









USC WOMEN IN SCIENCE AND ENGINEERING

ANNUAL REPORT 2021-2022

Contents

- 03 Executive Summary
- 04 WiSE Faculty Accomplishments
- 06 WiSE Activities

Programming

WiSE Outreach

New and Expanded Awards

10 Mentoring

2022 Hanna Reisler Mentorship Award

WiSE Students and Postdoctoral Scholars Achievements

14 Advancement

WiSE Leadership

WiSE Program Staff

WiSE Advisory Board

WiSE PhD Advisory Board

USC Dornsife WiSE Committee

USC Viterbi WiSE Committee

- 23 New Faculty
- 26 WiSE Financial Awards

WiSE Gabilan Assistant Professorships

Formal Program Awards

- 28 Appendix 1: Current WiSE Faculty, Tenured and Tenure-Track (Including New Hires)
- 31 Appendix 2: Faculty Candidates Interviewed Via Zoom
- 33 Appendix 3: Samples of WiSE Event Flyers
- 37 Appendix 4: WiSE Corporate Partnership Programming Summaries
- 39 Appendix 5: WiSE Undergraduate Researcher Mini Symposium
- 44 Appendix 6: WiSE Undergraduate Research and Professional Program Events

Executive Summary

The USC Women in Science and Engineering Program (WiSE) is USC's premiere diversity initiative. Founded in 2000 by an anonymous donation of \$20 million, WiSE is an endowed initiative aimed at increasing the representation of women in tenured and tenure-track faculty positions in the sciences, engineering, and mathematics at USC.

Since the program's inception, WiSE has successfully helped to increase the number of women in these positions in the programs it represents -- the departments of engineering in the USC Viterbi School of Engineering (VSoE) and the departments of mathematics, biological sciences, earth sciences, physics and astronomy, and chemistry in the USC Dana and David Dornsife College of Letter, Arts and Sciences -- from 15 in 2000 to 85 in August 2022 (See Appendix 1). By targeting the recruitment and retention of new women faculty members and by establishing a suite of programs aimed specifically at creating an environment in which women at all stages of their careers may thrive, WiSE serves as a role model for successful diversity efforts at USC, as well as across the country and internationally.

During the 2021-2022 recruitment season, WiSE helped add thirteen new women to the tenuretrack faculty. VSoE welcomes Assistant Professors Neda Maghsoodi (Aerospace and Mechanical Engineering), Jieyu Zhao (Computer Science), Kandis Leslie Abdul-Aziz (Civil and Environmental Engineering), Theodora Chaspari (Electrical and Computer Engineering), Souti Chattopadhyay (Computer Science), Weihang Wang (Computer Science), Negar Mehr (AME). The Dornsife College welcomes Assistant Professors Kelly Luo (Physics and Astronomy), Lauren McElvain (Biological Sciences, NEUR), Caroline Seyler (Earth Sciences), Julia Schwartzman (Biological Sciences, MEB), Noelle Held (Biological Sciences, MEB) and Associate Professor Karen Lloyd (Earth Sciences).

WiSE continues to play an active role in helping to increase the representation of women faculty candidates by hosting meetings with department chairs and search committees to outline strategies for broadening the scope of searches for outstanding diversity candidates. WiSE leadership also actively meets with women faculty candidates during the interview process. During the 2021-2022 academic year, WiSE leadership participated in meetings with 42 formal candidates during their interviews (31 in Viterbi and 11 in Dornsife) (See Appendix 2). WiSE Support for Facilitating Diversity in Faculty Searches provided 3 grants, one to each of the departments of Physics and Astronomy, Civil and Environmental Engineering, and Mork Family Department of Chemical Engineering and Materials Science.

Additionally, WiSE successfully continued its Industry Partnership Program with its three partners, Qualcomm, The Aerospace Corporation, and Northrop Grumman. The program provided top-off fellowships to PhD students, alongside professional development programming and networking and recruitment opportunities.

Finally, WiSE continued its expanded its childcare program to counterbalance the challenges of the global pandemic. The program also received a donation toward the childcare program for students and postdoctoral fellows to partially support one grant per year for the next 5 years.

WiSE Faculty Accomplishments

Current WiSE faculty members continue to distinguish themselves with campus-wide and national-level recognition for their research.

