Chemistry Professor Sarah Larsen (left) and Living-Learning Community member Claire North first met during WISE’s first-year seminar. North is currently working in Larsen’s laboratory.

WISE Women: Advocates of their own education

Students in the Women in Science and Engineering (WISE) program at the University of Iowa learn to be advocates for their own education. How is this done?

“That lesson of being the administrator of your own education is difficult for the students to learn at first,” said Kristin Wurster, a Ph.D. student in counseling psychology and coordinator of the WISE Living-Learning Community. “If you’re the administrator of your own education, you have to advocate for yourself, you have to ask questions, you have to connect with people. That is what’s going to control how much you get out of it.”

Wurster and her fellow WISE staff members talk with the students about resources that are available to them. One Living-Learning Community offering is the first-year seminar, Research 101: Exploring STEM Research. The seminar, offered for the second time in fall 2011, focuses on the business of research, including a review of historical studies that impact the way research is done today.

“No matter what you’re interested in, the University has something to offer.”

—Claire North
of her own education. As a result of her exposure to Dr. Larsen’s lab, North began working in Larsen’s lab in the 2012 spring semester.

“No matter what you’re interested in, the University has something to offer in that field. The biggest thing I took away from the seminar was the opportunities that the University has to offer,” North said. “College is what you make of it. If you want to get involved and you want to be a part of a community, WISE makes that easier.”

In fall 2011, WISE offered the WISE Reads! initiative for the first time. All incoming first-year WISE Women were asked to read the book, The Immortal Life of Henrietta Lacks by best selling author Rebecca Skloot. The book uncovers the story of an African-American woman whose cells led to the discovery of the HeLa cell line following her death from cancer.

Students visit several faculty-led research areas across campus to gain practical knowledge of how research works.

Last fall, 11 female faculty members and seven graduate students participated in the seminar, giving a total of 19 lab tours in 12 different labs.

Chemistry Professor Sarah Larsen gave two tours of her lab on Sept. 13.

“I try to tell students what different types of opportunities are available to them and how they might be involved in research,” Larsen said.

Larsen’s talk had an impact on first-year student and Living-Learning Community member Claire North. So much so that North approached Larsen about working in her lab.

North is becoming an administrator

All students were required to attend three facilitated discussion sessions about professional ethics over the first six weeks of the fall semester and submit three reflection papers. Based on attendance and grades on the reflection papers, four first-year seminar students — Latrice Lawal, Mariah McClelland, Rocio Ayala and Janelle Lala — were chosen to attend a lecture given by Skloot in Omaha, Neb.

“I have learned so much about the steps science has taken to this point,” one WISE student said. “I have begun to understand the gravity of the responsibility I will have in my future career. Thus, I won’t be biased only towards the advances of science, but I will understand the human aspect behind that.”

WISE Reads! is another example of how WISE connects women with the resources needed to succeed.

The first-year seminar and the WISE Reads! initiative provide a mixture of learning and camaraderie, while putting the students on a successful course during their academic careers.

“If you have what you want to do in mind from the beginning, it’s more likely that you’re going to accomplish it,” Wurster said.
First-year WISE Women were welcomed to campus in an inaugural All-WISE Orientation on Aug. 19, 2011. Starting off in Shambaugh Auditorium, incoming students joined together for a day of firsts, including introductions, meeting new friends, roaming the campus sporting the latest WISE shirt, and ending with lunch at Hillcrest Marketplace. Students were able to choose from a tour of their class locations, a tour of Iowa City’s financial institutions, a guided Cambus tour, a book-buying tour, or a downtown walking tour.

This will be the first of many upcoming events that work to create community with all of our WISE Women!
WISE Women learn about graduate school

The WISE Mentoring Program welcomed Dean John Keller of the University of Iowa Graduate College, along with a panel of graduate students, to speak to a group of 30 WISE mentors and mentees at the annual Applying to and preparing for Graduate School seminar.

Students at various stages in the graduate school application process spoke about topics including research interests, the graduate school interview process, personal statements, the new GRE test, and how to prepare for graduate school early in their academic careers.

A big thank you

We would like to thank the University of Iowa Graduate College and the Office of the Vice President for Research for their support of WISE programming in the form of a Graduate Assistant position. WISE programs are very intensive and require a lot of face time, so the gift of a GA line is critical to our ability to provide focused support to our young women.
WISE lends helping hand when classes get tough

WISE offers free tutoring for LLC women every semester for common math and science courses in a comfortable, non-judgmental environment.

All sessions are held in the Rienow Residence Hall.

The following are LLC tutors: Meredith Godar, Sara Jewett, Tatiana Mishanina, Janani Veluchamy, Kristin Weigel, and Kelsey Wirth.

