

## Women in Science, Technology, Engineering and Entrepreneurship (WiSTEE)

### April event “Owning the shaping moments of your career”

The April event for the Women in Science, Technology, Engineering and Entrepreneurship (WiSTEE) group that took place on April 5th, 2013 saw 34 attendees from 21 academic units across campus and industry, 30 of which were women, come together. The attendees’ career stage again spans from faculties, scientists, industry engineers, graduate and undergraduate students.

WiSTEE Founder and Chairperson Dr. Jie Qiao, scientist at the Laboratory for Laser Energetics, University of Rochester, reviewed the WiSTEE vision and the post opening-event survey results. WiSTEE vision to “*Promote women leadership in Science, Technology, Engineering, and Entrepreneurship, bridge the gap between Science and Business, and provide a forum to learn, connect and lead*” resonated among every respondent of the survey conducted after the opening event. There was also a clear interest to expand WISTEE @ UR to a broader organization to include other women from regional universities and industries in STEE fields.



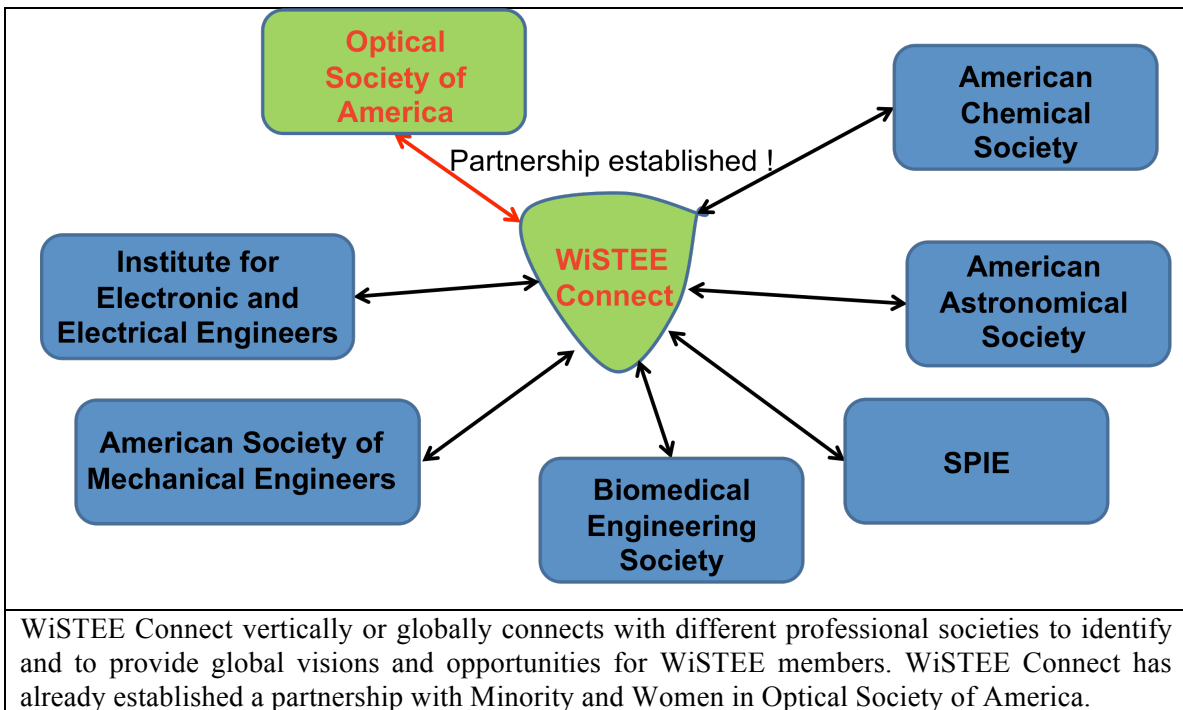
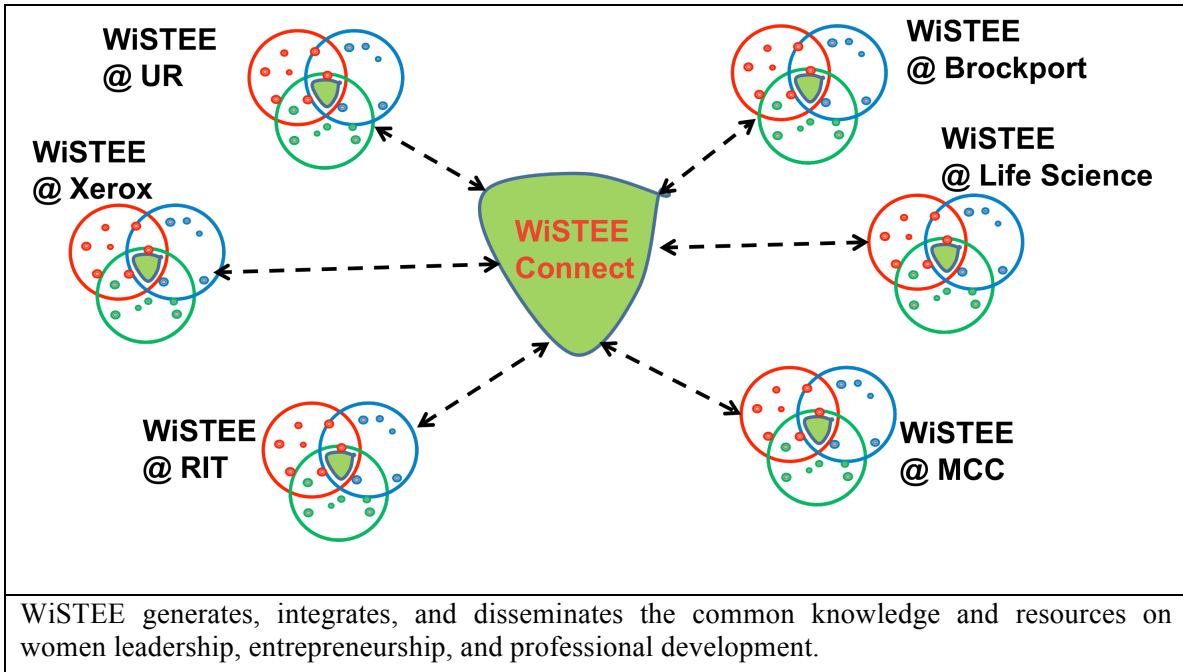
Thirty women in Science, Technology, Engineering, and Entrepreneurship came together at the WiSTEE April 5th event @ the Faculty Club of U of R. Dr. Jie Qiao shared the vision and strategy for growing WiSTEE @ UR into WiSTEE Connect.

