

## Celebrating Diversity, Overcoming Adversity



Association for Women in Science San Diego Chapter



May 15, 2021 7:30am-1:00pm PDT



After 12 years working in Telecommunications, I joined Thermo Fisher as an electrical engineer helping to design life science instruments for researchers as part of the Genetic Sciences R&D team. At first, I was overwhelmed coming to a completely new industry, surrounded by brilliant scientists who seemed to be speaking a new language. Yet, everyone was very welcoming and supportive of teaching me.

I began working on a large effort called Project GT, focusing on upgrades for our PCR (polymerase chain reaction) machine. The enhancements are leveraging smart technology to reduce manual processes and human errors. This will help researchers using the machine to work more efficiently and provide accurate data and diagnostic results impacting patients worldwide. Each day is unique and different, filled with discovery and impactful work. It's what inspires me to come to work!

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#### Welcome to WIST 2021

#### Celebrating Diversity & Overcoming Adversity

The 16th Biennial Women in Science and Technology Conference (WIST) is presented by the Association for Women in Science, San Diego Chapter (AWIS-SD). What once began in 1971 as a small group of women advocating for the careers of women in science has since grown into a global organization with over 100,000 members, sponsors, and allies, advocating for equity in all areas of STEM through research, advocacy, and community. As one of the largest AWIS Chapters, we are proud to consistently provide award winning programming developed, implemented, and sponsored by our own local STEM talent and we are honored to have you join us to shape the ideas and strategies of WIST 2021!

Our goals for the conference are to provide relevant and engaging talks, panels, and interactive discussions on personal & professional development and career advancement strategies highlighting amazing leaders in STEM. We also hope to assemble a diverse and inclusive interdisciplinary community that leverages its collective resources and continues to evolve and rise together. The theme of this year's WIST Conference is "Celebrating Diversity & Overcoming Adversity". We selected this theme to reflect an inclusive and cross collaborative approach to how AWIS San Diego supports the goals and interests of all our members, attendees, and the larger STEM community. It has also been a year of extreme adversity as we have all faced the challenge from COVID-19 on our families, our careers, and our personal mental wellbeing. We also recognize that support systems are crucial to overcoming adversity and we hope to foster a diverse network of supportive allies at WIST 2021 that you can leverage today and throughout your career.

As an organization that champions women in STEM and more broadly advocates for equity in STEM, we encourage you to actively participate in the discussions and networking and create and leverage connections within the broader STEM community to advance your career and take part in elevating the equity landscape.

We offer our sincere gratitude to all the outstanding volunteers, speakers, sponsors, and to our attendees who have made WIST 2021 possible.

We hope you enjoy WIST 2021.

The 2021 WIST Team.

Association for Women in Science, San Diego Chapter Women in Science & Technology Conference wist@awissd.org wist2021.org awissd.org

#### **2021 Conference Committee Members:**

Shirley Ahn, Anamaria Ancheta, Sameera Bilgrami, Dina Dehaini, Svasti Haricharan, Cynthia Kuan, Stacy Kurnikova, Angelia Macia, Rachel McMillan, Michelle Muldong, Kina Thackray, Jenny Waters & Robyn Wygal

### Thank you!

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AWIS Fellow

Lynne Friedmann

Collaborators









Society for Women Engineers, National Society for Black Engineers (NSBE), Women in Bio, Mana San Diego Latina Organization, National Postdoctoral Association (PDA),San Diego Biotechnology Network (SDBN), Healthcare Businesswomen's Association (HBA), Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), WISE Women in Science & Engineering, San Diego STEM Ecosystem

#### 7:30-7:55am PDT

## Lobby: Intro to Gather/Networking Sponsored by Hera Hub

#### 8:00-9:15am PDT

**WELCOME (Torrey Pines Auditorium): Varykina Thackray, PhD,**President of AWIS-SD and Professor, Obstetrics, Gynecology and
Reproductive Sciences, UC San Diego

**KEYNOTE (Torrey Pines Auditorium): JoAnn Trejo, PhD, MBA,**Professor and Vice-Chair of Pharmacology UC San Diego School of
Medicine and Assistant Vice Chancellor for UC San Diego Health
Sciences Faculty Affairs

"Science, Mentorship, and Leadership: Breaking One Barrier at a Time"

#### 9:15-9:30am PDT

#### Torrey Pines Auditorium: AWIS-SD Scholarship Presentations Shirley Ahn, PhD, AWIS SD Scholarship Chair, Postdoctoral Scholar, UC San Diego Monica Gonzalez, PhD, AWIS SD Scholarship Chair, Postdoctoral Scholar, UC San Diego Linda Hammond, Thermo Fisher Scholarship Presenter, Technical Writer, Thermo Fisher Felicia Murray, UCSD Extension Scholarship Presenter, Program Manager, UCSD Extension

#### 9:30-9:55am PDT

#### Lobby: Networking Break with Sponsors, Partners and Allies

Sponsored by Beckman Coulter Foundation

#### 10:00-10:55am PDT

Session I

A & B Panels

#### Panel A: Moonlight Conference Room

Sponsored by Bristol Myers Squibb Increasing Diversity in Physics, Engineering and Computer Science

Moderator: Rachel McMillan, B.S., PhD Student, Biomedical Sciences, UC San Diego

#### Dr. Olivia Graeve, PhD,

Professor, Department of Mechanical and Aerospace Engineering, UC San Diego

#### Dr. Nicki Washington, PhD,

Professor of the Practice, Department of Computer Science, Duke University

#### Dr. Elizabeth Orwin, PhD,

Chair and Professor, Department of Engineering, Harvey Mudd College

#### Panel B: Tourmaline Conference Room

Sponsored by UC San Diego Extension
Challenges in Academic and
Industry Career Transitions

Moderator: Sameera Bilgrami, PhD, Senior Scientist, Aethlon Medical Inc, San Diego

#### Dr. Malika Grayson, PhD,

Application Portfolio Manager, Northrup Grumman

#### Dr. Lisette Acevedo, PhD, MBA,

Senior Director, Clinical Development, Equillium Inc.

