



2023 ANNUAL SUMMARY

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208 Bowne Hall

S Syracuse University
Women in Science and Engineering

ABOUT WiSE

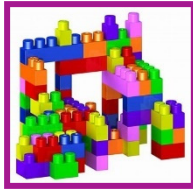
Since 1999, Syracuse University's Women in Science and Engineering (WiSE) has proudly supported the recruitment, persistence, and advancement of women in STEM (science, technology, engineering, and mathematics).

Led by women faculty and professional staff, WiSE serves a total of 18 STEM departments in six different colleges and schools at the University. Our diverse programming and events offer women in STEM a wide variety of networking and learning opportunities, as well as support, encouragement, and inspiration. Through evidenced-based strategies and an active community, we help women students, postdoctoral fellows, and faculty achieve their career goals. We are administered through the Office of Academic Affairs | Strategic Initiatives. For more about our mission and history, please visit the WiSE website at:

<https://suwise.syr.edu>

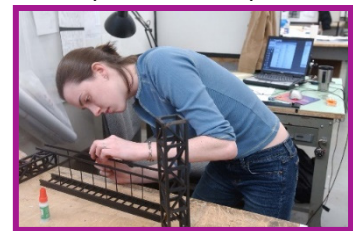


Building Blocks



When searching for pictures of blocks on any online search engine, there is a notable lack of women/girls represented. In the rare case they are pictured, they are usually depicted observing an agentic male or posing with lettered blocks, implying that women's place is only in the "softer" arenas. This lack of representation reveals the need to continue to address the social narratives about women, so they are SEEN as agentic achievers, creators, innovators, and leaders. WiSE remains committed to attaining that vision with the support and help of those on campus who are part of

the building blocks for WiSE and the women we serve. The enduring support of Chancellor Kent Syverud, Provost Gretchen Ritter, and Associate Provost of Strategic Initiatives Marcelle Haddix, as well as the Deans of the Colleges of Arts and Sciences, Engineering and Computer Sciences, Falk College of Sports and Human Dynamics and Schools of Education, Architecture, and Information Studies have been critical to our success. Our daily partners in moving gender equity and inclusion forward include the 18 STEM departments-served and the Office of Research, Graduate School, Humanities Center, Office of Diversity and Inclusion, SOURCE, and others. And of course, we could not achieve our goals without the support and efforts of our women in STEM leaders.



We also could not accomplish this work without the many faculty, professional staff, and community volunteers that help in many ways. We are so appreciative that:

- ✧ Over 40 faculty and professional staff (gender inclusive) reviewed 60 graduate and undergraduate women's portfolios (FPP and CPP Associates). This translates into over 80 reviews as graduate students in FPP 2nd-year receive two reviews.
- ✧ In addition to the 25+ faculty committee leaders, over 110 faculty and professional staff supported programs by presenting, moderating, or serving as mentors.

WiSE is a community that is raising up undergraduate and graduate students as well as postdoctoral scholars and women faculty in STEM. We value the contributions of expertise, time, and support.

Our staff continues to be key building blocks in WiSE's ability to impact our campus community. In 2023 we said goodbye to Amanda Latreille, who started as our program coordinator and later became the Assistant Director, moved to a position in Faculty Affairs. Amanda contributed significantly to the expansion of WiSE programs and the adaptation to Zoom during Covid. **Dana Olesch**, our new program coordinator, is a graduate student in Anthropology with her dissertation near completion. Education, community-building, and public outreach energize her work and we have seen it in all that she does for WiSE. She has contributed greatly during her first 6 months, and we look forward to helping her continue to support WiSE participants through impactful programs and mentoring.



PROGRAMS OFFERED

WiSE provides programs and support at all stages of academic and professional careers. The following chart provides an overview of WiSE offerings during 2023. We frequently open our individual programs and events to all WiSE associates so that mentoring relationships can naturally develop.