Viterbi School of Engineering

- Phebe Vayanos (Industrial and Systems Engineering) received the 2022 USC Viterbi Junior Research Award, the 2021 National Science Foundation CAREER award and was reelected INFORMS Public Sector Operations Research (PSOR) Society VP of Communications.
- Amy Childress (Civil Environmental Engineering) elected member of the EPA's chartered Science Advisory Board (SAB) and the Drinking Water Committee.
- Stacey Finley (Biomedical Engineering) was appointed as the inaugural holder of the Nichole A. and Thuan Q. Pham Professorship.
- Bistra Dilkina (Computer Science) was appointed as the inaugural holder of the Dr. Allen and Charlotte Ginsburg Early Career Chair.
- Heather Culbertson (Computer Science) received the 2021 Okawa Foundation Award.
- Ellis Meng (Biomedical Engineering) became the IEEE Engineering in Medicine and Biology Society VP of Technical Activities, and she was appointed as the inaugural holder of the Shelly and Ofer Nemirovsky Chair in Convergent Bioscience.
- Sze-chuan Suen (Industrial and Systems Engineering) had a publication in Operations Research, the premier journal in ISE, with collaborators: Suen SC, Negoescu D, Goh J. Design of Incentive Programs for Optimal Medication Adherence. Operations Research, 2022 Feb. She also had her NIH R21 grant funded: NIH National Library of Medicine 1R21LM013697 (9/1/21-8/31/23). PI: Suen SC. "Using Road Traffic Data to Identify COVID-19 Priority Testing Locations in Southern California". Suen also received an Honorable Mention in the Competition for the Best Application Paper in the 2021 IISE Transactions Focus Issue on Operations Engineering and Analytics for paper: "Allocating Outreach Resources for Disease Control in a Dynamic Population with Information Spread" by Wilder B, Suen SC, Tambe M.
- Andrea Armani (Chemical Engineering and Materials Science) became an NAI and AAAS Fellow.
- **Eun Ji Chung** (Biomedical Engineering) was promoted to Associate Professor with tenure.
- Maja Mataric (Computer Science) elected as an ACM Fellow in 2021.

Urbashi Mitra (Electrical and Computer Engineering) was a presenter/panelist at the National Academies Workshop on Using Biology for Communication and Information Transmission, Molecular Communication and Computation and Biology's Impact on Information Science, January 21, 2022. She was also a panelist/presenter at the DARPA Information Science and Technology (ISAT) Workshop, Wearable Supportive Personalized Self-Regulation: a few thoughts on privacy, February 1, 2022. Finally, she served as a panelist at the International Research Panel (Europe, North America), U.S. NAE Member Led Workshop, An International Innovation Center for Future Wireless (6G), June 24, 2021.

Dornsife College of Letters, Arts and Sciences

- Anna Krylov (Chemistry) received Communicator of the Year from Dornsife and the Creativity in Research USC Associates Award.
- Naomi Levine (Biological Sciences, MEB) was promoted to Associate Professor with tenure.
- Megan Fieser (Chemistry) and Emily Cooperdock (Earth Sciences) on being the recipients of the 2022 USC Mentoring Award for Faculty Mentoring Graduate Students.
- Emily Cooperdock (Earth Sciences) received the American Geophysical Union's Dorothy LaLonde Stout Lecture.
- Susan Montgomery (Mathematics) gave the Block lecture at UC Riverside in 2022.
- Jill McNitt-Gray (Biological Sciences, HEB) was elected to National Academy of Kinesiology.
- Vera Gluscevic (Physics and Astronomy) recieved a NASA ATP grant, with her postdoc Rui An as a Co-I.
- Emily Liman (Biological Sciences, NEUR) was elected program chair for the Association for chemoreceptive sciences ACHEMS). She also gave the Cranefield lecture at the University of Wisconsin and became an Editorial board member of EMBO reports.
- Carolyn Phillips (Biological Sciences, MCB) was promoted to Associate Professor with tenure.

WiSE Activities

Programming

During the 2021-2022 academic year, the WiSE Program hosted 70+ events and meetings. In order to further aid in the retention of women faculty and to encourage undergraduate and graduate students to pursue careers in the academe, WiSE holds various events each academic year.

WiSE planned and hosted the WiSE Alumni Lecture Series during the 2021-2022 academic year.

Speakers in this series discussed their career paths & answered questions on a variety of career-related topics.

September 1: Dr. Joycelyn Yip (USC PhD Alumna, Biomedical Engineering), The Joy of Discovery

Dr. Joycelyn Yip is an Associate at McKinsey & Company working primarily in the Pharmaceuticals & Medical Products practice in both the private and public sectors. Her recent studies have focused on COVID-19 testing, DEI in oil & gas companies, and cell & gene therapy review. Prior to joining consulting, Joycelyn earned her BS in Biomedical Engineering, MS in Mechanical Engineering, and PhD in Biomedical Engineering from USC and worked in Dr. Megan McCain's Laboratory for Living Systems Engineering on microfluidic systems and engineered cardiovascular tissues.

September 17: Dr. Blithe Rocher (USC PhD Alumna, Physical Chemistry) and Dr. Olivia Evanson (USC PhD Alumna, Industrial and Systems Engineering)

Dr. Blithe Rocher is a software engineering manager at Google. She leads engineering teams to help people get the answers they need from their data at Looker. Prior to becoming a developer, she received a PhD in Physical Chemistry from the University of Southern California.

Dr. Olivia Evanson completed her MS in Operations Research Engineering and PhD in Industrial and Systems Engineering at USC Viterbi (2015-2019). During her time at USC, she worked with Dr. Shinyi Wu in the Health Systems Engineering Lab. Olivia's research focused on analyzing newer care models designed to help treat patients with chronic conditions. After graduating, she began working at Boston Scientific in their Neuromodulation division as a product manager on the digital health team. Her job involves leading mobile app development teams to provide companion apps to patients during their treatment journey.

