Using Participatory Methods to Foster Inclusion for Women in Engineering

Dr. Batsheva Guy & Dr. Brittany Arthur

Overview
Participatory methods involve an approach to research, program development, and action planning in a manner that captures diverse voices and involves stakeholder input in the development, implementation, and dissemination of work within their own community or institution. Implementing participatory methods in your own organization, department, lab, or classroom allows for including and valuing all voices at the table, while also creating collaborative, actionable change and gender-equitable spaces in engineering.

In this workshop, Drs. Batsheva Guy and Brittany Arthur will demonstrate unique ways with which to implement participatory methods with your collaborators and stakeholders in multiple settings in order to foster a more inclusive and innovative environment, while producing impactful output and programs for women in engineering. Presenters will share information on their successful participatory research projects with women in engineering. Drs. Guy and Arthur will also guide participants through a collaborative activity, in which they will leave with the tools they need to facilitate a participatory method with women in engineering.

Agenda
The agenda for this 90-minute workshop will be as follows:
00:00-00:15 Introduction & Ice Breaker
00:15-00:30 Overview of participatory research & participatory methods
00:30-00:45 Examples of implementing participatory methods with women in engineering
00:45-1:15 Activity, collaboratively planning a participatory method to address an issue or problem surrounding gender equity in engineering
1:15-1:30 Wrap up & final activity

Learning Outcomes
After completing the workshop, participants will be able to:
1. Identify the key tenets of participatory research
2. Define what characterizes a participatory method
3. Describe the processes and characteristics of three distinct participatory methods (Future Creating Workshop, Photovoice, and Group-Level Assessment)
4. Analyze an issue in their organization that can be addressed via participatory methodology
5. Design their own Group-Level Assessment and develop a series of prompts
WEPAN Women in Engineering Virtual Program Day: Returning to Our Roots

Including Women with Disabilities in Engineering
Brianna Blaser and Sheryl Burgstahler

Description:
Despite frequent discussion of intersectionality among diversity, equity, and inclusion professionals, there is rarely meaningful inclusion of people with disabilities in these efforts. In this session, leaders from the AccessADVANCE project will share lessons learned and best practices for ensuring that DEI efforts are welcoming and inclusive of individuals who identify as women with disabilities.

AccessADVANCE is led by the University of Washington and North Dakota State University with the goal of increasing the participation and advancement of individuals who identify as women with disabilities in academic science, technology, engineering, and math (STEM) careers, including faculty positions. AccessADVANCE aims to increase understanding of the issues related to this understudied and often marginalized group that will lead to the identification of effective interventions with the potential to systematically address issues impacting the career advancement and success of women faculty with disabilities.

As the pandemic has continued it has become clear that it is crucial for organizations to take into consideration the barriers that many individuals with disabilities have faced in requesting accommodations to teach or learn remotely.

Session Content:
10 minutes - Experiences of women with disabilities in academic engineering positions
5 minutes - An introduction to disability and the social model of disability
20 minutes - Access approaches: accommodations and universal design
20 minutes - Practical strategies for disability inclusion, data collection and accessibility of meetings and conferences
20 minutes - A case study: NDSU ADVANCE
5 minutes - Questions & Answers
Description:
The Purdue University Women in Engineering Program was established in 1969. Over the past half-century, we have developed a broad and intentional retention strategy for female undergraduate engineering students. An examination of WIE participation was conducted for 6 entering cohorts (F09 - F14). During their freshmen year, an average of 68% of these women participate in at least one WIEP retention program. Our retention programming includes a residential community, Women in Engineering Seminar for first-year students, a network mentoring program, a tutor center, and connecting with alumnae.

This workshop will outline the Purdue Women in Engineering comprehensive approach to retention programming and leave time for Q&A and a discussion on retention of female undergraduate students.
Supporting Female Graduate Students: What is Working?
Suzanne Zurn-Birkhimer

Description:
How can we best support female graduate students? The Purdue University Women in Engineering Program has had a mentoring program for female graduate students since 1994. The program has been updated over the past 27 years but in the last decade, we have seen a steady decline in participation. Such a decline that the program was put on hiatus during COVID. Our team is brainstorming how we can best provide support, affirmation and strategies to these women.