A big thank you

WISE is extremely fortunate to receive GA and programming funds from University College to support activities in the WISE Living-Learning Community. Thanks to the generosity of Beth Ingram, associate provost for undergraduate education and dean of University College, we are able to sustain our effective programming as well as develop new, innovative activities. We appreciate the investment in the WISE LLC and strive to use the support wisely.

WISE Women put creative cookie skills to test during December Stressbuster

With finals fast approaching, our Living-Learning Community had its annual Cookie Decorating Stressbuster on Dec. 4.

First-year and upper-level women gathered to decorate 45 dozen cookies from Neel House Bakery in Coralville, while sipping hot cocoa and enjoying one another’s company.

As always, we were impressed by everyone’s creativity! You can trust our clever WISE Women to make an eyeball out of frosting and sprinkles, and to construct three-dimensional cookie trees. In addition to decorating cookies for themselves and friends, the women decorated over 15 dozen for the Domestic Violence Intervention Program, which serves Cedar, Iowa, Johnson and Washington counties in the state of Iowa, as well as several dozen for campus supporters of WISE.

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Cookies made by WISE LLC Women.
Who are the WISE Ambassadors?

The WISE Ambassadors, a University of Iowa Student Government student organization, is a team of both undergraduate and graduate students in science, technology, engineering, and math (STEM) fields who organize and participate in outreach, leadership, and career development experiences.

The program is administered by the enthusiasm and ideas of the ambassadors, and the WISE office aids their efforts by providing an annual budget, resources, and support. The WISE Ambassadors program is open to all students, and new participants are always welcome.

View http://www.uiowa.edu/~wise and e-mail wise@uiowa.edu to be added to the Ambassadors mailing list.

WISE Ambassadors keep busy with outreach events

WISE Ambassadors were busy volunteering last semester! Below are a few things that our WISE Women put their time towards:

- The WISE Ambassadors had its blood drive on Sept. 14 in the Burge Carnival Room. Working with the Red Cross, WISE brought in 45 units of blood. WISE hosted another blood drive April 3.
- On Oct. 21, The Ambassadors ran a booth at the annual Post-Homecoming Parade Fair at the Seamans Center for the Engineering Arts and Sciences. Students and community members gathered to celebrate the Hawkeyes with food and fun.
- Ambassadors put their creativity to great use on Dec. 4 by making holiday cards for patients at the local VA Medical Center.
- On Dec. 28, Samantha Kerkove and Nicolette Johnson, members of the WISE Ambassadors K-12 Outreach Committee, visited Roosevelt Elementary School to teach fifth and sixth graders about engineering.
WISE Ambassadors make Girl Scout Badge Day a big success

By Mitchell Schmidt
Iowa City Press-Citizen

Jeanna Muse said her first visit to the Science and Engineering Extravaganza couldn’t have gone better.

The fifth-grader at Williamsburg’s Mary Welsh Elementary, participated in several experiments Feb. 18, including studying density with handmade boats and chemistry while making lava lamps and volcanoes with baking soda and vinegar.

“It was really fun; our volcano exploded probably the most I think,” the 10-year-old Girl Scout said.

More than 80 local fourth- and fifth-grade Girl Scouts participated in science experiments and presentations at the University of Iowa’s Pomerantz Center for the Women in Science and Engineering Ambassadors’ 13th annual Science and Engineering Extravaganza.

The event, hosted by WISE, was developed to help young women interested in the fields of science and engineering to participate in hands-on experiments and hopefully foster continued passion for these careers.

Keynote speakers included UI professors Betsy Stone in chemistry and Marcia Cordts in microbiology.

Melanie Reichwald, WISE co-mentoring/ambassadors program coordinator, said the event is equally beneficial for the elementary and university students involved.

“Part of our mission is to connect with the community and encourage them to share in science, technology and math.”
—Melanie Reichwald

Meredith Godar, WISE Ambassadors vice president, noted the benefits that UI students can gain from the organization.

“It’s to provide support for current women in science fields in college and to give us opportunities to have resources to talk to older women who are already in this field,” the 20-year-old UI sophomore in electrical engineering said.
Melanie Dettmer sees WISE as more than an academic program ... much more.

WISE was home for this Crystal Lake, Ill., native during a difficult transition to college, which featured a bout of depression and subpar grades for this 4.0 high school student.

“When I look at WISE, I see family. I see a support system,” said Dettmer, a senior health and human physiology major at the University of Iowa.

As Dettmer prepares to graduate in May, she hasn’t forgotten the challenges she overcame thanks in large part to the WISE family, particularly the women in the Living-Learning Community (LLC).