October 4: Dr. Carolina Amador (USC PhD Alumna, Chemistry)

Dr. Carolina Amador holds a PhD in Chemistry from USC and an MS degree in Chemistry from the University of Aveiro, in Portugal, specialized in the design and syntheses of drug candidates. In parallel to her academic studies, Carolina led Biotech Connection LA (BCLA), a non-profit organization focused on career and networking development, as President in 2017/2018 and now as Chair of the Advisory Board. Carolina is also the Regional Director of the Healthcare Businesswomen's Association, Entrepreneurship Affinity group with the mission to bring the spotlight to female founders, CEOs and leaders in the start-up ecosystem. Before moving to the US, Carolina was a Medicinal Chemistry Intern at Roche Pharmaceuticals in Basel, Switzerland where her passion for pharma first came to life.

October 27: Dr. Ahuva Weltman Hirschberg (USC MD/PhD Alumna, Clinical Medicine and Biomedical Engineering), Staying True to You

Dr. Ahuva Weltman Hirschberg is an MD/PhD trained in clinical medicine and biomedical engineering. She completed her medical studies at the Keck School of Medicine at the University of Southern California (USC). Prior to this, she was a member of the Biomedical Microsystems Lab at the Viterbi School of Engineering at USC, where she designed, prototyped, and microfabricated a high-density, polymer, neural probe array designed to record from the rat hippocampus. A native Angeleno, Ahuva recently relocated to Dallas along with her husband and two young daughters. In her spare time, she enjoys hiking, basketball, and Bible Studies. Ahuva currently works for Abbott as a Senior Clinical Engineer in their Neuromodulation division in Plano, Texas.

November 9: Diya Dwarakanath (USC MS Alumna, Biomedical Engineering), Being Comfortable Outside of Your Comfort Zone

Diya Dwarakanath is a passionate medical device industry professional and two-time Trojan with a BS in Biomedical Engineering (May 2013) and an MS in Biomedical Engineering (May 2017) from USC. She worked in Dr. Ellis Meng's Biomedical Microsystems Lab at USC as a Merit Research Scholar for 3.5 years on implantable BioMEMS devices. She is currently a Product Development Engineer at DNA Electronics, working in a start-up team to design and develop a complex diagnostic cartridge and overall platform for detecting sepsis. Previously, she worked at Becton Dickinson, Oracle, and Edwards Lifesciences.

November 17: Dr. Heidi Tu (USC PhD Alumna, Biomedical Engineering) and Luann Raposo (USC MS Alumna, Product Development Engineering), Be Your Own Champion

Dr. Heidi Tu has Bachelor's degrees in Biomedical Engineering and German from UT Austin and a PhD in Biomedical Engineering from USC, which she earned as a member of Dr. Ellis Meng's Biomedical Microsystems Laboratory. Supported by a Viterbi Dean's Doctoral Fellowship and an NSF Graduate Research Fellowship, she developed small implantable drug delivery devices for applications including eye disease and cancer treatment. Heidi's academic work was recognized with the Best Dissertation Award and has been featured in over a dozen scientific conferences and journals. After graduation, she moved to the San Francisco Bay Area, where she now develops commercial products for medical and life sciences applications. Heidi is currently a Staff Mechanical Engineer at Beckman Coulter Life Sciences.

Outside of work, she enjoys spending time outdoors with her family, doing Zoom yoga with friends, and trying new foods.

Luann Raposo graduated with a BS in Biomedical Engineering (Mechanical Emphasis) from USC in May 2019 and then graduated with her MS in Product Development Engineering in December 2019 through USC's Progressive Degree Program (PDP). While at USC she was involved in research, ASBME, WiSE, internships, study abroad, and a number of other organizations. After graduating, she did a Fulbright English Teaching Fellowship in Spain. In May 2020, Luann began working as a Process Development Engineer in New Product Introduction for Abbott's Heart Failure Division. She and her team are developing an alternate power system for the HeartMate 3, a Left Ventricular Assist Device (LVAD), to improve patients' quality of life.

February 9: Dr. Lindsey (Bogachus) Sullivan (USC PhD Alumna, Biology), Carve Your Own Path

Dr. Lindsey Sullivan Bogachus worked in Dr. Lorraine Turcotte's lab studying glucose and fatty acid metabolism while pursuing her PhD at USC. For her post-doctoral fellowship, she worked in Dr. R. Paul Robertson's lab studying glucose kinetics in TP/IAT (Total Pancreatectomy/Islet Auto-Transplantation) recipients. After completion of her post-doc, she switched industries and started over. She is currently the Director of Medical Education at a medical device agency in the Bay Area – Evolution Surgical. Evolution Surgical is the exclusive Bay Area distributor for Arthrex; one of the leading orthopedic medical device companies in the world.

February 25: Roxanna Pakkar (USC MS Alumna, Electrical Engineering), Finding Your Place in the Workplace

Roxanna Pakkar is a proud 2-time Trojan alumna working in the Aerospace industry. She joined the Aerospace Corporation in 2020 after receiving her BS in Electrical Engineering from USC, and she recently completed her MS in Electrical Engineering at USC in December 2021. At the Aerospace Corporation, Roxanna works in the Embedded Control Systems Department where she works on a number of projects such as flight software development for satellite systems, launch support for Space X and ULA launch vehicles, and has been leading the development of a new robotics lab. She is also currently supporting the NASA JPL mission, Psyche. At USC, Roxanna worked in Dr. Maja Mataric's Interaction Lab, interned at NASA JPL and Microsoft, and was a counselor in Troy Camp.