For Undergraduate Students

WiSE Women of Color in STEM (WWoCS)
and Career Preparation Program (WWoCS-CPP)

WWoCS Meetups with Mentors

Norma Slepecky Undergraduate Research Prize
and Memorial Lecture

Summer Research Support

First Year Persistence Programs **(NEW)**



For Graduate Students

WiSE Future Professionals Program (WiSE-FPP)

FPP Peer Mentoring Chats

Scientific Writing Workshops



For Postdocs

Professional Development Opportunities

Virtual Coffee Breaks

Peer Writing Group



For Faculty

Professional Development Opportunities

Faculty-2-Faculty Peer Mentoring & Networking
Opportunities

Leadership Development & small grants

Affinity Consults with prospective women faculty
candidates

Department Ambassadors Program **(NEW)**

ANOTHER YEAR OF EXPANSION



*Rina Banerjee and WiSE
faculty & students.*

Another busy year with over 80 valuable networking and developmental offerings. We began the year with a new first-year student persistence initiative called Welcome to WiSE. Through this series STEM faculty mentors host workshops for first-year students to learn more about SU resources and develop connections. Fall 2023 saw the development of the new Faculty Department Ambassador project. Partially funded by the Office of Diversity & Inclusion (ODI), the goal of this program is to build a thriving community of women faculty and postdocs in STEM. This outreach by ambassadors connects new and non-attending faculty to the WiSE community. WiSE also participated in the inaugural ODI symposium offering a poster on informal peer mentoring groups. Collaborating with the Humanities Center, a lunch presentation and personal tour of the art exhibit by Rina Banerjee was an added gem in our programs. All WiSE women, undergraduates to faculty, were invited to hear about and see how Banerjee's engineering education informed her artwork and career journey.

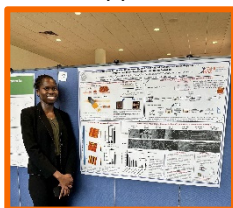
Highlights - For Undergraduate Students

- This year, the **Norma Slepecky Undergraduate Research Prize** ceremony was held in April. The WiSE faculty chair of the Norma Slepecky Prize was Dr. Heather Coleman, Associate Professor and then Assistant Chair of the Department of Biology. The prize was awarded to Ruohan Xu for his work titled *Design, Manufacture, and Testing of Customized Sterilizable Respirator*. He conducted his research under Dr. Zhao Qin of the Department of Civil and Environmental Engineering. This year, we honored the work of so many undergraduate researchers and their many mentors by highlighting two Syracuse University distinguished scholars, Drs. Jennifer Ross and Shikha Nangia. Dr. Nangia presented on Undergraduate Powered Research: Are bacteria friends or foes? Dr. Ross presented on Undergraduate Powered Research: Exploring Cellular Self-Organization.



1st picture: Slepecky awardee XU and mentor Qin. 2nd Picture: Slepecky Chair Coleman, WiSE Faculty Directors Bhatia and Lewis and the two Slepecky Lecturers Nangia and Ross. Picture 3: First Year Bootcamp WiSE Faculty Leaders – Cadwell, Becklin and McDermott with a resource fair guest from Engineering's Student Success and Career Center.

- We were able to serve more undergraduate students, particularly first year women, through our **First-Year Programs**. This calendar year we offered a ½ day workshop and 2 additional one-hour programs. The purpose of these programs is two-fold; to increase persistence in STEM and connect the students to both WiSE and the broader SU community and resources.
- WiSE supported **Summer Research** for eight undergraduates through collaborations with the SOURCE, departments, Honors, and faculty research funds. WiSE “tops up” awards from other sources, so students have sufficient funds to conduct fulltime research on campus for ten weeks. We distributed \$24,000 in grants in 2023 and offered a welcome luncheon and poster presentation practice session. Our eight students had backgrounds in biochemistry, bioengineering, chemistry, communication sciences and disorder’s neuroscience, health and exercise science, and nutrition science.