This breakout session will convene WIE staff for an open discussion and brainstorming session on how to provide useful programming for female engineering graduate students.
Description:
As a WIE Director I often find myself holding my breath in hopes that students will register and turn out at the programs and events that we host. Much like other WIE programs, ours is funded primarily by corporate sponsorships and outside financial support. Many of our events are headlined by those same sponsors as well as college of engineering alumnae across the spans of their careers. Our program stakeholders beyond the students themselves, be they corporations, foundations, alumnae, or college of engineering faculty and staff, typically gauge the success of the WE@RIT program on current student engagement levels within that programming. Unfortunately, beginning in 2016-2017 I began noticing sharp declines in current student engagement with WE@RIT that has only continued, resulting in strained stakeholder relationships and frustration that we weren’t adequately meeting current student needs.

In the spring 2019 I began work on what would become my Master’s Capstone project: Understanding Gen Z’s Declining Engagement with WE@RIT, a Woman in Engineering Program. My explanatory sequential mixed methods design began with a survey to all undergraduate women in the college of engineering; and followed with student focus groups and contextual interviews with other clubs, programs and departments on campus. I’ve had the privilege of unpacking the quantitative results at CoNECD this past spring; and unpacking the qualitative results at ASEE’s Annual Conference this past July. This presentation and workshop is the next step and intended for WIE program practitioners to come together, review the key findings from my project presented as a whole (not parsed out by data source), and engage in honest dialogue and brainstorming about the challenges facing WIE directors who might be struggling with current student engagement declines.
Co-Conspire: Concentrated Efforts of Collaboration Between Underrepresented and Women Engineering Student Programs

Panel Description:
Programs for the Educational Enrichment and Retention (PEER) and Women in Science and Engineering (WISE) are dedicated to increasing diversity in science and engineering by addressing and assisting students in technical majors.

At Clemson University, we offer pro-active mentoring, guidance, coaching, and tutoring. Our programs provide career development and networking opportunities. Learn the power of combining your minority engineering program (MEP) and women in engineering (WIE). In “Co-Conspire: Concentrated Efforts of Collaboration” hear from PEER WISE Executive Director and WISE Associate Director on how the power of these two programs lead to justice, equity and future leaders that are well equipped to better this world.

Speakers:
Serita Acker
Executive Director, Program for Educational Enrichment and Retention (PEER) and Women in Science and Engineering (WISE)
College of Engineering, Computing and Applied Sciences
Clemson University

Beth Anne Johnson
Associate Director, WISE
College of Engineering, Computing and Applied Sciences
Clemson University

Lisa Jackson
Associate Director, PEER
College of Engineering, Computing and Applied Sciences
Clemson University

Chat Moderator:
Sarah Johnson
Women in Science and Engineering Residence Graduate Assistant
College of Engineering, Computing and Applied Sciences
Clemson University
In this session participants will:

- Understand what makes feedback drive decision making
- Learn to translate their feedback from thought to engaging conversation
- Engage in interactions that help them communicate more effectively

In a fun and safe environment, the participants will take part in playful and practical small group activities related to receiving, interpreting and communicating feedback.
OUR APPROACH

All our solutions are 100% online and created based on our S.A.F.E. Values.

SIMPLE - We keep it simple and sustainable for optimal implementation, because complex ↔ forgotten.

ACTIONABLE - We keep it practical and actionable because who has time for more theory?

FUN - We take fun seriously because fun makes learnings memorable.

EXPERIENTIAL - We provide a safe space for you to learn by doing, not by being talked to.

Genevieve Pepin
Mindset & Productivity Coach

Christina Unrein
Clarity & Happiness Coach

www.connectionlabproject.com
Women Coders: From "Hiding to Thriving:"

Maru Colbert

Description:

*Women Coders...From Hiding to Thriving* is a case study wherein best practices to train underprepared adult students for sustainable careers in computer science will be shown. The specific case involves women who have overcome extreme hardship to succeed. Their achievement is relevant to the general case wherein any student with extenuating circumstances has to be “met where she is” in order to do well in technical subjects. The training organization, Annie Cannons, was a finalist in the 2017 MIT SOLVE Competition in the "Women in Technology" pillar. Dr. Maru Colbert, the presenter, is an advisory Board Member.
Description:
Research shows that the number of women pursuing degrees in STEM (Science, Technology, Engineering, and Math) fields is disproportionately less than the number of men pursuing degrees in the same fields. Cal Poly Pomona’s Women in Science and Engineering (CPP WiSE) Program seeks to do its part in countering this disparity by engaging all within the Colleges of Agriculture, Engineering and Science for the purposes of recruiting, retaining, and graduating greater numbers of female students.