March 8: Dr. Katrina Mikhaylichenko (USC PhD Alumna, Physical Chemistry), Never Dream About Success. Work for It.

Dr. Katrina Mikhaylichenko is a passionate USC alumna, who earned her PhD in Physical Chemistry in 1998 working in Dr. Curt Wittig's Lab on photodissociation dynamics of small polyatomic molecules in the gas phase. Katrina has joined semiconductor capital equipment industry right after graduating from USC. Since 2013, Katrina has been working at Applied Materials, where she currently is a Senior Director of Technology in the Chemical Mechanical Polishing Business Unit, responsible for technology development for Dielectric CMP and post-CMP Cleans.

Prior to joining Applied Materials, she has been working 15+ years at Lam Research Corp. There, she led technology development efforts in the areas of defect reduction, wet etch, and surface preparation in various wet processing divisions. Katrina has been granted over 100 patents. She is passionate about enabling innovation and instigating positive change.

April 1: Dr. Elaine Short (USC PhD Alumna, Computer Science), Robust Intelligence for Assistive Robots

Dr. Elaine Schaertl Short is the Clare Boothe Luce Assistant Professor of Computer Science at Tufts University. She completed her PhD under the supervision of Dr. Maja Matarić in the Department of Computer Science at the University of Southern California (USC). She received her MS in Computer Science from USC in 2012 and her BS in Computer Science from Yale University in 2010. From 2017-2019 she worked as a postdoctoral researcher in the Socially Intelligent Machines Lab at the University of Texas at Austin. At USC, she received numerous awards for her contributions to research, teaching, and service, including being one of very few PhD students to have received all three of the CS department Best TA, Best RA, and Service awards.

Elaine's research seeks to improve the computational foundations of human-robot interaction by designing new algorithms that succeed in contexts where other algorithms' assumptions frequently fail, such as in child-robot interaction, in minimally-supervised public space deployments, and in assistive interactions. As a disabled faculty member, Elaine is particularly passionate about disability rights in her service work. In addition to having recently joined the new AccessComputing Leadership Corps, she is the Communications Chair and Community Liaison of AccessSIGCHI, an advocacy group that works to increase the accessibility of the 24 SIGCHI conferences.

April 13: Elaine Krebs (USC MS Alumna, Marine and Environmental Biology)

Elaine Krebs is the Lead Educator at the California Science Center where she creates and delivers fun, educational programs to schools and families. She graduated from USC in 2015 with a BA in Health and Humanities and an MS in Marine and Environmental Biology, and was also a four-year student athlete on the Women's Rowing Team. Elaine is passionate about creative and engaging strategies of science communication and has won multiple awards for her scientific animations at the USC Science Film Festival and RAW Science Film Festival.

WiSE also continues to provide professional development and networking opportunities for women. During the 2021-2022 WiSE Undergraduate Research Experience, students had the opportunity to participate in 33 sessions (See Appendix 6).

Upon the conclusion of the WiSE Undergraduate Research Experience for WiSE Summer Researchers, WiSE held a virtual mini-conference (8/5/2022) where the participating undergraduate researchers presented short talks on their summer research to an audience comprised of faculty, staff, PhD students and postdoctoral researchers (See Appendix 5).

WiSE hosted the WiSE Professional Program during the 2021-2022 academic year, and students had the opportunity to participate in 25 sessions (See Appendix 6).

The WiSE Faculty Networking Group met once a month, virtually. In May 2022, WiSE recognized all WiSE award recipients via its online social media channels and on its website.

WiSE Outreach

WiSE continues to issue regular newsletters. In addition, the Program launched an alumni newsletter to highlight WiSE alum and grow our alumni network.

WiSE also continues to support the USC Young Researchers Program (YRP) annually. YRP hosts a summer research experience devised and executed by USC graduate students for USC-area high school students in the sciences.

New and Expanded Awards

WiSE offered a continued temporary increase in its Child Care Subsidies Program for faculty in the 2021-2022 academic year to offset the costs of child care.

Mentoring

In conjunction with WiSE's stated mission to build a supportive environment for women within the University, WiSE faculty mentor women at all levels – ranging from undergraduate to graduate students and postdoctoral scholars to faculty at all levels. Professor Jessica Parr (Chemistry) continued to coordinate the WiSE Undergraduate Experience, and she will stay in her role during the 2022-2023 academic year. Professor Raffaella Ghittoni joined as the Undergraduate Research Program Mentor beginning summer 2021, and will continue in her role during the 2022-2023 academic year.

The WiSE PhD Advisory Board continued its work on community building for PhD students within WiSE-eligible departments. The Board continued its formal mentorship program across WiSE-eligible departments and held several events throughout the academic year, both virtual and in person. This past year the Board continued its WiSE Liaisons program, in which they appoint liaisons in each department. The liaisons help the board assess their department's needs, interface with department leadership, and organize attendance of WiSE events with the members of their respective departments. For the upcoming year the Board is focused on working with the liaison network to plan more events.