- In December, we revived the **tradition of a tea** for our last social for the WWoCS and CPP Associates. Dr. Shobha Bhatia gave a presentation explaining the WiSE tradition. She reflected that in 2000 faculty used the tea to celebrate the successful beginning of WiSE. At this point, faculty still felt like Alice in Wonderland where Alice is initially told that there is no room at the tea party table, but she sits down anyway. So, a tea to celebrate success became a tradition. Dr. Romita Ray also fascinated us with information about tea, a topic she has researched and written about. Students assembled their own tea bags from a variety of teas and spent the remainder of the evening relaxing. Our Graduate Associate, Myla Thomas, conceived, planned, and led this event.



Highlights - For Graduate Students

- WiSE-FPP AY 2022-2023 enrolled 47 Associates. In 2023-2024, 51 graduate women were enrolled. Once again, more graduate students were nominated by faculty to participate in the program than there were slots available.

- This year we returned to having a December event at **Dr. Shobha Bhatia's home**. FPP associates and faculty mentors enjoyed a



wonderful meal, each other's company, and a presentation titled *Women*

and *Central NY: Surprises and Secrets* by Linda Lowen. She is a local author of two Syracuse guidebooks.

"When attending WiSE-FPP peer chats, it has made me feel more understood as a woman in STEM. Hearing experiences from women across disciplines yet like my own has aided me in feeling a bit less alone in some of the difficulties that come with being a woman in STEM (e.g., power dynamics, imposter syndrome)."

-From WiSE-FPP portfolio reflections and evaluations

- Peer Chats** were added to WiSE-FPP events in fall 2021 and continued through 2023. This informal mentoring program has become a valuable addition to our work. Former and current WiSE-FPP Associates (listed in the Leadership column) serve as facilitators. Often addressing day-to-day challenges, it is an important form of peer mentoring and community building.
- WiSE again, in collaboration with the Graduate Student Organization (GSO), delivered two well-attended **Scientific Writing Workshops** with Dr. Elizabeth Paley of Duke University. 96% of the January and 100% of October participants gave an overall rating of excellent or above average. Students in both workshops felt they gained strategies for evaluating and revising their work. In addition, they learned to write more clearly, concisely, and cohesively.

Highlights - For Postdocs

- WiSE Postdocs **Virtual Coffee Breaks and Writing Groups** continued under the leadership of Drs. Samantha England and Carla Frare for 2023. These informal groups provided women postdocs with networking and peer mentoring opportunities—building new and lasting, supportive relationships and a source of aide as they apply for grants and next step positions. Dr. England started with WiSE as a postdoc (later became a research faculty) and had a sincere desire to lead and improve the WiSE postdoc program. She soon became a proactive leader developing critical programs that met the needs of postdocs. She found a partner in Dr. Frare. The two went on to create and grow the writing group and the informal peer mentoring group called "The Coffee Break." We will miss their leadership greatly and wish them well in their future endeavors.



Drs. Carla Frare and Sam England with Amanda Latreille (center) at the 22 - Year Celebration.

- WiSE offered two programs on mentoring – How to Create a Mentoring Plan and How to Get the Mentoring You Need. Postdocs also enjoyed workshops on Negotiation and International Collaboration. The workshop of greatest interest was the Industry Panel of former SU postdocs and others from industry. *"I received good advice from panelists about transferable skills from academy to industry and how to link our PhD and Postdoc experiences to jobs in industry."*

Highlights - For Faculty

WiSE provides small grants for up to 10 people annually to support leadership development and career planning for women faculty. Several women STEM faculty were awarded WiSE Leadership Development Grants in AY 23. AY24 proposals are in review and will be announced spring semester. One recipient said,

"[This grant] has been instrumental in helping me both create and prioritize the time to focus on my career growth and development."

From AY20 – AY23, WiSE has provided 29 grants (\$29,000) to women STEM faculty.

The Leadership Development committee also offered peer mentoring information sessions for those applying for grants. Previous recipients mentored those interested in developing their leadership skills and applying for a grant.

In May 2023, we provided a half-day leadership workshop; **"Your Voice, Your Power"** by Dr. Katrina Hutchins. Over 30 women faculty and professional staff attended. The workshop was rated overall as excellent.

Faculty members said, *"Dr. K's modeling of openness was the most beneficial. She really showed how to put into practice what we learned by showing it to us in action."*

"I plan to incorporate some of the activities with my lab group to help build a real community there."