### Vision for establishing WiSTEE Connect

Dr. Jie Qiao shared her vision of growing WiSTEE @ UR into **WiSTEE Connect** to gain regional connections and global impact. Since none of the individual science and engineering departments within a single regional university or company has critical mass of women faculties, students, and researchers, it would be valuable to further establish WiSTEE groups at other universities and connect them regionally through WiSTEE Connect. Furthermore, the nature of WiSTEE members working in distinctively different professional disciplines makes it essential to have a platform to globally connect with other women within the same professional discipline to enhance career advancement opportunities. Dr. Qiao envisions WiSTEE Connect to link horizontally or locally regional WiSTEE groups across universities and industries. It also vertically or globally connects with different professional societies to identify and provide opportunities for WiSTEE members.

WiSTEE Connect aims to provide concrete support to its members through

- local and global connectivity
- Informal mentorship
- Leadership opportunities
- Entrepreneurship knowledge and advice
- Professional development
- Mentoring relationships between high school girls and women in STEE.



### WiSTEE and Minorities and Women in Optical Society of America established partnership

WiSTEE Chair Dr. Jie Qiao envisions this partnership will provide complementing global and local aspects, bringing WiSTEE's local voice to global stage and providing global vision and opportunities back to WiSTEE members. The two organizations plan to cross broadcasting educational and event contents. MWOSA is interested in providing sponsorship for building WiSTEE Connect infrastructure and organizing local events.

### WiSTEE-Boni Travel Grant Established

Thanks to Mr. Robert Boni and Ms. Diane Boni, the **WiSTEE-Boni travel grant** was established to provide WiSTEE members with international exposure and perspectives and enhance their academic and research experience.

Mr. Robert Boni is a research engineer at the Laboratory for Laser Energetics, University of Rochester. He has worked on various innovative optical technologies and has a keen interest in mentoring students in Science and Engineering. Ms. Diane Boni is a K12 school district administrator and a PhD student at the Warner School, University of Rochester. She has a strong interest in connecting WiSTEE members with K12 girls in STEM.

The first recipient is Xiang Liu, junior, majoring in Optical Engineering and Mechanical Engineering and minoring in Business and Mathematics. She will attend an international CIOMP-OSA Summer Session on Optical Engineering, Design, and Manufacturing in Changchun, China.