2022 Hanna Reisler Mentorship Award

The 2022 Hanna Reisler Mentorship Award, which recognizes individuals at USC who have advanced the careers of women in science and engineering through generous and committed professional mentorship, was awarded to Lorraine Turcotte, Professor of Biological Sciences, to recognize her exceptional mentoring of faculty and students.

WiSE Students and Postdoctoral Scholars Achievements

Current and past WiSE students and postdoctoral scholars continue to be recognized for their research and accomplishments.

- Nathan Justin (PhD student in Computer Science, Advisor Phebe Vayanos) received the USC Viterbi Graduate Student Award, Best RA. He also received the National Science Foundation (NSF) Graduate Research Fellowship award in 2022.
- Bill Tang (PhD student in ISE, Advisor Phebe Vayanos) earned the National Science Foundation (NSF) Graduate Research Fellowship award in 2022.
- Caroline Johnston (PhD student in ISE, Advisor Phebe Vayanos) earned the Bayer Women in OR Scholarship from the INFORMS Analytics Society in 2021.
- Christopher Doehring (Undergraduate alumnus in ISE, Advisor Phebe Vayanos) earned the USC ISE Undergraduate Research Award 2022.
- Nathanael Jo (Undergraduate alumnus in ISE, Advisor Phebe Vayanos) earned the INFORMS
 Undergraduate Operations Research Prize Award 2021. He also earned the USC University-wide
 Discovery Scholar Prize 2021 and the USC Discovery Scholar distinction.
- Sue Wang (PhD student in BME, Advisor Ellis Meng) was a finalist in the best paper award competition for the 2022 IEEE MEMS conference (hybrid, Jan 9-13, 2022).
- Alysia Cox (Postdoctoral Scholar, Advisor Eun Ji Chung) received the 2022 USC WiSE Merit Award for Excellence in Postdoctoral Research.
- Megan Dudaney (Undergraduate student in BME, Advisor Eun Ji Chung) received a 2022 BRIDGE Program Fellowship.
- Nathan Ho (Undergraduate student in BME, Advisor Eun Ji Chung) received a 2022 BUGS Program Fellowship, and a Provost Undergraduate Research Fellowship.
- Veda Bansal (Undergraduate student in BME, Advisor Eun Ji Chung) received 2nd prize at the CURVE Undergraduate Research Symposium.
- Kerry Kairui Jiang (Undergraduate student in BME, Advisor Eun Ji Chung) received the 2022 USC AMI Award for Outstanding Research in Biomedical Engineering and is starting as PhD student at University of Washington Bioengineering Fall 2022.
- Woori Lee (Undergraduate student in BME, Advisor Eun Ji Chung) received the 2022 2nd prize in Physical Sciences, Math and Engineering category, Undergraduate Symposium for Scholarly and Creative Work.

- Yi Huang (PhD student in BME, Advisor Eun Ji Chung) received a 2022 Viterbi Undergraduate Research Mentoring Award.
- Noah Trac (PhD student in BME, Advisor Eun Ji Chung) was named a 2021 ARCS Foundation Scholar.
- Deborah Chin (PhD student in BME, Advisor Eun Ji Chung) defended May 2022 and is starting at ZS Associates.
- Zhenzhuo Lan (PhD Student, 2022, Advisor Shaama Sharada) started at Meta (Facebook) as Research Scientist in Fall 2022.
- Kareesa Kron (PhD Student, 2022, Advisor Shaama Sharada) received the Kokes Award by the North American Catalysis Society for the NYC Meeting in 2022. She also received the Best Poster Award, American Institute of Chemical Engineers National Meeting in Boston 2021.
- Nicholas Humphrey (PhD Student, 2022, Advisor Shaama Sharada) received a Spring 2022 Travel Award by the Catalysis Science and Technology (CATL) division of the American Chemical Society.
- Leena Mathur (Undergraduate alumna, 2022, Advisor Maja Mataric) received the following: National Science Foundation (NSF) Graduate Research Fellowship (2022-25), USC Provost's Undergraduate Research Fellowship (2019-21), USC Albert Dorman Grand Challenge Scholar Award (2022), USC Department of Computer Science Award for Outstanding Research (2022), USC Department of Computer Science Service Award (2022), USC Discovery Scholar (2022) USC, Engineering Honors with Distinction in Research (2022), USC Global Scholar, University Distinction and Prize Recipient (2022), USC Order of Troy (2022), USC Renaissance Scholar (2022), and USC Viterbi School of Engineering Award for Outstanding Research (2022).
- Tom Groechel (PhD Student in CS, Advisor Maja Mataric) received the Viterbi Undergraduate Research Mentoring Award (2021) and the USC Department of Computer Science Best PhD Research Assistant Award (2022).
- Lauren Klein (PhD Student in CS, Advisor Maja Mataric) received the USC Department of Computer Science Best PhD Research Assistant Award (2022).
- Radhika Agarwal (Undergraduate in CS, Advisor Maja Mataric) received the USC Order of the Laurel and the Palm (2021).
- Nikki Yaminrafie (Undergraduate in CS, Advisor Maja Mataric) received a Summer 2022 USC Provost's Undergrad Research Fellowship.
- Furong Jia (Undergraduate in CS, Advisor Maja Mataric) received a USC Provost's Undergraduate Research Fellowship 2022.
- Claudia Chiu (Undergraduate in CS, Advisor Maja Mataric) received a USC Provost's Undergraduate Research Fellowship 2021.