Cal Poly Pomona’s Women in Science and Engineering (WiSE) program was established in 2021 as part of the Cal Poly Pomona STEM Success Network. WiSE was originally the Cal Poly Pomona Women in Engineering program (CPP WE), a student support program within CPP Engineering founded in 2012. WiSE provides resources and support services for students to succeed in STEM. WiSE serves undergraduate and graduate students and faculty in STEM fields at Cal Poly Pomona.

Session Content:
• Background: Cal Poly Pomona WiSE
• Student demographics and the need for the program - Hispanic Serving Institution, local community demographics, STEM education as a path to social and economic mobility and alleviation of poverty in the community
• Program Objectives and Outcomes
• Support team: Outreach Office, WiSE Members, WiSE Student Coordinators
• Activities: Fall Student Welcome Lunch, WiSE Chat, WiSE Talk (Alumnae Speaker Series), Quarterly Meetings, Introduce a Girl to Engineering
• Internships, scholarships, and research opportunities
• Impact of the program
• Partnerships/funding
• Audience sharing and Q & A
• Wrap up and conclusion
WEPAN Women in Engineering Virtual Program Day: Returning to Our Roots

Speaker Bio

Dr. Beth M. Holloway
Assistant Dean for Diversity and Engagement, College of Engineering,
Leah H. Jamieson Director of Women in Engineering, Assistant Professor, School of Mechanical Engineering (by courtesy),
Purdue University

An advocate for research-informed approaches to engineering education, equity, and policy, as well as student recruitment and retention efforts, Holloway has made significant contributions nationally as well as at Purdue University, where she has spent her academic career.

Her research Interest areas include engineering admissions practices; women and leadership, particularly in male dominated careers; and diversity and equity. She is a fellow of the American Society for Engineering Education (ASEE), and currently serves on the ASEE Board of Directors as Chair of Professional Interest Council IV, and was previously Vice President of Professional Interest Councils. Holloway was president of the Women in Engineering ProActive Network (WEPAN) in 2006-07 and served on WEPAN’s Board of Directors from 2005 -2008.

Holloway believes in student engagement, and has served as the advisor to the Purdue Society of Women Engineers (SWE) student section since 2001. The section has over 700 members. Since 2015, she has also been the advisor for the Alpha Chapter of Phi Sigma Rho, a national engineering sorority.

Holloway’s honors include the 2015 ASEE William Elgin Wickenden Award, as lead author, which recognizes the best article published in the Journal of Engineering Education the year prior, the 2016 WEPAN Founders award, the 2016 and 2018 Purdue Panhellenic Advisor of the Year, the 2013 Purdue Helen B. Schleman Gold Medallion Award, the 2012 SWE National Outstanding Faculty Advisor Award, and the inaugural Phi Sigma Rho National Sorority Lifetime Achievement Award in 2009.

Holloway received both B.S. and M.S. degrees in Mechanical Engineering and a Ph.D. in Engineering Education, all from Purdue University. She spent nine years as a research and development engineer at Cummins, Inc. While at Cummins, she was a recognized corporate engine lubrication system expert, with specialties in piston cooling nozzle and lubrication pump performance.

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Speaker Bio

Elizabeth Mirowski, PhD
SBIR/STTR Program Director

Elizabeth (Ela) Mirowski is a Program Director for the SBIR/STTR program at NSF. Her portfolio areas are Advanced Manufacturing and Mobility.

For two decades, Ela engaged with start-ups and small businesses as a founder, executive officer, and scientific lead on the development of technologies involving medical devices, photonics for displays, semiconductor electronics, renewable energies, nanomaterials, and biotechnologies. As lead, her activities included developing and executing the strategic vision to create successful revenue generating companies.

Ela holds a Ph.D. in Physical Chemistry from the University of Colorado, a B.A. in Chemistry from Columbia University, and completed a National Research Council post-doctorate at the National Institute of Standards and Technology.
Speaker Bio

Dr. Batsheva (Sheva) Guy
Program Director of Strategic Initiatives, Inclusive Excellence & Community Engagement

Dr. Batsheva (Sheva) Guy is a Diversity, Equity, and Inclusion Professional, Educator, Participatory Action Researcher, and Program Developer. She is the current Program Director of Strategic Initiatives for the Office of Inclusive Excellence and Community Engagement in the College of Engineering and Applied Sciences at the University of Cincinnati.