#### Dr. Emily Troemel, PhD,

Professor, Biological Sciences, UC San Diego 11:00-11:40pm PDT

Session II Career Roundtables

Sponsored by Vertex Moonlight Conference Room: Biopharmaceuticals/Drug Discovery Tourmaline Conference Room:
Bioinformatics
and Data Science

Windansea Conference Room: Energy/Environmental Science

Moderator: Jenny Waters, BS, Biology Graduate Student, SDSU Moderator: Stacy Kurnikova, PhD, Al Engineer, Thermo Fisher Moderator: Dina Dehaini, Undergraduate Student, Cogs Machine Learning, UC San Diego

Chadia Robertson, PhD, Scientist and Program Lead Gl Discovery, Takeda Pam Bhattacharya PhD, Lead Data Scientist, Mitre Star Jahansouz PhD,
Principal Mechanical Engineer,
Cubic Mission & Performance
Solutions

Minh-Ha Do, PhD,
Director, Pre-Clinical Innovation,
Lumos Pharma

**Heather Estrella, MS,** Principal Scientist, Takeda Shih-Chi Hsu, PhD, Scientist II, Synthethic Genomics

11:45-11:55PM PDT

#### **Lobby: Networking Break**

12:00-12:40pm PDT

Session III
Career
Roundtables

Sponsored by Thermo Fisher Moonlight Conference Room: Cell and Molecular Biology

Tourmaline Conference Room: Scientific Writing and Policy

Moderator: Dina Dehaini.

Windansea Conference Room: Chemistry

Moderator: Shirley Ahn, PhD

Moderator: Jenny Waters, BS Biology Graduate Student, SDSU

Undergraduate Student, Cogs Machine Learning, UC San Diego

tudent, Postdoctoral Scholar, Chemistry and arning, Biochemistry, UC San Diego

**Sara Mills, BS,** Senior Consultant, Dark Horse Consulting Michelle Nolasco PhD, Technical Writer, Agena Bioscience Sharon Gao, PhD, Senior Director, CMC Analytical & Formulation Development, Synthorx

Vickie Sheckler, Lead Research Strategic

Lead Research Strategic Advisor, UC San Diego CIRM Alpha Stem Cell Clinic **Adriana Bankston, PhD,** Principal Legislative Analyst,

Principal Legislative Analyst UC Office of the President Laura Sanchez, PhD,

Associate Professor, Chemistry and Biochemistry, UC Santa Cruz

12:45-1:00PM PDT

Torrey Pines Auditorium: Robyn Wygal, AWIS-SD Board Member and WIST 2021 Organizer

## Virtual Conference Platform Gather Map



## Torrey Pines Auditorium KEYNOTE SPEAKER

## JoAnn Trejo, PhD, MBA



Science, Mentorship, and Leadership: Breaking One Barrier at a Time

JoAnn Trejo, PhD, MBA Assistant Vice Chancellor for UC San Diego Health Sciences Faculty Affairs and Professor of Pharmacology, UC San Diego School of Medicine

Dr. Trejo's scientific research revealed how cellular responses are regulated by G protein-coupled receptors in the context of vascular inflammation and cancer. Her research has been continuously funded by the NIH, including a R35 Outstanding Investigator Award. She was the recipient of the American Heart Association Established Investigator Award and the American Society for Cell Biology E. E. Just Award for outstanding scientific achievement. In 2020, she was elected as an American Society for Cell Biology Fellow and to the 100 Inspiring Hispanic/Latinx Scientists in America.

Dr. Trejo is also an outstanding educator, mentor and leader, actively engaged in numerous initiatives aimed at enhancing the inclusive excellence of UC San Diego. In addition to mentoring trainees in her lab, she is the director of several NIH-sponsored programs that promote the career development and success of women and underrepresented early career scientists. In 2014, Dr. Trejo received the UC San Diego Chancellor's Award for Excellence in Postdoctoral Scholar Mentoring and the American Society for Cell Biology Prize for Excellence in Inclusivity in 2020. She was elected to serve on the leadership council of the American Society for Cell Biology and the American Society for Biochemistry and Molecular Biology.

## **SPEAKERS**

#### Session I

#### Panel A: Moonlight Conference Room 10:00am-10:55am PDT

## Increasing Diversity in Physics, Engineering and Computer Science

According to the National Science Foundation's 2019 women, minorities and persons with disabilties in science and engineering report, computer science has one of the lowest shares of women degree recipients among the broader fields of science and engineering. In addition, while some STEM majors have a one-to-one male-to-female ratio, physics, engineering and computer science (PECS) majors consistently have some of the largest gender imbalances among U.S. college majors -- with about four men to every woman in the major. In a new study published in 2020 in the peer-reviewed research journal, Science, NYU researchers find that this disparity is not caused by higher math or science achievement among men. On the contrary, the scholars found that men with very low high-school GPAs in math and science and very low SAT math scores were choosing these math-intensive majors just as often as women with much higher math and science achievement. How can we encourage more women to pursue a degree in physics, engineering, and computer science? How can we overcome the institutional barriers that women face while pursuing thse degrees?

#### Olivia Graeve, PhD

Professor, Department of Mechanical and Aerospace Engineering, UC San Diego

Dr. Graeve's research focuses on the design and processing of new materials for extreme environments, including



temperature, pressure, and radiation. She is Director of the CaliBaja Center for Resilient Materials and Systems, and Faculty Director of the IDEA Engineering Student Center. Dr. Graeve earned a Ph.D. in Materials Science and Engineering from UC Davis, and a BS in Structural Engineering from UC San Diego. Dr. Graeve has been involved in many activities related to the

recruitment and retention of women and Hispanic students in science and engineering and has received several awards including the Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring in 2020. She was inducted into the Mexican Academy of Engineering (2016), the Mexican Academy of Sciences (2019), and was named Fellow of the American Ceramic Society (2017). In addition, Forbes Magazine named her one of the 100 Most Powerful Women of Mexico (2017).