“Classes were very hard. I was in big classes where I was not getting 1-on-1 attention,” Dettmer said. “I isolated myself and went through a pretty good depression.

“LLC was like home. People there know what you’re going through. It’s a balance of stress relief and a chance to meet new people.”

Motivated by the support of the WISE Women and being a first-generation college student, Dettmer continued working and turned her academic record around. In the 2011 fall semester, she made the Dean’s List (3.50 grade-point average) for the first time.

“Ultimately, I realized there was a lot riding on me. I am the first person in my family to go to college,” Dettmer said. “I would not only be letting my family down, but I would be letting myself down. That is the ultimate.”

WISE Director Chris Brus presented Dettmer with the Carol Fethke Scholarship in recognition of her significant investment in WISE over the past three-plus years. As a member of the Living-Learning Community since her first year at the UI, she has been a role-model for those following her. She has an open-door policy for fellow students experiencing the same struggles she did as a freshman.

When Dettmer received the good news about the scholarship, she was speechless.

“I had never been given an opportunity like that before. I had never had a scholarship before,” Dettmer said.

“Chris was the one who decided and it means a lot that she chose me. It melted my heart. Chris saw something in my character and that was important to me.”

Talking directly to Dettmer, Brus responded, “I believe in you. That’s why it is special to me.”

After graduation, Dettmer would like to become a wellness coach.

“I just want to help people. I want to be there for someone,” Dettmer said.
WISE Women from all programs came together on Oct. 27 for some Halloween fun! Working alone or in teams, the women carved pumpkins, ate some fall treats, and voted for the winner of the best-designed pumpkin.

The competition ended up with a tie between the depiction of a large pumpkin eating a mini-pumpkin and a well-carved owl.

A small group of Pharmacy Interest students shared an intimate lunch on Nov. 7 with Richard Barajas, from the Office of Academic Affairs at the College of Pharmacy, and Deanna McDanel, a clinical pharmacist at UI Hospitals and Clinics (UIHC).

Barajas discussed application requirements: pre-requisite coursework, applying to pharmacy school, what is expected once students are admitted, and things that students can focus on to build their application profiles.

McDanel shared her experiences with students, including memories of her own college years and what she does now at UIHC. The WISE Women felt this event was beneficial early in their academic careers.

“It’s very important to get your face and name out there to people who are involved with admissions,” said Laura Steinauer, a Pharmacy Interest student. “It can give you a little advantage when decisions have to be made about who is accepted.”

Danielle Brown (left) and Megan Johnson show off their work during WISE’s pumpkin carving event.

WISE women find time for fun, professional growth
Beam Travel Grant Recipients 2011

The University of Iowa Women in Science and Engineering (WISE) Program has announced the fall semester award recipients of its annual Dr. Eunice Schuytema Beam Travel Grant Program.

The award winners, each of whom will receive an individual award of $300 to be used toward travel to a professional meeting to present scholarly work, are the following:

Diqiong Xie, of Shanghai, China, is a doctoral student in the College of Public Health, studying biostatistics. She presented at the Joint Statistician Meeting Jul. 30–Aug. 4, 2011 in Miami Beach, Fla. Her presentation was titled “Survival Analysis by Cause of Death Among Bariatric Surgery Patients Matched by Propensity Score.”

Hua Yu, of Yueyang, Hunan, China, is a doctoral student in the College of Liberal Arts and Sciences studying analytical chemistry. She gave a presentation at the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy Mar. 11-15, 2012 in Orlando, Fla. Her presentation is titled “Synthetic Training Sets for the Development of Automated Classifiers for Passive Infrared Remote Sensing Measurements.”

Janice Wang, of Taichung, Taiwan, is a doctoral student in the Graduate College, studying free radical and radiation biology. She presented her research at the Society for Free Radical Biology Nov. 16-20, 2011 in Atlanta, Ga. Her presentation was titled “Parkin-Dependent Mitophagy (Parkin-M) and Mitochondrial Outer Membrane Permeabilization-Induced Mitophagy (MOMP-M) Both Alter Cellular REDOX and Energetics but are Mechanistically Distinct.”

Stephanie Katarina Drumheller, of Knoxville, Tenn., is a doctoral student in the Graduate College, studying geoscience-vertebrate paleontology. She gave a presentation at the Society of Vertebrate Paleontology 71st Annual Meeting Nov. 2-5, 2011 in Las Vegas, Nev. Her presentation was titled “Direct Evidence of Crocodyliform Predation on Small Dinosaurians from the Kaiparowits Formation of Utah.”