Her professional interests revolve around utilizing participatory and community-based methods to engage and support racially and ethnically diverse groups and women in the workplace.
Speaker Bio

Dr. Brianna Blaser
Associate Director, *AccessComputing* and DO-IT Counselor/Coordinator,
University of Washington

Brianna Blaser, Associate Director of *AccessComputing*, is a part of the DO-IT Center at the University of Washington (UW) where she works to increase the participation of people with disabilities in science and engineering careers. Her work includes direct interventions for students with disabilities and working with faculty, employers, and other stakeholders to create institutional change. Brianna has a PhD in women studies from UW and a background in broadening participation and career development in science and engineering fields. Before joining DO-IT, she was the Project Director for the AAAS (American Association for the Advancement of Science) Science Careers Outreach Program.
Speaker Bio

Dr. Sheryl Burgstahler
Founder and Director, DO-IT Center & Affiliate Professor, College of Education, University of Washington

Dr. Sheryl Burgstahler founded and continues to direct Accessible Technology Services at the University of Washington (UW) in Seattle. This unit includes the DO-IT (Disabilities, Opportunities, Internetworking, and Technology) Center and the Access Technology Center (ATC). The ATC focuses efforts at the UW; the DO-IT Center reaches national and international audiences with the support of federal, state, corporate, foundation, and private funds and hosts The Center on Universal Design in Education (CUDE). Dr. Burgstahler is an Affiliate Professor in the College of Education at the UW. Her teaching and research focus on the successful transition of students with disabilities to college and careers and on the application of universal design to technology, learning activities, physical spaces, and student services.

Dr. Burgstahler has published articles and delivered presentations at national and international conferences that focus on universal design of online learning, websites and multimedia, computer labs, instruction, student services, and other applications in education; and the management of electronic communities, work-based learning activities, and transition programs for youth with disabilities. She is the author or co-author of eight books on using the Internet with pre-college students and directing e-mentoring and transition programs, and lead editor of the book Universal Design in Higher Education: From Principles to Practice. Dr. Burgstahler has degrees in mathematics, education, and administration of higher education. She has taught precollege and postsecondary mathematics, computer programming, assistive and accessible technology, and courses for teachers on mathematics instruction and technology applications. Dr. Burgstahler and her projects have received many awards, including the Professional Recognition Award for the Association for Higher Education and Disability, the National Information Infrastructure Award in Education, the President's Award for Mentoring, the Golden Apple Award in Education, and the Harry J. Murphy Catalyst Award.
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Speaker Bio

Dr. Canan Bilen-Green
Vice Provost for Faculty Affairs and Equity, professor of Industrial & Manufacturing Engineering at North Dakota State University

Canan Bilen-Green is the Vice Provost for Faculty Affairs and Equity, professor of Industrial & Manufacturing Engineering at North Dakota State University (NDSU). Her work focuses in areas including faculty policies, recruitment, development, leadership training, promotion and tenure, executive searches, and other issues related to faculty and their concerns. Dr. Bilen-Green also oversees Disability Services, the Equity Office, Faculty and Scholar Immigration, International Student and Study Abroad Services, Multicultural Programs, ADVANCE FORWARD, and the Commission on the Status of Women Faculty. Dr. Bilen-Green serves as the Title IX/ADA Coordinator, and chair of the Senate Coordinating Council and Faculty Awards and Recognition Committee.
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Speaker Bio

Dr. Suzanne Zurn-Birkhimer
Associate Director, Women in Engineering Program, Purdue University

Dr. Suzanne Zurn-Birkhimer has spent her career diligently working towards broadening participation of women and underrepresented groups in STEM fields. She is the Associate Director of the Purdue University Women in Engineering Program where she leads retention efforts and conducts research around female student success. She manages the undergraduate and graduate mentoring programs that reach over 600 students annually and teaches two Women in Engineering seminar courses. She also holds a courtesy Associate Professor appointment in the Department of Earth, Atmospheric, and Planetary Sciences where she teaches introductory Atmospheric Science courses.

