

WOMEN in *STEM Panel*



Start At

9AM ON JULY 25TH

Live Via

Zoom



RAE FERRIOLO

Senior Discipline Manager

Rae Ferriolo is a Senior Discipline Manager in the San Diego Electrical Department at Coffman Engineers, Inc. with over 16 years of experience as an electrical engineer. A San Diego native, she graduated high school from the Academy of Our Lady of Peace and then proceeded to earn her BS in electrical engineering from the Illinois Institute of Technology in Chicago where she specialized in Power Engineering.

Rae started her professional career as an intern at MWH Global in Chicago before transferring back to San Diego to be closer to family. Upon her return to Southern California, she joined Sparling where she spent 8 years as an electrical engineer, passed her EIT, and then her PE exam. She had a brief stint with a small electrical equipment manufacturing firm called Teal Electronics but eventually returned to Sparling/Stantec as a project manager.

In 2017, Rae joined Coffman Engineers to help support and grow their electrical engineering department. With Rae's help, the electrical team in San Diego has grown from 3 to 15 in just 5 years. She currently manages some of Coffman's most complex electrical design projects and multi-discipline projects in the Southern California market. Rae is well-versed in all things electrical and is well-respected throughout the AEC industry for her creative and dynamic solutions to the built environment. When she's not designing a new engineering solution, Rae is supporting Coffman's local business development and proposal efforts, mentoring the younger team members, and remaining active in the industry organizations such as the Women's Construction Coalition (WCC), Society of Women Engineers (SWE), and the Design-Build Institute of America (DBIA).

SOPHIA KRAUSE- LEVY

*Assistant
Professor*



Sophia Krause-Levy is an Assistant Professor in the Computer Science Department at the University of San Diego. Her research is in Computing Education and focuses on finding ways to improve how we teach computer science. She seeks to use her research to increase retention rates and decrease failure rates in computing programs, especially for students from underrepresented groups. She conducts research in multiple areas, including the mismatch between instructors' expectations and students' prerequisite knowledge, the effectiveness of student-tutor interactions, and the impact of students' sense of belonging in computing courses. Sophia is a recipient of the NSF Graduate Fellowship and one of her papers recently won the Computing Education Research Best Paper Award at SIGCSE '22. She has also received the UCSD CSE Department's Awards for Contributions to Diversity and Teaching.



VARYKINA (KINA) THACKRAY

Professor

Dr. Thackray is a Professor in the Department of Obstetrics, Gynecology and Reproductive Sciences at UC San Diego. She is Associate Director of the UC San Diego Center for Obstetrics and Gynecology Research Innovation (CORI) and Co-Director of the San Diego Institutional Research and Academic Career Development Award (IRACDA) post-doctoral fellowship program.

Dr. Thackray is interested in understanding how the gut microbiome influences the pathology of polycystic ovary syndrome (PCOS), a disorder that affects 10% of women worldwide. In addition to infertility and pregnancy complications, many women with PCOS have metabolic dysregulation that results in an increased risk of developing type 2 diabetes and cardiovascular disease. Her ground-breaking research showed that changes in gut microbes and the metabolites they produce are associated with PCOS and elevated androgens, both in women and in PCOS mouse models. Moreover, these studies demonstrated that exposure to a healthy microbiome improved PCOS symptoms in a mouse model, indicating that modulation of the gut microbiome may be a potential therapy for PCOS. Ongoing studies are focused on understanding how elevated androgens influence host/microbe interactions and identifying novel pre- and probiotics to treat PCOS.

Dr Thackray received her B.A. in biology/psychology at Middlebury College in Vermont. She then worked for 5 years as a technician in research labs at Cornell University in Ithaca, New York and Ribozyme Pharmaceuticals in Boulder, Colorado. She obtained her Ph.D. in molecular biology from the University of Colorado Health Sciences Center and completed her post-doctoral training in reproductive endocrinology at UC San Diego. She joined the faculty at UC San Diego in 2008. Her research has been funded by grants from the National Institutes of Health and she has mentored 6 postdoctoral fellows, 17 graduate students, and 27 undergraduate students in her lab. She is also passionate about advocating for equity and inclusion of women in STEM. She has been an active member of the Association for Women in Science San Diego (AWIS-SD) Chapter since 2005. She is currently the Co-Chair of the AWIS-SD Leadership Network and previously served in leadership roles including Co-Chair of the Scholarship Committee (2006-2008), Co-Chair of the Outreach Committee (2017-2019), Board Member (2019), President (2020-2021), and Past-President (2022-2023).

NANCY RONQUILLO

*Naval
Information
Warfare Center-
Pacific Engineer*



Nancy Ronquillo, Ph.D. is an engineer for the Naval Information Warfare Center-Pacific. Her research interests include using theoretical methods of information acquisition and processing as well as applications of machine learning for practical problems in areas such as millimeter wave communications and neural signal processing.

With her collaborators, she is a recipient of the 2021 IEEE Communications Society and Information Theory Society Joint Paper Award. She is a recipient of the Alfred P. Sloan Foundation's Minority Ph.D. program fellowship and the Department of Defense Science, Mathematics, and Research for Transformation (SMART) Scholarship.

She is also a Ronald E. McNair Postbaccalaureate Achievement Program scholar and a National Action Council for Minorities in Engineering scholar. She completed her B.S., M.S., and Ph.D. degrees at the University of California, San Diego. In her free time, Nancy enjoys testing new baking recipes, salsa dancing, and going to Disneyland.



SATARUPA BHADURI, PH.D.

Protein Biochemist

Satarupa was born in Kolkata, India where she completed her bachelors in microbiology and masters in biochemistry. She came to the US to pursue her Ph.D. in Biophysics and Structural Biology from Purdue University Indiana, where she studied the structure and function of complex proteins involved in photosynthesis. In 2019, she came to UC San Diego, as a postdoctoral researcher in the lab of Prof. Sonya E. Neal. Satarupa focused her research on the structure-function of novel enzymes implicated in Alzheimer's and cancer. Satarupa has been a part of various outreach and volunteering activities and has served in leadership roles in organizations like the UCSD Postdoctoral Association and the Association for Women in Sciences (AWIS). For fun, Satarupa is a running enthusiast, loves gardening and reading fiction.