Diane Boni, Xiang Liu and Robert Boni at the announcement of the first recipient of the WiSTEE-Boni travel grant.

### WiSTEE members enthusiastically shared the shaping moments of their career

The discussion on career shaping moments was opened by **Catherine Cerulli**, Associate Professor of Department of Psychiatry and Director of the Susan B. Anthony Center for Women's Leadership, **Jannick Rolland**, the Brian J. Thompson Professor of Optical Engineering at The Institute of Optics and Director of the R.E. Hopkins Center for Optical Engineering, and **Dennis**

**Kessler**, the Edward J. and Agnes V. Ackley Clinical Professor of Entrepreneurship at Simon School.

Prof. **Catherine Cerulli** shared her perspective that the issues faced by working women are nothing new – being a 4<sup>th</sup> generation working woman herself, she also believes that it is very important to know when to lean back if the time is not right. Prof. Cerulli believes that every single job she had has made her who she is, and referred to the importance of meeting and wanting to connect with a mentor as a big shaping moment for her.



Prof. **Jannick Rolland**'s most significant shaping moment had to do with making the choice between becoming a dancer and an engineer during her formative years. She always felt that it is important for women to be financially independent, and has personally pursued happiness as her top priority. For her, the big decisions in her life came one at a time, and she never made 10-year plans; she also learned that even though some things happen and they do not feel good at the time, there usually is a reason for it. So if something does not pan out, it is important to keep in mind that there are always more opportunities coming, and not give up. Ultimately, she feels that her dancing skills have proven useful in navigating between the different opportunities in life.

Prof. **Dennis Kessler**, a successful entrepreneur who employs about 3,000 workers in central and western New York State in his franchise business, shared two key qualities and actions for entrepreneurial success: perseverance, and surrounding yourself with good professional advisors. He believes that financial success can lead to opportunities for social success. Prof. Kessler also commended the fact WiSTEE welcomes everyone at the meetings, men and women alike, because there is much to be learned from each other.



The openness with which the first speakers shared their experiences set the stage for an open and trusted sharing among the rest of the group, fostering the trusting and nourishing environment

WiSTEE is striving to build. The participants were happy to share their own shaping moments, and comment on several discussion topics brought up by the first speakers.



**Weimin Kaufman** (left), from the Office of Technology Transfer at UR, was delighted to learn about the scope of WiSTEE.

**Debra Haring** (right), from the Dean’s Office at UR, shared her own career path – while focusing on family first in the years in which her children were little, she was then able to progress her career gradually, and she currently holds the position of Assistant Dean. She never had a master plan, and every stage of her career had defining moments - not only for herself but for her family as well. Even though this has not been her case personally, she hears from many women who feel they have to make a choice between research and family.

The phrase “One year is one year” resonated strongly among **Leonor Sierra**, from the University Communications office. She told us that she shares that belief now, but didn't feel like that in her 20s. Finding herself uncertain of the path to take after completing her PhD, her big shaping moment was when her mom told her that the decision she was facing was not as big deal as she thought, and encouraged her to just try a job, and if she didn't like it she could switch to something else. Knowing that she didn't need to decide now what she would be doing in 20 years took a big weight off her shoulders.



**Valerie Newman** of Artemis Health encouraged everyone to find the unique intersections where you can really contribute something personal, rather than taking the big road like everyone else. You can do anything but not all at the same time - be patient, you have a whole lifetime. She also reiterated the importance of seeing people at different points in their career, to learn about options and opportunities. Her defining moment was when she realized that she was interpreting medicine through the filter of the culture in which she had grown up. She values WiSTEE as a beautiful opportunity to look at the same problem from different perspectives.

Another interest manifested by several participants was in sharing and learning more about options for career transition.



Physics undergraduate student **Marissa Adams** drew a parallel between one of her hobbies, knitting, and math homework – if there is a mistake, you have to undo everything and start over, but you know how to proceed to fix the error. When teaching high school girls math and physics this past summer, she noticed that they often gave up on word problems as they felt the answer didn't come naturally to them – it really doesn't come naturally to anybody, but the point is one must work hard to arrive at an answer that makes sense. She also shared how her experience of working on optical hardware with Bob Boni, a research engineer at the LLE, has helped her build confidence and overcome self-doubt. She encouraged us to keep doing what we like to do, in spite of what other people (yourself included) tell you. She also challenged us to do something we are scared of every day.