Dr. Zurn-Birkhimer’s research focuses around understanding the barriers and pathways to success for typically marginalized groups in STEM. She is developing an online training program for students with under-developed spatial skills. She is also working to understand the intricacies of female undergraduate students’ successful navigation to their degrees. Finally, Dr. Zurn-Birkhimer studies the career pathways of indigenous women to better inform practices and policies in the work force. She is a founding Advisory Board member of the Geoscience Alliance, a national alliance committed to broadening participation of Native Americans in the geosciences. In 2019, she was appointed to the Advisory Board of the international organization Diversity in Organizations, Communities, and Nations Research Network.

She has held several positions across academia including Deputy Director of Purdue’s NSF-ADVANCE initiative to increase the number of female faculty in the STEM fields and Associate Professor and co-Chair of Mathematics at Saint Joseph’s College in Rensselaer, IN where she implemented a curriculum revision and developed a Mathematics-Engineering dual degree program.

Dr. Zurn-Birkhimer earned her B.S. in Mathematics from the University of Minnesota, and an M.S. and Ph.D. in Atmospheric Science from Purdue University. She was awarded the 2012 Outstanding Alumni Award from the Purdue University Department of Earth, Atmospheric, and Planetary Sciences and the 2019 Distinguished Alumni Award from the Purdue University College of Science.
Ana Dison is the assistant director of the Women in Engineering Program and coordinates all current student programming, including the First-Year Initiative, the Peer Assistance Leader program, and the Women In the Second Year of Engineering program. She typically teaches three to four classes each semester, including the WEP Leadership Seminar and the GLUE undergraduate research seminar. She led efforts to create a partnership with the UT College of Natural Sciences to develop and deliver bias and inclusion workshops and trainings across the university for students, staff and faculty.

Dison earned her bachelor’s degree in kinesiology from The University of Texas at Austin in 1992 and her master’s degree in college student services administration from Oregon State University in 1994. After working for two years at the University of Maryland in recreation services, Dison returned to UT Austin in 1996 and served as assistant director in the Division of Recreational Sports, coordinating membership services and satellite facilities as well as overseeing a large part-time student staff.

She joined Texas Engineering in 2000 and served as an academic advising coordinator in the Engineering Student Services office, advising thousands of students and coordinating a wide variety of student programs. Additionally, she served as the degree evaluator for the Cockrell School for four years. Dison has served on numerous committees across campus, has been president of the Academic Counselor’s Association and served for three years in the inaugural group of the UT Staff Council. Dison co-chaired the Provost’s Council on Student Advocacy for three years and has served two terms as president of the Academic Counselors Association. She continues to be active in the UT Austin community, working with peer and professional mentoring programs.

A member of the Women in Engineering ProActive Network (WEPAN) since 2006, Dison completed a two-year appointment to the WEPAN Board of Directors as communications director in 2015. She received the Cockrell School of Engineering Staff Excellence Award and the Eyes of Texas Award in 2011 and the university’s Outstanding Staff Award in 2012.
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Speaker Bio

Judith Cordes, MA
Senior Specialist and Director, Women in Engineering Program, Student Success, Michigan State University

Judy Cordes is the Director for Student Success in the Women in Engineering Program at Michigan State University. Judy has been at MSU since 1987, starting as an academic advisor and the advisor for the MSU Society of Women Engineers Collegiate section. In 2007, Judy started the MSU Women in Engineering Program. The program has helped to triple the number of women in the College of Engineering, and has grown from a staff of one to a staff of four. Judy has been involved with WEPAN since the beginning, attending all but one National Conference. Her service to WEPAN has included a term on the WEPAN Board and serving on the planning committee for five national WEPAN conferences and forums.

Although more of a home body now, Judy has had the great fortune to travel to seven other countries and thirty-nine states. In her spare time she loves escaping into a good book or a great movie or television series or listening to her favorite music. The number one thing on her bucket list: see the Northern Lights!
Speaker Bio

Paula Davis Lampley, BSEE, JD
Director of Women in Engineering, University of Cincinnati College of Engineering and Applied Science

Paula Davis Lampley is the Women in Engineering Director at the University of Cincinnati College of Engineering and Applied Science. She received a degree in Mathematics from Wilberforce University and a degree in Electrical Engineering from the University of Dayton.