#### Nicki Washington, PhD

Professor of the Practice of Computer Science, Duke University



Dr. Washington is addressing diversity, equity, and inclusion issues in tech by measuring and improving cultural competence of students in undergraduate Computer Science departments. Dr. Washington graduated from NC State University as the first Black woman to earn a PhD in CS. Her professional

experience includes Howard University (as the first Black female faculty in CS), Winthrop University, The Aerospace Corporation, and IBM. Dr. Washington is author of Unapologetically Dope: Lessons for Black Women and Girls on Surviving and Thriving in the Tech Field and 2019 Computer Science Hall of Fame Inductee. Recognized as one of Essence Magazine's Tech Stars, Dr. Washington led partnerships with Howard, Google and Exploring Computer Science to improve CS instruction in Washington, DC high schools. She was lead writer for the K-12 CS Framework and implemented the first Googler-in-Residence program at Howard University in 2013 to help recruit and retain students of color in CS.

#### **Elizabeth Orwin, PhD**

Chair and Professor, Department of Engineering, Harvey Mudd College

Dr. Orwin is director of the Engman Fellowship Program in Bioengineering, which trains students in tissue engineering research and biomedical device design. Her research is in the area of tissue engineering and wound healing in skin and neural



models, and she has consulted for various companies including Optics Medical. Dr. Orwin has served on the Faculty Executive Committee and as Associate Dean for Research and Experiential Learning. She served as an American Council for Education Fellow (2019), an academic leadership development experience in which Fellows observe and work with the president and other senior officers at their host institution, and participate in leadership development activities. Dr. Orwin is active in the Society of Women Engineers, serving most recently as lead for their Leadership Competency Model. Dr. Orwin is active in implementing best practices for recruiting and retaining a diverse student body, and in developing an inclusive culture in engineering groups.

## Challenges in Academic and Industry Career Transitions

Biotechnology and pharmaceutical industry positions are attractive to many recent PhD graduates — and are thus highly competitive. More than half of the respondents to Nature's 2017 Graduate Student Survey said that they would like to work in industry, and nearly one-quarter said an industrial position was what they most wanted. On the other hand, in recent years, academic institutions have become more open to industry professionals making the return journey to education, and PhDs with years of real-world experience can bring practical innovation into university labs and courses. Both paths do not come without their own unique set of challenges which will be discussed in this panel.

## Malika Grayson, PhD Application Portfolio Manager, Northrup Grumman

Dr. Grayson graduated with a BS in Physics from Adelphi University and a MS/PhD in Mechanical Engineering from Cornell University. She then joined Northrop Grumman and served in several roles including Principal System Engineer and Application Portfolio Manager. Dr. Grayson is the founder of



STEMinist Empowered LLC, focused on the empowerment of Women of Color who pursue graduate degrees. She is also the author of the best-selling book "Hooded: A Black Girl's Guide to the PhD" and has been featured in magazines such as US Black Engineer and Information Technology. A Fortune 100 global speaker, she has given workshops and keynotes and is the recipient of honors including the Zellman Warhaft Commitment to Diversity Award, National Society of Black Engineers – Mike Shin Award for Distinguished Member of the Year, Adelphi University's Top 10 Alumni Under 10 and BEYA STEM's Modern Day Technology Leader.

#### Lisette Acevedo, PhD, MBA

Senior Director of Clinical Development, Equillium, Inc.

Dr. Acevedo completed her BS at UC San Diego in Biochemistry and Cell Biology, received her PhD in Pharmacology from Yale, and completed her post-doctoral training at the UC San Diego Moores Cancer Center. She also obtained an MBA from the Rady School of Management at UC San Diego. She has extensive experience in



the biotech industry, and clinical development. After her post-doctoral training, she transitioned to clinical scientist positions at Lumena Pharmaceuticals and Patara Pharma. She then served as Director of Clinical Science at Orexigen Therapeutics and Arena Pharmaceuticals. Most recently, Lisette is the Senior Director of Clinical Development at Equillium, Inc. and oversees the acute Graft versus Host Disease program.

## Emily Troemel, PhD Professor, Biological Sciences, UC San Diego

Dr. Troemel received her BS in Biochemistry from the University of Wisconsin, Madison in 1992, and her PhD in Cell Biology from UC San Francisco in 1999. For her PhD thesis, she identified and characterized the first chemosensory receptors in the nematode, C. elegans. After a brief postdoc studying visual motion detection in Drosophila, she helped launch a start-up



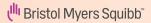
biotech company in San Francisco where she studied neuronal identity, neuroinflammation and performed drug screening in mammalian systems. After the company went public, she returned to academia for a postdoctoral fellowship at Mass General/Harvard Medical School, where she identified the first natural pathogen of C. elegans, Nematocida parisii. As faculty at UC San Diego, she uses this natural host/pathogen system to investigate the host response to intracellular infection. Recent findings include describing how a common transcriptional response to N. parisii and a natural RNA virus constitute a new immune/stress response.



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#### AWIS-SD Scholarship Awardees 2021



Kelly Flanders spent her early childhood in Utah, where the only way to satiate her natural aquatic curiosities was observing tadpoles in a neighborhood drainage ditch. In her later years as an undergraduate student, she was able to truly study ocean organisms and environments by pursuing a BS in Biology from Pacific

Lutheran University (Tacoma, Washington). She then went on to specialize in marine predator ecology via her master's degree at the University of New England (Biddeford, Maine). Her research focused on the feeding ecology of grey seals off Cape Cod, with consideration of the societal conflict between seals and the fishing industry. Currently, Kelly is excited to be working on her Ph.D. at the University of California, San Diego with her advisor Dr. Carolyn Kurle. She is studying the past and present ecological role of killer whales in the North Pacific through biogeochemical analyses of teeth and bones. Throughout her educational career, Kelly has also enjoyed teaching and mentoring students of all backgrounds to empower them through research and academic opportunities.



Analine Aguayo earned her B.S. in Cell and Molecular Biology at the California State University, Northridge (CSUN) and is currently a second-year Ph.D. student within the Division of Biological Sciences at the University of California, San Diego (UCSD). Her thesis work in Dr. Sonya Neal's lab focuses

on further understanding the role of endoplasmic reticulum (ER) membrane proteins in sphingolipid biosynthesis. As a first-generation Mexican-American student, Analine strives to use her experiences in academia and the sciences to mentor underrepresented minority (URM) students through participation in organizations like the Society for Advancement of Chicanos/Native Americans in Science (SACNAS) and the Biology Undergraduate and Master's Mentoring Program (BUMMP) at UCSD. She aspires to continue these efforts once she graduates by becoming a community college professor. When Analine is not busy with school or work, she loves being outdoors soaking

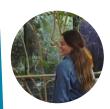
up the sun with her one year-old puppy Laika.