The importance of mentorship was discussed extensively, and three of the graduate students in Prof. Jannick Rolland's group at The Institute of Optics, **Jianing Yao** (top), **Huimin Zhao** and **Cristina Canavesi** (bottom), recounted the importance of having the encouragement and seeing the positive example of a successful woman in front of them.

In Cristina's case, Prof. Rolland's advocacy for women in engineering and science has inspired her to found a group for Women in Engineering at UR in 2010, through which students have the opportunity to meet with successful women engineers in academia or industry at a monthly brown bag meeting. Prof. Rolland and Prof. Cerulli were instrumental in supporting Dr. Jie Qiao's vision and leadership of founding WiSTEE. Prof. Rolland also introduced Jie Qiao to Cristina Canavesi, and they started working together on WiSTEE's further development.



Interest in outreach activities and mentoring was shown by several members, who appreciate the importance of providing the younger generations with positive role models.



**Betty Sun**, PhD student at The Institute of Optics, was invited to attend this meeting by one of her professors, Jannick Rolland, and by a postdoc in her group, Bianca Jackson. Both women serve as positive role models for Betty, who aspires to learn how to become a “superwoman” (as she referred to Prof. Rolland), and looks forward to meeting more mentors at future WiSTEE meetings.

**Leva McIntire** (left), PhD student at The Institute of Optics, is interested in finding further sources of mentorship, and wants to learn about the transfer of research from academia to industry.

Dr. **Hitomi Mukaibo** (right), Assistant Professor of Chemical Engineering, shared a moment that is currently shaping her, and encouraged all participants to spend some time learning about how our mentality can affect our career.



Other comments shared by several members of the audience concerned the importance of perseverance. As Bob Boni said, “Persistence can overcome differences; it is the great equalizer. It is probably the biggest factor that makes us successful”.