- Maristella Alessio (Postdoctoral Scholar in Chemistry, Advisor Anna Krylov) has received prestigious Marie Curie fellowship to fund her work at KU Leuven.
- KSenia Bravaya (Former Postdoctoral Scholar, Advisor Anna Krylov) was promoted to Associate Professor with Tenure at Boston University.
- Emily Zakem (Former Postdoctoral Scholar, Advisor Naomi Levine) is now a Research scientist at Carnegie Institution for Science.
- Trang Nguyen (Former Postdoctoral Scholar, Advisor Naomi Levine) is Faculty of Integrate Science Fulbright University Vietnam.
- Suzana Leles (Postdoctoral Scholar, Advisor Naomi Levine) received the Simons Postdoctoral Fellowships in Marine Microbial Ecology.
- Valerie Komatsu (PhD Student in Molecular Bio, Co-Advisor Le Trihn) is starting a position at Amgen as a Process Development Scientist in July, 2022.
- David Wen (Undergraduate in QCB, Advisor Le Trihn) is attending UCSF in Fall 2022 in Developmental and Stem Cell Biology Graduate Program.
- **Jenna Dilworth** (PhD student, Advisor Carly Kenkel) was awarded the Women Divers Hall of Fame Susan L. Williams Memorial Fellowship in Coral Rehabilitation.
- Sibelle O'Donnell (Undergraduate student, Advisor Carly Kenkel) was awarded a USC Provost's Summer research fellowship 2022.
- Kaylee Tseng (Undergraduate Student in Chemical Engineering, Advisor Kate White) received an Astronaut Scholarship.
- Anne Nguyen (PhD student alumna, Advisor Carolyn Phillips) started a postdoctoral position in Andrea Cochran's lab at Genentech as of Jan 2022.
- Anika Shrivastava (Undergraduate student, Advisor Jazlyn Mooney) received accepted the Dornsife Summer Undergraduate Research Fund (SURF).
- Mengdi Chai (Undergraduate student, Advisor Jazlyn Mooney) received and accepted an invitation
 for the WiSE Undergraduate Research Experience Program and received the Dornsife Summer
 Undergraduate Research Fund (SURF).
- Emily Tibbett (PhD Student alumna, Advisor Sarah Feakins) received an NSF OPP postdoctoral fellowship to be based at UMass Amherst.
- Justine Grabiec (PhD Student, Advisor Emily Cooperdock) received an NSF/Geological Society of America Graduate Student Geoscience Grant & Outstanding Mention for her research on the geology of Catalina Island.

Advancement

WiSE continued work on its Corporate Partnership Program by collaborating with the Viterbi, Dornsife and University Corporate & Foundation Relations teams. We hosted a series of professional development programming during the 2021-2022 year for the WiSE Aerospace, Northrop Grumman and Qualcomm PhD fellows as part of our partnership with The Aerospace Corporation, Northrop Grumman and Qualcomm. Events included, Female Founders: Beyond the Glass Ceiling, Conflict Management, Communicating Science Online, Acing Your Non-Academic Job Interview, Presentation Design, and Proposal Writing, and tech talks among others (See Appendix 4).

Aerospace has agreed to continue their support for 2022-2023 and 2023-2024. Additionally, we are in talks to renew the program with Qualcomm for the 2022-2023 academic year.

As part of our fundraising efforts, we received a donation from an individual donor to fund a new Undergraduate Professional Program during the 2021-2022 academic year. We successfully ran the first year of this program, and will attempt to raise more funds to continue it into the future. The goal of this program is to offer undergraduates professional development training and experiences to prepare them for successful careers in STEM fields. "WiSE Professional Fellows" submit an application describing their interests and objectives in participating in the program. Once accepted, they receive a small stipend of \$500 per semester and commit to attending a variety of programming opportunities aimed especially at preparing a CV/resume, writing an effective cover letter, interview preparation, elevator pitches, negotiations, etc.

The WiSE foundation grant for the WiSE Burg Communicating Science Program was renewed by the Anton Burg Foundation. We will continue the communication program for an additional three years for both graduate and undergraduate students.

WiSE received a donation in memory of early childhood teacher Helen Brooks, who formerly worked at the USC UPC Child Care Center (1988-2008). The gift provides partial coverage of one child care award per year for 5 years.

WiSE Leadership

A critical aspect of the success of WiSE is the direct involvement of men and women faculty members, at all career levels and from both the USC Dornsife College and the Viterbi School of Engineering, in planning, evaluating, and guiding the Program's development. With the guidance of its diverse committees, WiSE programs have grown and evolved in response to changing needs. Continued evaluation of the success and utility of programs have helped to keep them relevant and effective.

WiSE Program Staff



Leana Golubchik, Stephen and Etta Varra Professor of Computer Science and Electrical and Computer Engineering in the Viterbi School of Engineering, serves as Director of the WiSE Program. Golubchik was appointed as Director in September 2010.



Mallory Redel, serves as the WiSE Program Manager and leads program development, operations, finance and committee coordination. She also oversees the Corporate Partnership Program. Mallory joined WiSE in November 2014. She holds a Bachelor of Science in Journalism from Middle Tennessee State University and a Master of Science in Social Entrepreneurship from the University of Southern California.