Lauren Cilingiri Molin is a senior at the University Of San Diego (USD) studying Mathematics. She is balancing her studies while working full-time in the Undergraduate Admissions Office at USD, part-time in restaurant, being a mother to a two and

a half year old girl, a wife, a daughter, a sister and a valuable member of the community. Laura is passionate about exploring the connection of Mathematics and social justice causes. Her Albanian roots have a strong tie to her personality, the way that she fights for injustice, and of course, her love for Mathematics.

Gabrielle Martinez is a junior at CSUSM studying



Biochemistry and is currently an undergraduate student researcher in Dr. Kristan's physiological ecology lab. After her undergraduate studies, she plans to complete a MD/PhD with aims of becoming a physician scientist researching neurodegenerative diseases. Her research will be focused on Alzheimer's and dementia seeking to research the complex pathophysiology behind

this disease and find treatments that address the underlying physiology rather than targeting symptoms. Outside of academics. Gabrielle volunteers at REINS, a therapeutic riding program for disabled children, works as a caregiver for those with Alzheimer's and dementia at Brookdale, and enjoys spending her free time riding horses and reading.

#### Miriam Garcia



San Diego State University

Rosey Gutierrez Meza is a first-generation formerly undocumented undergraduate student at MiraCosta College pursuing a degree in Computer & Data Science. She is the lead Teaching Assistant for the Giving Ownership of Active Learning



to Students in Computer Science (GOALS in CS) grant project within the CS Department which aims to bring topics of cultural relevance to the CS curriculum in order to bring a focus towards diversity, inclusivity and sustainability. Rosey is also the Outreach Chair for the Empowering Chicanx and Latinx to Explore (EChALE) STEM club and an active member of Women in Computer

Science club, MiraCosta Honors Scholar Program & Phi Theta Kappa Honors Society. As a member of these programs & organizations, she is committed to increasing women and BIPOC representation in tech, and has presented research on algorithmic bias to organizations like Umoja in order to showcase the importance of diversity in the CS field. Rosey has recently accepted a summer internship as a Lamat research fellow at UC Santa Cruz and is thrilled to be able to develop her skills in Data Science, and hopes to use that knowledge in the future to inspire more women of color to get involved in tech.

Anisa Ibnat is an aspiring Computer Science student at MiraCosta College with extensive experience in mentoring



students as a Supplemental Instruction leader, teaching assistant and president of Women in CS (WiCS) club. She is passionate about creating a community of support and excellence for women and other underrepresented communities entering science.

#### AWIS-SD Scholarship Honorable Mention 2021



Alyssa Choi is a second year doctoral student in the San Diego State University/ University of California, San Diego Joint Doctoral Program in Clinical Psychology. She is specializing her studies in behavioral medicine and focuses on researching psychosocial issues faced by patients living with chronic illnesses. She is particularly interested in studying how

coping and cultural factors are related to biopsychosocial outcomes (e.g., quality of life) in underserved populations (e.g., marginalized groups, rare diseases

Michaela Lynott is a second-year Ph.D. student at Sanford Burnham Prebys Medical Discovery Institute advised by Dr. Alexandre Colas. She is working to understand the genetic



barriers of cardiac regeneration utilizing high-throughput screening technology. She is very passionate about her research and excited to discover novel regulatory pathways that can one day help to improve heart function post-injury. At the start of her career, she was honored with the Award for Excellence in Biochemistry by the American Institutes for Chemistry at

Simmons University, a women-focused undergraduate university. Michaela was trained by Dr. John Glass at the J. Craig Venter Institute using synthetic biology techniques and contributed to her first published research article on the essential metabolism for a minimal cell. To gain industry experience, she joined the CB Therapeutics team to help grow the research and company. Outside of research, she enjoys volunteering with the BE WiSE program at the Fleet Science Center to mentor and inspire the next generation of female scientists. In her spare time, you can find her at the golf course working on her swing or at home trying a new plant-based recipe. She is pleased to accept Honorable Mention for the 2021 AWIS-SD Scholarship.



Diane Castellanos was born and raised in Southern California. She is a graduating senior at the University of San Diego studying Mechanical Engineering. After graduating, she plans to obtain her PhD to research hemodynamics and eventually work in academia. In her free time, she enjoys painting,

traveling, meditating and embarking on her self-improvement journey.

Amy Parampil is a third-year undergraduate studying



molecular and cell biology at UC San Diego. A proud daughter of two immigrant parents, her love for oncology began when she became a lab assistant at Pfizer oncology her freshman year. In addition to contributing to small-molecule drug-discovery projects at Pfizer, she is also an intern at Palomar Medical Center, where she cares for cancer

patients alongside doctors and nurses. Upon graduation, Amy hopes to pursue an MD-PhD degree and work towards becoming a clinician-researcheris in the field of oncology. In her free time, Amy likes to sing, draw, rock climb, or go on road trips.

Bindhu Hosuru is a 4th year Molecular and Cell Biology



Major at UCSD. She is an undergraduate researcher in Dr. Daugherty's Virology lab. She is currently working on writing a literature review about viral proteases and their host protein targets. Bindhu also uses bioinformatics and coding in python to look for human polymorphisms in viral cleavage

sites. Bindhu is planning to pursue a molecular biology master's degree in Dr. Daugherty's lab starting in the Fall of 2021. In her free time, Bindhu enjoys singing, cooking, and playing with her cousins.