Dr. Eunice Schuytema Beam WISE Travel Grant Program

The Dr. Eunice Schuytema Beam WISE Travel Grant program awards three $300 grants per semester to women doctoral students who were competitively selected to give an oral presentation of their work at meetings, symposia, conferences, or other professional or academic gatherings. The travel grant program is made possible by a 2002 gift from Dr. Eunice Schuytema Beam, who received her doctorate in microbiology from the University of Iowa in 1956. She later taught at Chicago’s Rush Medical College and served as assistant dean of the college until her retirement in 1985. She passed away in 2008, at age 79. Submission deadlines are October 15 and February 15.

Guidelines and application materials are available on the WISE website: www.uiowa.edu/~wise.

For further information about WISE, contact Chris Brus, director, at (319) 355-3511 or at christine-brus@uiowa.edu.

Arbash-Meinel scholarships

Each spring, WISE offers two $300 Arbash-Meinel Travel Scholarships for female undergraduate students majoring in biomedical engineering at the University of Iowa. Students are not required to present at the conference, instead being provided with an opportunity to meet other professionals and attend presentations on current research that may spark an interest in a certain aspect of biomedical engineering early in their academic experience. Application materials will be available through WISE on April 2, 2012. Email Chris Brus (christine-brus@uiowa.edu) for more information.
Spring 2012 Workshops

**Effectively Responding to Reviewer Comments**
*Facilitator:* Deborah Dawson, Professor, Depts. of Pediatric Dentistry and Biostatistics.
*Description:* This workshop was designed to assist in successfully addressing issues within grant proposal submissions. Topics included understanding the reviewers' report, making proposal revisions in response, and preparing the introduction of the resubmission.

**Negotiating Your First Tenure-Track Faculty Position**
*Facilitator:* STEM faculty
*Description:* This two-part workshop focused on negotiating “new hire” issues such as start date, salary, and start-up packages, as well as the psychology behind negotiations. Effective strategies and tactics for women were shared.

**Developing a Research Statement**
*Facilitator:* Scott Coffel, Director, and Jennifer Ambrose, Assistant Director, Hanson Center for Technical Communication, College of Engineering.
*Description:* This workshop provided an overview of the essential content of the research statement as well as specific strategies for developing one.

Fall 2011 Workshop Series

**Optimizing Your Scientific Talk and Q&A**
*Facilitator:* Jennifer Streeter, Ph.D. student, Anatomy and Cell Biology, Carver College of Medicine, WISE Dr. Eunice Beam Travel Grant Award Winner Fall 2009 and 2010.
*Description:* This new workshop was presented by our very own WISE woman. Jen shared with other WISE women her experiences conducting exceptional scientific talks, as well as how to successfully and confidently host engaging Q&A sessions. A highlight of the workshop was that it provided time for participants to practice identifying common presentation errors and responding to questions through a mock presentation.

**Developing a Teaching Philosophy in the Sciences and Engineering**
*Facilitator:* Carolyn Colvin, Associate Professor, Language, Literacy, and Culture, Teaching and Learning, College of Education.
*Description:* Dr. Colvin’s two-part workshop allowed the participants to learn about the components of a teaching philosophy through a discussion-based first session, and the participants returned for a second session to peer-edit their teaching philosophy drafts. One participant stated, “The second session was wonderful. I got great feedback from my peers and from Dr. Colvin. It’s easier to give constructive comments face-to-face.”

**Writing a Successful Research Grant Proposal**
*Facilitator:* Deborah Dawson, Director, Biostatistics and Research Design, College of Dentistry, Professor, Depts. of Pediatric Dentistry and Biostatistics.
*Description:* Dr. Dawson presented on the research grant proposal process with a heavy focus on the various levels of NIH grants. This has always been one of the most popular series of WISE Pro-Dev Workshops. One participant stated, “I really enjoyed the format of the workshop- structured but laid back and easy to participate.”

“It has been a most enjoyable and rewarding way for me to show my gratitude for the many mentors, colleagues and friends who have helped me along my own journey.”
—Deborah Dawson
Professor
Pediatric Dentistry and Biostatistics
Help WISE help young women succeed

WISE works with The University of Iowa Foundation (UIF) to stay abreast of funding opportunities that support our mission and goals. Maintaining close connections with our corporate sponsors and alumnae is critical to the fiscal health of WISE, and we are very fortunate to have strong UIF advocates in our corner, such as Diana Johnson, with corporate and foundation relations, and Kate Metcalf, associate director of development for the College of Engineering.

If interested in supporting WISE, please visit the WISE website (http://www.uiowa.edu/~wise) and follow the link to make an online donation through The University of Iowa Foundation.