After working as an engineer for a major automobile manufacturing company, Paula attended the University of Cincinnati College of Law. After practicing as a trial attorney, concentrating in products liability and labor law, and later as a corporate attorney, Paula worked as an entrepreneur while raising her small sons.

Paula is passionate about empowering girls to consider engineering where they can use their talent to develop technology and create solutions to everyday problems. As the Women in Engineering Director, Paula creates programs to insure women students, faculty and staff feel supported and enjoys recruiting the next generation of engineers. She also enjoys speaking with engineering students about the intersection of law and technology.

Paula served as a speaker at the July 2021 American Society of Engineering Education (ASEE) Conference on the topic: “Leveling the Playing Field - An Engineering Camp for Women of Color”. Paula will also serve as a speaker at the October 2021 National Society of Women Engineers Conference on the topic: “From Beaker to Gavel - Engineers Make Great Lawyers”. Paula and her husband, attorney Nathaniel Lampley, Jr., reside in Cincinnati, Ohio. Paula and Nate have two adult sons, Nathaniel III, a fourth year medical student and Hunter, an information technology professional.
Kathy has served as Director of Women in Engineering at RIT (WE@RIT) since 2015 and brings a rich array of life experiences to the position.

After graduating with a bachelor’s degree in Public Affairs from a women’s college where she learned first-hand the value of a female-centric support network, Kathy made her way to Silicon Valley. There she studied CMOS Mask Layout Design which eventually led her to a position in IT for a semiconductor IP start-up. Fast forward through coast-to-coast moves to Boston, San Diego and finally Rochester, Kathy spent many years in the fitness industry while raising her daughter, wearing every hat from personal trainer and cycling instructor to owner and director of Cycledelic Indoor Cycling Studio. Kathy draws upon these many diverse career and life experiences while directing WE@RIT.

In the spring of 2020, Kathy earned her Master of Science degree in Program Design, Analysis & Management through RIT’s School of Individualized Study, combining concentrations in Project Management, Analytics and Research, & Group Leadership and Development.

An unabashed introvert, Kathy enjoys reading and spending time with her family, exploring the world of craft cocktails, and making a fuss over her Boston Terrier, Gatsby.
Serita Acker
Executive Director, PEER & WISE, College of Engineering, Computing and Applied Sciences, Clemson University

Serita earned her bachelor’s degree from Lander University and a Master of Education in Human Resource and Development from Clemson University. Before becoming the PEER/WISE director in August 2015, Serita Acker was Director of the Women in Science and Engineering program. Additionally, she has more than 25 years of experience in higher education, both in student support services, mentoring, and diversity programs. She is a certified Global Career Development Facilitator and Life Coach. Serita Acker sees the PEER/WISE main role as providing student success programs and services that can equip students with the resources they need to excel at Clemson University and achieve their educational goals to prepare for success after graduation.

She has won several State and National Awards: Thomas Green Clemson Award, Woman of Distinction by the Girl Scouts of Mountains to Midlands, the James E. Bostic Diversity and Inclusive Excellence Award in 2017 as a diversity champion at Clemson University, Clemson University Woman of the Year, Martin Luther King Jr. Award, Clemson University Board of Trustees Award, Women in Engineering Pro-Active Network Distinguished Service Award, Career Communications Magazine College Level Promotion of Education Award, National Association of Multicultural Engineering Advocates Award, Upstate Diversity Award, Calder D. Elhmann Outstanding Individual.

Mrs. Acker was also featured on the cover of Insight into Diversity, a National magazine, September edition, for her work at Clemson University.

She also served as MentorLinks Consultant for the American Association of Community Colleges in Washington DC and sits on many state and national boards to help promote STEM. She currently serves as the National Society of Black Engineers Student Chapter campus advisor at Clemson University. In her spare time, she enjoys reading and traveling.
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Speaker Bio

Beth Anne Johnson
Associate Director, WISE, College of Engineering, Computing and Applied Sciences, Clemson University

Beth Anne Johnson serves as the Associate Director for the Women in Science and Engineering (WISE) Program in the College of Engineering, Computing and Applied Sciences at Clemson University.

Since the program’s establishment in 1995, the WISE program has helped thousands of women successfully gain employment in male dominated industries. This award-winning program pairs first year, female-identifying students with female upperclassman to guide the young women in their college experience. While teaching essential skills alongside academics, Beth Anne helps educate and prepare women to pursue and secure successful careers in science, technology, engineering and mathematical (STEM) fields through outreach, recruitment, and college support.