**Anamaria Ancheta** is a senior Biochemistry and Cell Biology undergraduate at the University of California, San Diego. She is passionate about conducting and leading projects on health disparities as the Director of Intersectional Health Project,



participating in community health outreach efforts as a member of Chicanx/Latinx for Community Medicine, and hosting conferences focused on careers in health for underserved high school students throughout California. Anamaria believes in providing for her South San Diego community by conducting science

outreach for K - 12 students with the Association of Women for Science in San Diego and serving as a mentor on the Tia's Committee for MANA de San Diego. She is currently preparing for the MCAT and completing her food insecurity research project as a Triton Research Experimental Learning Scholar, titled "Analyzing the Impact of CalFresh acceptance at Farmers Markets in San Diego"

#### Katy Wilweber

**Grossmont College** 

#### UCSD Extension Scholarship Awardee 2021

**Quynh Nguyen Wong** is currently a first-year master's student in Biochemistry at California State University-San Marcos. Her master research focuses on developing methods using Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS) to analyze female bear urine. The study gives



biologists insightful information which ultimately will support black bear conservation. Her research interest includes but not limited to analytical chemistry, environmental chemistry, and food chemistry. Quynh graduated from CSUSM in 2020 with a bachelor's degree in Biochemistry. In her free time, Quynh enjoys baking with her children.



## **Roundtable Speakers**

#### **Roundtable Moderators**

Stacy Kurnikova, PhD
Al Engineer, Thermo Fisher
Jenny Waters
Graduate Student, Biology, SDSU
Shirley Ahn, PhD
Postdoctoral Scholar, Chemistry and Biochemistry, UC San Diego

Dina Dehaini

Undergraduate Student, Cogs Machine Learning, UC San Diego

## Moonlight Conference Room: Biopharmaceuticals/Drug Discovery

#### Chadia Robertson, PhD Scientist and Program Lead GI Discovery, Takeda

Dr. Chadia Robertson is an experienced drug discovery thought leader with a passion for improving lives through scientific discovery.



She is a scientist and Program Lead, GI drug discovery at Takeda with expertise in gastrointestinal and neurological disorders and more than 12 years of experience leading clinical and preclinical discovery programs. Chadia is a seasoned program director with a proven track record of leading cross functional teams and driving successful delivery of R&D objectives and IND milestones.

#### **Moonlight Conference Room: Biopharmaceuticals/Drug Discovery**

Minh-Ha Do, PhD Director, Pre-Clinical Innovation, Lumos Pharma

Minh-Ha Do has been working on nonand translational aspects therapeutics development for rare diseases for the past 12 years. In her roles she has been responsible for driving projects through



critical inflection points, including from discovery into early clinical phase. Her roles included oversight of pharmacology, pharmacokinetics, and toxicology. She has represented these functions in interactions with the FDA, collaborators, business partners, and members of the board.

Currently, Dr. Do is Director of Pre-Clinical Innovation at Lumos Pharma, where she oversees non-clinical and translational drug development and evaluates assets for potential in-licensing. She previously was Program Scientific Lead and Associate Director of Physiology at aTyr Pharma, a biotechnology company. There, she led non-clinical development and oversaw crossfunctional groups to advance projects. Dr. Do completed her Ph.D. in Biomedical Sciences at the University of California, San Diego and graduated Magna Cum Laude from the University of California, Los Angeles.

#### **Tourmaline Conference Room:** Bioinformatics and Data Science

Pam Bhattacharya, PhD Lead Data Scientist, Mitre

Pam Bhattacharva is a Lead Data Scientist at MITRE, where she leverages expertise in data analytics, machine learning, and other modeling



approaches, for a variety of projects spanning areas such as computer vision, data architecture, systems engineering, causal 25 analysis, quantum computing, and neuromorphic computing. Prior to MITRE, Pam was a postdoctoral scholar at UC San Diego, where she was an active member of the Postdoctoral Association. She earned her B.S. in Electrical Engineering from Stanford University, and M.S. and Ph.D. in Bioengineering from UC San Diego.

## **Tourmaline Conference Room: Bioinformatics and Data Science**

#### Heather Estrella, MS Principal Scientist, Takeda

Heather has over 20 years of experience in the pharmaceutical industry in both large pharma and small biotech spanning multiple modalities, including small molecules, oligonucleotides and antibodies. Her background is in computational biology



from Johns Hopkins University and her career has focused on supporting pharmacology and toxicology. She has developed expression signatures for target pharmacodynamics, as well as approaches for target and indication identification, off-target assessment and toxicity risks. She has helped develop several applications for target assessment merging internal and external, omics and biological data sources. She is currently a Discovery Toxicologist at Takeda Pharmaceuticals where she is using bioinformatics to assess target and modality risks.

#### Windansea Conference Room: Energy/Environmental Science

Star Jahansouz, PhD

Principal Mechanical Engineer at Cubic Mission & Performance Solutions

As a young woman in Iran, the aerospace industry was off limits to her since it was open only to men. To pursue her passion, Jahansouz immigrated to the United States, completing both her MS and PhD with honors at the University of California, Riverside. Jahansouz has pursued a career in the



industry while completing her degrees, raising a family, and helping many young women get started in the engineering field. Jahansouz is an active member of the Air Force Reserve in the fields of avionics and systems. Jahansouz has led a number of initiatives to support the progress of women in engineering. A SWE member since 2013, Jahansouz helps professional and academic development organizations support women in achieving their full potential in careers as engineers and leaders. She is Vice President (executive team member) for SWE San Diego County. Star Jahansouz has led an exemplary life as engineer, researcher, and community organizer as well as wife and mother. She is a role model for many girls in the STEM fields and an important advocate for inclusion and innovation in engineering.

#### Windansea Conference Room: Energy/Environmental Science

Shih-Chi Hsu, PhD Scientist II, Synthetic Genomics

Shih-Chi received her bachelor's degree in Zoology from National Taiwan University in Taipei, Taiwan. She came to the States for graduate research and became interested in plant biology, especially chloroplast biology. After receiving her Ph.D. in Biochemistry



and Molecular Biology from UC Davis, Shih-Chi moved to the east coast and started her postdoctoral research on microalgae genetic engineering for biofuel production at the Boyce Thompson Institute, an affiliate of Cornell University. She came back to California in 2017 and joined a San Diego start up company, MicroSynbiotiX, to develop fish and shrimp vaccines from engineered algae. In 2019, she joined Synthetic Genomics to continue her pursuit of algal biofuel advancement using genetic engineering techniques.