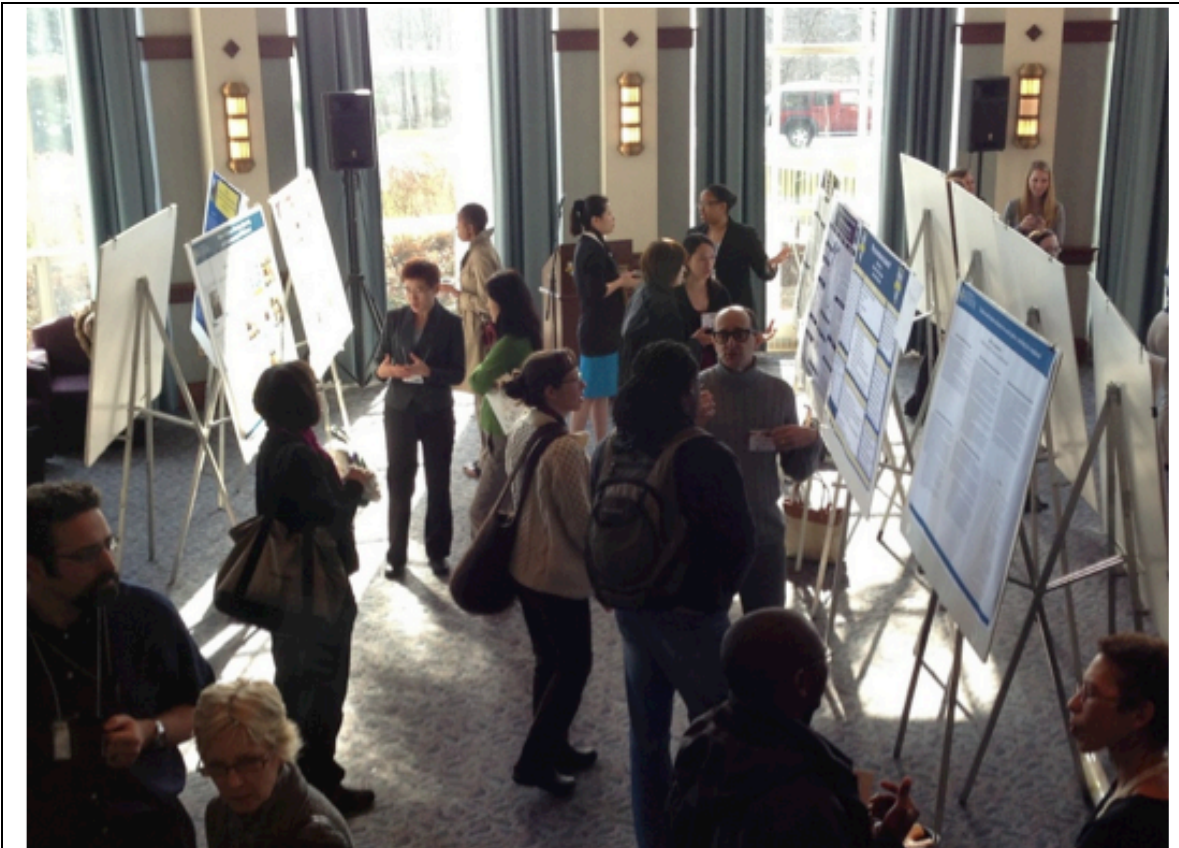


After the meeting, the participants enjoyed a networking session at the Faculty Club.

We gratefully thank the sponsorship from **Eugene Kowaluk Photography** for capturing the moments of touching lives and the glowing flow of positive energy. We thank the sponsorship from **Stanley Byrd**, Human Resources-Organizational Development and Staff Diversity, the support from the **Susan B. Anthony Center for Women Leadership**, and **Mr. Robert Boni and Mrs. Diane Boni** for their generosity to establish the international travel grant for WiSTEE members.

### WiSTEE Connect at the Annual Diversity Conference held at UR on April 12th

WiSTEE Chairperson Dr. Jie Qiao attended the 2013 Annual Diversity Conference at University of Rochester and presented WiSTEE Connect at the poster session. According to Dr. Qiao: “I truly enjoyed and resonated with the keynote speech given by Dr. Lani Guinier, Professor at Harvard Law School. I feel that the formation and the missions of WiSTEE are exactly echoing the critical gender issues in her speech. WiSTEE’s vision of connecting women across departmental boundaries to forge informal mentorship and to promote women leadership could be an effective way to counter the fact that few of the STEM academic departments have achieved critical mass for women.” A number of enthusiastic visitors with backgrounds spanning from IT, Education, Physics, Communication, Chemistry, etc., visited the WiSTEE poster. They were all quite excited about WiSTEE vision and wanted to be part of it. Notably, UR Board of Trustees members Mr. Launcelot F. Drummond and Mr. Francis L. Price have shown a sincere interest in WISTEE vision and activities. Dr. Qiao provided them a full presentation on the vision, development, and future plans for WiSTEE Connect.



WiSTEE Chair Dr. Qiao presented the vision, actions, and plans for WiSTEE Connect at the 2013 Annual Diversity Conference (WiSTEE poster: front left).

**WiSTEE member news**

WiSTEE Secretary **Cristina Canavesi**, a PhD Candidate in Optics, won the 1st place in the 2013 Simon Games, a Full-Tuition Scholarship competition to pursue an Executive MBA with the Simon School of Business (scholarship valued at over \$89,000). The scholarship competition was fierce with a total of 75 applicants (many of them have industry experience) competing for two full scholarship slots. Cristina's performance was truly outstanding and she was a clear winner! Here are a few words from her about this accomplishment and how it ties in with the April meeting topic of owning the shaping moments of our career:

“While many important steps in my life have happened almost by chance, I am happy to say that in the past couple of years I have made the effort to seek out opportunities to shape my career. I have used these experiences to better understand what I wanted for myself, and then looked for opportunities to make it happen. While not all my attempts have been successful, and the temptation of just giving up when things don't go the way I hoped for is always strong, I overcame my self-doubt by reminding myself of all the people who have supported me along the way and who believe in me. All the hard work certainly paid off!”

**Xiang Liu**, majoring in Optical Engineering and Mechanical Engineering, and minoring in Business and Mathematics, was awarded the Emil L. Kuichling Prize (\$5,000) by the Department of Mechanical Engineering. The prize is awarded annually to the member of the junior class who has shown the greatest proficiency in mechanics.

*If you have some good news to share with WiSTEE members, email Cristina Canavesi at [canavesi@optics.rochester.edu](mailto:canavesi@optics.rochester.edu) for inclusion in the next newsletter.*

**WiSTEE meeting on entrepreneurship planned for May**

Save the date! On Friday, May 3<sup>rd</sup>, at 4 PM, WiSTEE will hold a meeting at the Faculty Club at UR on the topic of “[Path to Entrepreneurship – Intersecting Science, Technology, Engineering, and Entrepreneurship](#)”. Click [here](#) to RSVP.

Sincerely,

Cristina Canavesi, WiSTEE Secretary

Jie Qiao, WiSTEE Chair

<http://www.rochester.edu/diversity/affinity/wistee/index.html>