Workshop small group activity with Dr. Hutchins overlooking.

She also provided consults to campus leadership groups, WiSE leadership, and academic chairs. WiSE students enjoyed a meal and conversation with her as well.



WiSE LEADERSHIP

(AY 23 and AY 24)

Faculty Co-Directors

Dr. Shobha Bhatia (AY99 -AY24)
Dr. Katharine Lewis (AY18 – AY24)

WWoCS and WWoCS-CPP

Dr. Dawn Johnson (lead AY15-AY24),
Dr. Shikha Nangia (FY19-FY24), and
Dr. Jesse Joyce Briggs (AY24)

WWoCS Graduate Mentors:
Jasmine Gomez and Elizabeth Oguntade

Norma Slepecky Undergraduate Research Prize and Lecture

Dr. Mary Beth Monroe (Chair AY24),
Dr. Heather Coleman (Chair AY22-AY23)

General Undergraduate Programs

Dr. Katie Cadwell (lead AY22-AY24)
Dr. Katie Becklin (AY22-AY24) and
Dr. Moira McDermott (AY23-AY24)

WiSE-FPP

Dr. Sucheta Soundarajan (lead AY21-AY23,
Dr. Heidi Hehnlly (AY22-AY23), Dr. Laura Machia
(AY23), Dr. Sara Eftekharijad (AY24) and
Dr. Bei Yu (AY24)

FPP Peer Chat Facilitators:
Sadie Novak, Emily Smith, and Julia Zeh

Postdoc Mentoring

Karin Ruhland (lead AY24), Dr. Aesoon Park (AY24)
and Dr. Elia Soto (AY24), Dr. Jessica MacDonald (lead
AY23), Dr. Samantha England (AY18-AY23), and
Dr. Carla Frare (AY20-AY23)

Faculty Mentoring & Networking

Dr. Suzanne Baldwin (lead AY24), Dr. Julie
Hasenwinkel (lead AY20-AY23), Dr. Jennifer Cook
(AY24), and Dr. Latha Ramalingam (AY21-AY24)

Faculty Leadership Development

Dr. Eleanor Maine (lead AY19-AY24),
Dr. Qinru Qiu (AY20-AY24), and
Dr. Jennifer Ross (AY22-AY24)

Professional Staff

Sharon Alestalo (Program Director AY09-AY24)
Dana Olesch (Program Coordinator (AY24)

Student Staff

Graduate Program Assistant: Myla Thomas
Undergraduate Assistants:
Rachel Lin and Brielle Young

IMPACTFUL AND VALUED

The following section is a closer look at WWoCS and WiSE-FPP and the programs' evaluation highlights for the 2023 calendar year. The findings illustrate significant, positive student impact and consistently valued programming. It also demonstrates a strong alignment with the overall mission and goals of WiSE.

WWoCS

WiSE Women of Color in STEM (WWoCS)

programs served 33 different individuals in AY23 plus the 25 nominated and registered **Career Preparation Program (CPP)** Students. In fall of 2023 we accepted a new cohort of 25 CPP students. CPP is a one-year program.

- Sampling of Program topics: Personal Statement, Screening and discussion of the documentary Coded Bias, Resume and personal branding statement, Bolster your resilience, Building Community, and Building a Better Candidate for Science Fellowships and Scholarships.
- Some graduate programs that CPP students attended included Mentoring (2 parts), Personal Statements, and Managing Up: How to Facilitate Your Professional Growth

Across the 5 WWoCS and CPP programs formally evaluated in 2023 the average rating out of a possible 5 (excellent or strongly agree) for each of these common measures was:

- Respondents overall rating of the programs was 4.67 out of 5 overall.
- Increase in knowledge – 4.57.
- Increased skills and strategies – 4.61.
- Increased confidence or motivation – 4.55.
- Expanded connections to others in STEM – 4.35.
- Felt a greater sense of belonging in STEM – 4.14.

Of the AY23 CPP Associates, **72% completed** the program and earned a certificate and digital badge. To complete the program, participants had to acquire 5 program credits and portfolio submission (for faculty/professional staff review).