As a social scientist and researcher, Beth Anne explores female identity and leisure. Currently, she is investigating female leisure spaces in male dominated sports. She finds that her research interests better prepare her to coach young women in crafting their understanding of self, their worth and their relation to the world.

Currently, Beth Anne serves as the President Elect of WEPAN and will begin serving as president for the 2022-2023 fiscal year. Alongside the executive leadership team, she is honored to serve the WEPAN community. She is looking forward to building a strategic plan and stewardship strategies that exhibit and oversee the continuation of growth WEPAN has experienced over the last 30 years.
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Speaker Bio

Lisa Jackson
Associate Director, PEER, College of Engineering, Computing and Applied Sciences, Clemson University

Lisa Jackson is the Associate Director of Programs for Educational Enrichment and Retention (PEER). She joined the PEER & WISE, Women in Science and Engineering, team in 2014. For over 30 years, their mission at PEER & WISE has been to educate, recruit, and retain underrepresented students in STEM through mentoring, academic coaching, counseling and academic enrichment. This program is designed to help students transition from high school to college, ensuring they have all the necessary tools to be successful students at Clemson University.

One of her greatest achievements while in this role occurred in 2017; the program received an award from the National Association of Multicultural Engineering Program Advocates (NAMEPA). This national award recognizes retention programs that have increased the participation of students from historically underrepresented (URM) populations in engineering. This accomplishment allowed PEER & WISE to join other prestigious public engineering research institutions. Subsequently, the morale and participation of engineering students at the university has vastly increased.

Her personal philosophy is to treat others as you want to be treated. Being kind to others costs nothing but can leave every place you travel and every individual you encounter better because of you. When she engages with PEER mentors, she uses those moments as opportunities to plant and water seeds of wisdom, kindness, love and compassion. She believes with this mixture, we will make lifetime changes and eventually make this world a beautiful garden, a better place.

She is a proud alumna of Benedict College, one of the finest HBCUs in South Carolina, where she earned her Bachelor of Science in Economics Business Administration. It was there that she realized education was the tool she needed to change the world. She is a recent 2021 graduate of Clemson University MBA program and wants to continue to be the agent of change for her family, community and her country.
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Speaker Bio

Geneviève Pépin
Productivity Coach

Geneviève helps leaders and entrepreneurs let go of overwhelm, reinvent their productivity and elevate their efficiency, so that they experience less stress and more satisfaction in their life.

She is an accredited life coach (IAPC&M), certified mindset specialist, productivity and leadership development coach (Fortune 500 companies), and improv facilitator.

Before coaching, Geneviève built her career internationally in event management and marketing, living, working and traveling in more than 20 countries, in 4 languages.
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Speaker Bio

Christina Unrein
Clarity & Happiness Coach

As a Clarity and Happiness Coach, Christina inspires and prepares achievement-driven professionals and people-focused leaders to be more effective, courageous, intentional, and collaborative. She lives her life chasing challenge and embracing her happiness. She designs and facilitates immersive learning experiences on many topics including: happiness, collaboration, resiliency, team building, leadership, celebration, succeeding in ambiguous situations, and building positive mindsets. Her experience facilitating spans conferences, corporations, non-profits, government events, mastermind groups, teams, classrooms, professional webinars, and virtual spaces. She is the author of *The Happiness Workbook: Rise Up, Happiness Soldiers*.

Before starting Possibility Lab, Christina was an influential business professional with experience leading multifunctional teams in project execution, product development, process improvement, and strategic planning. Her latest project is co-founding the Connection Lab Project which provides practical tools and meaningful connection through a facilitated virtual practice space to improve daily interactions, problem solving abilities, and overall productivity. It focuses on tailored solutions for remote workforces valuing hassle-free, dynamic, and result-oriented spaces.