Marie Meneses, joined the WiSE Program in November 2019 and serves as the WiSE Marketing Assistant. She manages the program's marketing, social media, and events. She holds a Bachelor of Arts in Advertising from Pepperdine University.



Jessica Parr, Professor of Chemistry (Teaching) in the Dornsife College of Letters, Arts and Sciences serves as the WiSE Undergraduate Program Coordinator. She has been leading the undergraduate program since Fall 2013.



Raffaella Ghittoni, Associate Professor of Biological Sciences (Teaching) in the Dornsife College of Letters, Arts and Sciences serves as the Undergraduate Research Program Mentor. She began this role in 2021.

WiSE Advisory Board

The WiSE Advisory Board met twice in the fall semester and twice in the spring semester during the 2020-2021 academic year (10/8/2021, 12/6/2021, 2/15/2022, and 4/11/2022) and continues to work with program administration to hone its recruitment and support of programs for maximum impact. The first meeting in the spring semester is joint with the USC Dornsife College and Viterbi School Committees.

During the 2021-2022 academic year, the Board devoted attention to different topics that included childcare, COVID statements, and faculty recruitment. As always, the Board remains dedicated to mentorship, as it is key to all WiSE endeavors.

WiSE continues to advocate for ample, quality child care. The pandemic provided abundant evidence that childcare support is necessary for faculty with young children to function academically, not to mention retain any residual sanity. During that time, WiSE provided a temporary childcare subsidy to help with in-home care, with contributions from Viterbi and Dornsife. Given that so many faculty had children yet ineligible for the vaccine, or who were home frequently because of quarantine (current approximations are that one quarter of all school children were sent home in Fall 2021), or who understandably feared that children might bring Covid home to vulnerable family members, the Board strongly supported the continuation of this program for a year at least (pending any new twists and turns along the road to recovery from the pandemic).

WiSE Leadership had several discussions with faculty members to assess the ways in which Covid has had a negative impact on career progress beyond childcare. The list of concerns was long and included a slowdown on lab renovations that junior faculty need to begin their research programs and downstream consequences on training students, difficulty recruiting for TA/RA-ships and motivating current students, canceled grants, slowdowns in core facilities, delayed orders of supplies and equipment as well as increased costs, extra barriers for research collaboration, the exorbitant demands of conversion of classes that involve projects to online substitutes, safety of remote research sites (research in the home), disruption of human subject studies, destruction of research animals and overall barriers to collecting research data.

WiSE leadership and the larger community provided ideas to mitigate the damage that these cumulative setbacks caused. Thus, the Board was pleased that the Covid statement drafted was widely adopted by both Viterbi and Dornsife that outlines the setbacks the pandemic caused to candidate statements for pre-tenure assessments and the dossiers that will be reviewed both internally and externally for promotion.

During the 2021-2022 recruitment season, WiSE helped add thirteen new women to the tenure-track faculty, bringing the total number to eighty-five. Six faculty will join Dornsife: Noelle Held (Biological Sciences, Marine and Evolutionary Biology), Karen Lloyd (Earth Sciences), Kelly Luo (Physics), Lauren McElvain (Biological Sciences, Neurobiology), Julia Schwartzman (Biological Sciences, Marine and Evolutionary Biology) and Caroline Seyler (Earth Sciences). Seven faculty will join Viterbi. Kandis Leslie Abdul-Aziz (Civil & Environmental Engineering), Souti Chattopadhyay (Computer Science), Theodora Chaspari (Electrical & Computer Engineering), Neda Maghsoodi (Aerospace & Mechanical Engineering) Negar Mehr (Aerospace & Mechanical Engineering), Weihang Wang (Computer Science), and Jieyu Zhao (Computer Science). Some of the candidates were part of dual-career hires, and this was especially heartening because we have lost so many candidates for this reason in the past. At the same time, luck played a large part in these successes. We are enormously grateful to our divisional deans for working with WiSE and departments to recruit these remarkable women.

Finally, mentorship is key to the growth and strength of the WiSE community. Hanna Reisler continues to lead the faculty networking group. This academic year, the group met monthly. Senior WiSE faculty remain available to assist their junior colleagues.

The Board hopes that WiSE's many efforts will continue the acceleration of the rate at which women join the ranks of tenured and tenure-track faculty.

2021-2022 WiSE Advisory Board Members



Judith Hirsch (Chair)
Professor of Biological Sciences, Neurobiology
USC Dornsife College of Letters, Arts & Sciences



Linda Duguay Associate Professor (Research) of Biological Sciences, MEB USC Dornsife College of Letters, Arts & Sciences



David D'ArgenioProfessor of Biomedical Engineering
USC Viterbi School of Engineering



Raffaella Ghittoni Associate Professor (Teaching), Biological Sciences USC Dornsife College of Letters, Arts & Sciences



Leana Golubchik (Ex-officio, WiSE Director)
Professor of Computer Science and Electrical and Computer
Engineering
USC Viterbi School of Engineering



Sandeep Gupta Professor of Electrical and Computer Engineering-Systems USC Viterbi School of Engineering