## **Moonlight Conference Room:** Cell and **Molecular Biology**

#### Sara Mills, BS Senior Consultant, Dark Horse Consulting

Sara has spent over 10 years working with biotech companies and academic labs focusing on applications of human primary



cell cultures and autologous and allogeneic cell therapy products for therapeutic applications. She entered industry by way of UCSF where she was a CIRM funded, Junior Specialist in the Costello Lab of the Helen Diller Cancer Center studying Glioblastoma and epigenetics. She joined Dark Horse Consulting in 2016 bringing her expertise in aseptic and cGMP manufacturing process development, risk analysis, CMC and regulatory filings, facility design and project management to advise growing cell and gene therapy companies. During her time at DHC she has been fortunate enough to work with over 40 clients on over 45 different products and originate from at least 8 different countries.

## Moonlight Conference Room: Cell and Molecular Biology

#### **Vickie Sheckler**

Lead Research Strategic Advisor, UC San Diego CIRM Alpha Stem Cell Clinic

Vickie received a Bachelor's degree in Microbiology from San Diego State University in 1980, completed a 1-year clinical laboratory internship and was licensed as a Medical Technologist/ Clinical Laboratory Scientist. She moved to industry, working in small and large companies, developing medical devices,



biologics and cellular therapies regulated by the FDA, including medical devices for apheresis and hematopoietic stem cell enrichment for treating leukemia/cancer; encapsulated pancreatic islets and stem cell-derived treatments for diabetes; and a porcine liver perfusion device for treating acute liver failure. These positions provided diverse experiences in product/process development, preclinical/clinical studies, quality assurance, regulatory affairs, and project management. In 2010, Vickie joined UCSD for project management of a California Institute for Regenerative Medicine (CIRM) funded project developing stem cell-derived neural cells for treating ALS; and now advises faculty investigators on therapeutic product development, regulatory strategies and grant applications.

## **Tourmaline Conference Room: Scientific Writing and Policy**

#### Michelle Nolasco, PhD Technical Writer, Agena Bioscience

Michelle Nolasco's curiosity focuses on communicating scientific and technical information to professional audiences,



primarily scientists who work in molecular biology and genetics. Her current position is as a Technical Writer at Agena Bioscience where she works on a variety of projects related to applied genetic testing systems. Michelle's projects span from writing mass spectrometer engineering documents to creating product packaging graphics. Prior to Agena, Michelle held technical writing positions at Alere, Illumina, and Dassault Systèmes. She started her career in molecular biology R&D and product development at a variety of San Diego biotechnology companies. Michelle's educational background includes a BS in Biochemistry from UC, Riverside, an MS in Biology from the University of Oregon's Molecular Biology Institute, and a PhD in Science Education from the joint program at San Diego State University and UC, San Diego. Michelle is an avid volunteer and was a panelist on Comic-Con's first all-scientist panel.

## **Tourmaline Conference Room: Scientific Writing and Policy**

## Adriana Bankston, PhD Principal Legislative Analyst, UC Office of the President

Adriana Bankston is a Principal Legislative Analyst in the University of California (UC) Office of Federal Governmental Relations, where she



serves as an advocate for UC with Congress, the Administration, and federal agencies. Prior to this position, Adriana was a Policy & Advocacy Fellow at The Society for Neuroscience (SfN), where she provided staff support for special and ongoing projects, including SfN's annual lobby event and the society's annual meeting. In addition to working at UC, Adriana serves as Co-Director of the Policy Taskforce at Future of Research (FoR). a non-profit organization that empowers early career scientists. She is the Chief Executive Officer and Managing Publisher at the Journal of Science Policy and Governance (JSPG), a nonprofit and interdisciplinary peer review publication serving as a vehicle for early career researchers to publish on science policy topics. Adriana is also a Biomedical Workforce & Policy Research Investigator at the STEM Advocacy Institute (SAi), a think-tank building tools to expand pathways of access between science and society. Adriana obtained her PhD in Biochemistry, Cell and Developmental Biology from Emory University and a Bachelor's in Biological Sciences from Clemson University.

## Windansea Conference Room: Chemistry

#### Sharon Gao, PhD

Senior Director, CMC Analytical & Formulation Development, Synthorx

Dr. Gao is a senior director of CMC Analytical and formulation development at Sanofi, San Diego. She has over 20 years of pharmaceutical industry experience,



which spans from research and development to quality control and regulatory submissions. She held leadership roles as a senior director at La Jolla Pharmaceutical, the head of Analytical Chemistry at Alere San Diego and principal scientist at Biogen. Dr Gao specializes in biopharmaceutical and small molecule analytical, formulation development and drug product manufacturing. She earned a PhD in Chemistry from the University of California, San Diego and completed post-doctoral training at Washington University in St Louis.

## Windansea Conference Room: Chemistry

#### Laura Sanchez, PhD

Associate Professor, Chemistry and Biochemistry, UC Santa Cruz

Dr. Sanchez started her independent lab in the Fall of 2015 at the University of Illinois at Chicago in the Department of Pharmaceutical sciences. In the Winter of



2021, the Sanchez Lab relocated to the University of California, Santa Cruz Department of Chemistry and Biochemistry. Her team specializes in using and adapting imaging mass spectrometry and tandem mass spectrometry for small molecule analyses in complex systems. She was a K12 BIRCWH Scholar (2016-2017) which supported the translation of the techniques to women's health. She was the Rising Star in the Life Sciences in 2019 at UIC.





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#### 2021 WIST Conference

## Committee Members

#### Shirley Ahn, PhD

Postdoc in the Departmnet of Chemistry and Biochemistry at UCSD

Surl-Hee (Shirley) Ahn is a postdoctoral scholar advised under Prof. J. Andrew McCammon and Prof. Rommie Amaro in the Department of Chemistry and Biochemistry at UCSD. She is a computational/theoretical chemist and focuses on developing methods



for computer simulations and using them to study proteins and biomolecules. Prior to moving to UCSD, she was at Stanford working on her Ph.D. in Chemistry (Chemical Physics). In addition to research, she was a teaching assistant for eleven different classes at Stanford, ranging from undergraduate/graduate-level chemistry to parallel computing. She loves chemistry that enables her to study matter at the atomic level and math that enables her to know the language that describes phenomena. Outside of work, she enjoys training for marathons, visiting national parks, drawing, and trying out new restaurants in San Diego.