She has completed extensive training in leadership coaching and completed her Finance degree and Masters in Regional and Community Planning (MRCP) at Kansas State University. She is certified with the International Coaching Federation as an Associate Certified Coach and is Master Lean Coach certified. To further her capabilities, Christina completed the United Nations Advanced Training Facilitation Certification and serves as a WBECS Implementation Mastery Session Facilitator.
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Speaker Bio

Dr. Maru Colbert

Professor Colbert is an engineer, educator, performer, and activist. Her work spans from chemoselective coatings to interior and fashion design through musicianship to poetry. Her research, engineering and education practice projects spans ten companies including two start-ups, ten universities and five continents. Her research areas in industry and academia are chemical, environmental and materials engineering and include small-scale process chemistry, reactionware, phytoremediation, nanosensors and atmospheric modeling. She has been a professor for over 30 years with one patent and several “named” senior research appointments/fellowships, visiting scholar positions and teaching awards—one international. Maru has performed in plays with major and minor theater companies and has sung with prominent artists including Aretha Franklin, Roy Ayers and Shirley Caesar. She is a STEM advocate and BIPOC activist. Through her five alma maters and several personal partnerships she does volunteer work in STEM and entrepreneurship. Next month she will be in New York City for an entrepreneurial summit with Cornell alumni. A professional challenge is being met as she continually adds research and practice elements to her MIT postdoctoral project, combining chemical engineering and urban renewal with environmental justice.
Dr. Stephani Page is a STEM equity and community engagement professional who has over 15 years of biological and biomedical academic research experience. She earned her doctorate in Biochemistry and Biophysics from the School of Medicine at the University of North Carolina at Chapel Hill.

Dr. Page is a proud graduate of North Carolina A&T State University with a Bachelor’s and Master’s in Chemical Engineering and Biology, respectively. In 2014, Dr. Page earned the highest honor awarded to a graduate student in her PhD department, Diane Harris Leadership Award for Exemplary Research, Education, and Public Service. She has been recognized as a researcher by the American Society for Biochemistry and Molecular Biology, the Biophysical Society, and the American Heart Association.

Throughout her career as a scientist, Dr. Page has been committed to diversity, equity, and inclusion in the academy and STEM. She is the creator of the #BLACKandSTEM community which has a social media following of nearly 17,000 individuals and organizations. Over the years, she has contributed to several major efforts to improve the scientific workforce and education through experiences such as serving on the NIH’s working group for the Next Generation Researchers Initiative and contributing a commissioned paper for the National Academies of Sciences, Engineering, and Medicine’s (NASEM) report on Mentoring in STEMM (the additional ‘M’ stands for medicine).

Dr. Page has also been committed to science communication and engagement through several activities such as serving as an Impactor for the Morehead Planetarium and Science Center and speaking at conferences such as Dragon Con and South by Southwest (SXSW). In her current role, she leads communications and community engagement for the ADVANCE Resource and Coordination (ARC) Network, an NSF-ADVANCE funded STEM equity brain trust.
WEPAN Women in Engineering Virtual Program Day: Returning to Our Roots

Speaker Bio

Nicole Gutzke
Outreach Programs Liaison and Women in Engineering Program Coordinator, Cal Poly Pomona

Nicole Gutzke is the Outreach Program Liaison and Women in Science and Engineering (WiSE) Program Coordinator with Cal Poly Pomona. She works closely with the College of Engineering, College of Science, and College of Agriculture. As the Outreach Liaison, she is heavily involved in growing Cal Poly Pomona’s WiSE Program to help to recruit, retain, and graduate hundreds of female STEM majors each year through outreach events. Cal Poly Pomona Women in Science and Engineering Multi-Mode Mentoring Program received the 2021 Inspiring Programs in STEM. Nicole also provides support for the CPP CoE Femineers™, a program that was recognized by the White House in 2015 and received the 2019 INSIGHT into Diversity Inspire Programs in STEM Award.
WEPAN Women in Engineering Virtual Program Day: Returning to Our Roots

Speaker Bio

Magical Sparkes
Software Professional and Associate Teaching Engineer, AnnieCannons

Magical Sparkles is a software professional and associate teaching engineer with the AnnieCannons teaching team.

As an aspiring full stack developer, Magical believes education is a form of liberation and is passionate about curriculum development that nurtures the prosperity of one’s own brilliance. Having an educator background with grades K-12, she is excited to expand her teaching abilities to incorporate coding and computer literacy. She has contributed to student learning in partnership with West Contra Costa and Oakland Unified school districts as well as the Alameda County Office of Education and several San Francisco Bay Area non-profit organizations serving the needs of youth. As a survivor leader, Magical enjoys supporting other survivors achieve their coding ambitions to thrive in the world of tech.