking active conversation about how women in STEM careers can achieve success despite the barriers they may face in the academic workplace.

Save the Date
May 11-12
• NSF Site Visit, WSU — Interviews by invitation/registration

May 20
• Talking Shop with Dr. David Lodge, 9-10:30am, WSU

June 9
• STEM Dept. Chairs Training Workshop, UD

More details about our events can be found on our website.

Join the LEADER Consortium listserv by registering on our website:
www.wright.edu/leader/

Research Corner:
Why Workplace Climate Matters for STEM Women

Last month in the Research Corner, we focused on research demonstrating the relationship between workplace climate and job satisfaction. STEM women are less satisfied with their jobs when they perceive their workplaces to be less supportive; climate has little impact on men’s job satisfaction. One explanation for why climate means so much for women is that the STEM workplace may cue identity threats for women. Because STEM fields are stereotyped as male domains, these expectations may surreptitiously undermine women’s sense of belonging. Social scientists have linked social identity threats to a number of negative outcomes, including diminished academic performance and low self-esteem (Steele, 1997).

But could these identity threats have consequences for STEM women’s job satisfaction? Holleran et al. (2010) randomly recorded ~1,000 snippets of conversations between 45 STEM faculty—men and women. For women, talking about research with male colleagues was associated with less job satisfaction. Importantly, naive judges who listened to these interactions perceived women to be less competent when they talked about research with male, but not female, colleagues. When women “talked shop” with other women, they were perceived to be just as competent as men. Thus, research conversations with men undermined STEM women’s communication about their work.

Holleran et al.’s data do not address why research conversations with men are problematic for STEM women, but other research suggests that subtle sexism likely plays a role. Logel et al. (2009) found that male engineering students who scored high in subtle sexism were more dominant when discussing work-related tasks with female peers. If sexism leads men to dominate research conversations, STEM women may find these conversations to be unsatisfying, with implications for how they feel about their jobs. Although more research is needed to understand these findings, they point to the importance of addressing sexism and fostering a supportive climate for women in the STEM workplace.