#### **Anamaria Ancheta**

#### Undergraduate at UCSD

Anamaria Ancheta is a senior Biochemistry and Cell Biology undergraduate at the University of California San Diego.

She is passionate about conducting and leading projects on health disparities as the Director of Intersectional Health Project, participating in community health outreach



efforts as a member of Chicanx/Latinx for Community Medicine, and hosting conferences focused on careers in health for underserved high school students throughout California.

She believes in providing for her South San Diego community by conducting science outreach for K-12 students with the Association of Women for Science in San Diego and serving as a mentor on the Tia's Committee for MANA de San Diego.

As she enters her last quarter, she is focused on preparing for the MCAT and completing her food insecurity research project as a Triton Research Experimental Learning Scholar, titled "Analyzing the Impact of CalFresh acceptance at Farmers Markets in San Diego".

#### Sameera Bilgrami, PhD

#### Scientist at Aethlon Medical

Sameera Bilgrami, PhD. is a scientist at Aethlon Medical, a medical device company that specializes in extracorporeal devices that filter out viruses and cancer promoting exosomes. Her career as a cell biologist started in India at the National Centre for Biological Sciences. TIFR



Bangalore, where she studied protein-lipid interactions in live cell membranes. She was a postdoctoral fellow in Late Dr. Gary Bokoch's lab at The Scripps Research Institute before moving to UCSD. Her research focused on organelle movement, angiogenesis, and cancer cell movement. Sameera has a strong background in cell biology and expertise in imaging techniques, image analysis and programming. She likes to cook, spend time with kids and volunteer at AWIS-SD.

#### **Dina Dehaini**

#### Undergraduate at UCSD

Dina Dehaini is an undergraduate student at UCSD studying Cognitive Science with a Specialization in Machine Learning and Neural Computation. Professional interests lie in the Artificial Intelligence/Machine Learning fields. Currently researching biological neural networks with reservoir computing at The Center for Engineered



Natural Intelligence and hopes to attend grad school in CSE with a focus on Al.

#### Svasti Haricharan, PhD

#### Assistant Professor at Sanford Burnham Prebys

Dr. Haricharan got her BSc in Zoology from India, her MSc in Genetics from the University of Leicester, UK, and her PhD in Molecular Biology from Baylor College of Medicine, Houston, TX, USA. She has >10 years of research experience in breast cancer development and treatment



response. She started her independent research program as an Assistant Professor at Sanford Burnham Prebys in 2018. Her research focus is on the non-repair related activities of DNA repair proteins in tumor initiation, progression and treatment response. Her work is funded by the NCI, Department of Defense and the Susan Komen Foundation. Her work has been published in well-respected journals in the field including Cancer Cell, Cancer Discovery, eLife and PNAS. She is currently an early career brand ambassador for Susan Komen.

#### Cynthia Kuan

## Program Director at the ARM Foundation for Cell & Gene Medicine

Cynthia Kuan, who is the new secretary to the AWIS-SD board, is Program Director at the ARM Foundation for Cell & Gene Medicine. She is passionate about the development of regenerative medicine therapies and advancing patient access solutions in a coherent and credible



manner. She has over 13 years of experience in building/managing innovative programs and is seasoned in alliance management, strategic planning, program development, and financial oversight. From 2014 - 2021, she was the founding business operations manager of the Sanford Stem Cell Clinical Center at UC San Diego and helped secure over \$70 million funding for stem cell research. Prior to her work at UCSD,

she helped build a Chinese immersion charter school in Washington DC and a social service program in Los Angeles. Outside of work, she enjoys her role as the "crazy cat lady." (She has three adorable feline troublemakers!) She also volunteers through ElderHelp San Diego, providing seniors with access to fresh produce and groceries to mitigate the impact of social confinement caused by the COVID-19 pandemic.

#### Anastasia Kurnikova, PhD

#### Al Engineer

Anastasia is an Al engineer based in San Diego. She works on building machine learning models for technology development. She is particularly passionate about development for scientific instrumentation and medical devices. From 2019-2021 she was a data scientist at Accenture. Anastasia received her PhD in Neuroscience from the University of California, San Diego, and



Angela Macia, PhD Postdoc at University of California, San Diego

BS in Physics from Carnegie Mellon University.

Angela Macia is a Postdoctoral Researcher working at UC San Diego. She earned her Ph.D. in Biomedical Sciences from the University of Granada, Spain in 2015. Angela has a strong background both in transposable elements and stem cells. Her research focuses on modeling neurological



diseases, such as Autism Spectrum Disorders, investigating how transposons contribute to the disease by using patientderived neurons and 3D organoids. She is passionate about how AWIS-SD creates opportunities for women and girls in STEM and she has been part of the Corporate Sponsorship committee since 2017. Besides volunteering for AWIS-SD, Angela enjoys traveling, reading and cooking.

#### Rachel McMillan

#### Biomedical Sciences PhD Student at UCSD

Rachel McMillan is a first year Biomedical Sciences PhD student at the University of California San Diego. She is currently rotating in labs that study viral pathogenesis and host innate immune response, with a particular interest in flaviviruses and viral latency and



reactivation. Rachel completed her Bachelor of Science degree in Microbiology, Immunology and Molecular Genetics from the University of California Los Angeles in 2019, where she developed a passion for community service, advocacy, and outreach. She is a member of the AWIS-SD Outreach Committee and is also participating in the planning of this year's AWIS-SD Women in Science and Technology Conference. In her spare time, Rachel enjoys hiking, camping, yoga, cooking, and going to the beach.