As a senior graduate student, I am navigating potential mentorships to help me with the transition from graduate school to starting my career. The [Mentoring] Workshop provided me with helpful tips on how to approach these relationships and gave me confidence to engage in networking opportunities.

Additionally, the preparation of this portfolio has given me the opportunity to think about my 1–3 year plan and start preparing the materials necessary for jobs and postdoctoral positions.

Feedback from FPP 2nd Year Associate in her portfolio's critical reflection statement

WiSE-FPP

In AY23 we provided **Future Professionals programs (FPP)** to a total of 47 nominated and registered graduate students which consisted of 24 second year and 23 first- year students. The AY23 cohort had a **completion rate of 89%** and earned a certificate and digital badge. We registered 54 returning and 1st year graduate students in AY24.

- Sampling of Event topics: Mentoring (2 parts), Collaboration, Orientation to grant applications, Personal statement, and Managing Up: How to Facilitate Your Professional Growth.
- FPP Associates were invited to several Postdoc programs including Negotiation and a Panel of Alumna and others who pursued industry careers.

Across the 5 programs formally evaluated in 2023 the average rating out of a possible 5 (excellent or strongly agree) for each of these common measures was:

- Respondents overall rating of the programs was 4.49 out of 5.
- Increase in knowledge – 4.5.
- Increased skills and strategies – 4.6.
- Increased confidence – 4.23 or motivation – 4.56.
- Expanded connections to others in STEM – 4.22.
- Felt a greater sense of belonging in STEM – 4.11.

WiSE-FPP is a two-year graduate program. Each year has a combined cohort of first year and second year students. They are required each of the 2 years to attend 5 program credits and complete a portfolio for review.

EQUITY STATEMENT

At Syracuse University WiSE, we are committed to diversity, equity, inclusion, and accessibility. We believe that different perspectives and experiences enrich the academy and the research enterprise. We support all women (self-identified as such) in the departments we serve. Our programs welcome allies of all genders, races, religions, and ethnicities who are committed to the inclusion of women in STEM. Full Statement on [website](#).

Highlights - Outreach

- WiSE was invited to participate in 6 campus welcome back fairs this year.
- Our website and social media presence has shown great promise under our graduate associate Myla Thomas, especially Instagram. Check us out at suwise.syr.edu or on Facebook, Twitter, YouTube, LinkedIn including an alumni page, and Instagram. Handle across the board is @TheSUwise.

Inclusion of Women Faculty – Progress over Time



The picture above is a group shot of women in STEM (students, faculty, and alumna) from the 23-Year Celebration in April 2022. Established in AY99, we are now in our 25th year.

Each year we report on the progress in recruiting women to faculty positions. The number of women faculty in STEM in 1997 totaled 18 in 10 core STEM departments of the Colleges of Arts and Sciences and Engineering and Computer Science (WiSE data). These core departments plus the iSchool and School of Education saw a doubling of the number during the SUAdvance project, an NSF ADVANCE Institutional Transformation grant that WiSE initiated and remained heavily involved in from 2010-2017. In 2023, the 18 departments/schools WiSE now serves (November 2023) 120 tenure/tenure-track women faculty and 54 not on track for a total of 174 full time tenure, tenure-track and not on track faculty. There are over 223 STEM women plus women allies/guests on the listserv (WiSE data).

STEM women faculty in the WiSE served departments have been awarded nearly \$104 million in research funds through FY18 - FY23 according to the Office of Research. These awards have steadily increased annually during this time except in AY20 when COVID restrictions were at their highest. In AY23, two large awards were received by women faculty and colleagues allowing for a significant increase in the final total compared to other years.

For the first time in WiSE's program history, we have a united office space where the program director, program coordinator, and the student associates are all together. WiSE has joined 2 other sister programs – SOURCE and the Center for Scholarship and Fellowship Advising - in **suite 208 of Bowne Hall**. Having two of our consistent collaborators as neighbors has been very enjoyable and we see many future collaborations. Please feel free to stop by for a visit!

WiSE

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