#### Michelle Muldong

#### Research Associate at UCSD Moores Cancer Center

Michelle Muldong is a Research Associate at the University of California San Diego's Moores Cancer Center. She works in Dr. Christina Jamieson's lab studying bonemetastatic prostate cancer performing in vivo and in vitro experiments utilizing patient



derived samples. She obtained her B.S. from the University of California San Diego with a degree in General Biology. She has been involved in AWIS since September 2019 and is passionate about teaching the next generation about STEM. Outside of lab Michelle enjoys yoga, hiking, snowboarding, & hanging out with her French bulldog/Boston Terrier mix pup Stitch.

#### Varykina (Kina) Thackray, PhD

Professor of Obstetrics, Gynecology and Reproductive Sciences at UC San Diego

Varykina (Kina) Thackray, Ph.D. is a Professor of Obstetrics, Gynecology and Reproductive Sciences at UC San Diego. She received a B.A. in biology at Middlebury College and then worked as a lab technician at Cornell Universityand Ribozyme Pharmaceuticals. She obtained



her Ph.D. in molecular biology at the University of Colorado Health Sciences Center and completed her post-doctoral training in reproductive endocrinology at UC San Diego. Her lab focuses on understanding the role of the gut microbiome in polycystic ovary syndrome. Kina is passionate about advocating for the equal participation of women in STEM. She has been a member of AWIS San Diego since 2005. She served on the Scholarship (2006-2016; Co-Chair 2006-2008) and Outreach Committees (2016-2020; Co-Chair 2017-2019). She also served as a Board Member-at-Large (2019-2020) and a Speaker/Workshop Organizer for the Women in Science and Technology conference in 2019.

#### Jennifer (Jenny) Waters

PhD Candidate in the UCSD-SDSU Joint Doctoral Program

Jennifer Waters (Jenny) is a Ph.D. Candidate in the UCSD-

SDSU Joint Doctoral Program in Cell and Molecular Biology. She currently works in Dr. Carrie House's lab at SDSU studying role of preadipocytes in the ovarian cancer tumor microenvironment, and seeks to understand the effect of preadipocytemediated expression of insulin-like growth factor binding proteins (IGFBPs). Prior to her



return to graduate school, she completed her B.S. at SDSU in Biology, and spent several years working in biotech at Organovo as a member of the Tissue Testing Team, which focused on developing a 3D bioprinted liver tissue model for applications in drug discovery and disease modeling. She is an active member of AWIS-SD and furthers her passion for empowering women by coaching Girls on the Run (GOTR) San Diego. Outside of the lab, she enjoys hiking with her dog, competing in triathlons and trying bean-to-bar chocolates and craft beer.

#### Robyn Wygal

#### Program Manager/Research Analyst

Robyn Wygal is a Program Manager/ Research Analyst with a BS in biology and a minor degree in business with 10 + years of experience managing projects and data communication with multi-level & multidepartmental interfaces and collaborations in Healthcare IT. Her passions include the



intersection of data science, research, genomics, and healthcare. Robyn's early fascination with "Junk DNA' now includes the diverse layers of genetic and epigenetic influence on regulatory networks in the context of immunity, chronic disease, and cancer progression through the lens of bioinformatics and data visualization.

Robyn has held several roles within AWIS San Diego since 2014. Currently, she is an AWIS San Diego Board Member and the Public Relations Chair and works to highlight and expand our AWIS San Diego programming and network. Robyn attributes STEM advocacy to providing the opportunity to develop and deliver skills in strategic planning, leadership, program design, financial management, partnership development, mentorship, and community engagement and finds that it continues to foster a network of valuable developmental resources. In her free time, she enjoys reading science papers, playing with data, running with her husband Robert and Dog Pacer, and hiking and biking all over San Diego.



#### ABOUT AWIS SAN DIFGO

#### **Mission Statement**

AWIS is a national organization dedicated to achieving equity and full participation of women in science, technology, engineering, and mathematics.

The AWIS-San Diego chapter was established in the mid 1980s and currently has over 230 active members. It is one of the largest and most active chapters in the country. Our diverse membership includes students, post-docs, professors, entry-level interns and CEOs, patent attorneys as well as business entrepreneurs. Over 60% of the membership holds a doctoral degree. Our members contribute in many venues from academia and government to business and industry. Areas of participation and employment of our members include: Research, teaching, administration, patent law, scientific writing, and consulting. AWIS-San Diego is committed to supporting the advancement of women in science and science-related fields by providing opportunities to participate in professional networking, mentoring and leadership activities.

#### **2021 AWIS San Diego Chapter Board Members:**

Dr. Varykina Thackray, PhD president@awissd.org
Dr. Katherine Chang, PhD treasurer@awissd.org
Cynthia Kuan secretary@awissd.org
Dr. Angela Macia amacia@awissd.org
Robyn Wygal rwygal@awissd.org
Dr. Sigrid Katz, PhD sigridkatz@gmail.com
Michelle Muldong mmuldong@awissd.org
Dr. Kamala Janiyani kjaniyani@awissd.org

If you are an AWIS-SD member, consider joining the 2022 Board or join a committee!

# our volunteers make all of our programs possible!

Learn more about our committees and volunteer opportunities.

#### **AWIS San Diego Chapter Committees:**

- Academia to Industry: A2I@awissd.org
- AWIS Leadership Network: leadernet@awissd.org
- Career Advancement: careeradvancement@awissd.org
- Corporate Sponsorship: corporatesponsorship@awissd.org
- Events: events@awissd.org
- Newsletter: newsletter@awissd.org
- Outreach (K-14): outreach@awissd.org
- Public Relations: publicrelations@awissd.org
- Scholarship: scholarship@awissd.org
- STEM Active Connect: eventlist@awissd.org
- Website: website@awissd.org
- WIST Professional Conference: publicrelations@awissd.org





Funding from corporate sponsors is vital to support scholarships, outreach activities, and events such as the AWIS-SD Scholars Celebration and WIST Conference.

Companies benefit from sponsoring AWIS-SD in many ways, including recognition at events, in the newsletter and AWIS-SD website, job postings on AWIS-SD website, and sponsor employee discounts or complimentary admissions to AWIS-SD events.

AWIS-SD is a nonprofit, tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code, ID 52-1459168. Donations are tax-deductible as allowed by law.

**Contact: corporatesponsorship@awissd.org** 



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