Julie Higle Professor of Industrial & Systems Engineering USC Viterbi School of Engineering



Susan Montgomery Professor of Mathematics USC Dornsife College of Letters, Arts & Sciences



Hanna Reisler Professor of Chemistry USC Dornsife College of Letters, Arts & Sciences



Gary Rosen Gabilan Distinguished Professor of Science and Engineering and Professor of Mathematics USC Dornsife College of Letters, Arts & Sciences



Shang-Hua Teng Professor of Computer Science USC Viterbi School of Engineering

WiSE PhD Advisory Board

During the 2017-2018 academic year, WiSE established a PhD Advisory Board to further WiSE efforts in serving the PhD Community. The Board focuses on uncovering topics of interest to the STEM PhD Community at USC, and hosting events based on the findings.

2021-2022 WiSE PhD Advisory Board Members



Eun Ji Chung (Faculty Mentor)
Assistant Professor of Biomedical Engineering
USC Viterbi School of Engineering



Naomi Levine (Faculty Mentor)
Assistant Professor of Biological Sciences (MEB)
USC Dornsife College of Letters, Arts & Sciences



Kylie Trettner (Chair)
PhD Candidate, Chemical Engineering
USC Viterbi School of Engineering



Anjali Bhatnagar
PhD Student, Biological Sciences (MBBO)
USC Dornsife College of Letters, Arts & Sciences



Raven Althouse
PhD Student, Civil and Environmental Engineering
USC Viterbi School of Engineering



Nripsuta Saxena PhD Student, Computer Science USC Viterbi School of Engineering



Kelly Deweese PhD Candidate, Biological Sciences (MB) USC Dornsife College of Letters, Arts & Sciences



Dannielle Fougere PhD Candidate, Earth Sciences USC Dornsife College of Letters, Arts & Sciences



Natalie Khalil PhD Candidate, Biomedical Engineering USC Viterbi School of Engineering



Mallory Redel (Ex-officio) WiSE Program Manager

USC Dornsife WiSE Committee

Committees composed of faculty in each school serve as advisors on grant-making by reviewing and evaluating the applications and making recommendations for funding.

2021-2022 WiSE Dornsife Committee Members



Jill McNitt-Gray (Chair) Professor of Biological Sciences and Biomedical Engineering USC Dornsife College of Letters, Arts & Sciences



James Boedicker Associate Professor of Physics and Astronomy USC Dornsife College of Letters, Arts & Sciences



Suzanne Edmands Professor of Biological Sciences USC Dornsife College of Letters, Arts & Sciences



Joshua West Professor of Earth Sciences USC Dornsife College of Letters, Arts & Science

Number of

A summary of the reviews conducted by the USC Dornsife Committee during the academic year follows:

Program	Deadline	Applicants/ Nominations	Number of Awards
Undergraduate Research, Fall	May 17, 2021	5	5
Undergraduate Research, Spring	December 1, 2021	5	5
Undergraduate Professional, Fall	May 17, 2021	24	8
Undergraduate Professional, Spring	December 1, 2021	6	5
Graduate Merit	April 8, 2022	8	5 (3 honorary)
Graduate Top-Off	March 3, 2022	12	4 (8 offered)
Undergraduate Research, Summer	April 1, 2022	7	6

USC Viterbi WiSE Committee

Committees composed of faculty in each school serve as advisors on grant-making by reviewing and evaluating the applications and making recommendations for funding.

2021-2022 WiSE Viterbi Committee Members



Malancha Gupta (Chair)

Gabilan Distinguished Professor of Science and Engineering and Professor of Chemical Engineering & Materials Science USC Viterbi School of Engineering



Felipe de Barros

Associate Professor of Civil & Environmental Engineering USC Viterbi School of Engineering



Aleksandra Korolova

WiSE Gabilan Assistant Professor of Computer Science USC Viterbi School of Engineering



Sze-Chuan Suen

WiSE Gabilan Assistant Professor of Industrial and Systems Engineering USC Viterbi School of Engineering

Number of

A summary of the reviews conducted by the USC Viterbi Committee during the academic year follows:

Program	Deadline	Applicants/ Nominations	Number of Awards
Undergraduate Research, Fall	May 17, 2021	5	4
Undergraduate Research, Spring	December 1, 2021	9	9
Undergraduate Professional, Fall	May 17, 2021	35	8
Undergraduate Professional, Spring	December 1, 2021	5	5
Graduate Merit	April 8, 2022	3	2
Graduate Top-Off	March 3, 2022	12	1 (8 offered)
Undergraduate Research, Summer	April 1, 2022	5	2

New Faculty



Kelly Luo is an incoming Gabilan Assistant Professor of Physics and Astronomy at the University of Southern California, beginning January 2023. Her research focuses on spin-based information processing in van der Waals quantum materials, utilizing experimental techniques such as ultrafast optical microscopy and microwave low-temperature magnetotransport, among others. She was previously a Presidential Postdoctoral Fellow and Honorary Kavli Fellow at Cornell University studying spin torque dynamics in van der Waals magnets. She received her Ph.D. in physics at the Ohio State University studying information transduction between spintronic, photonic, and magnetic states in two-dimensional hybrid systems. She obtained undergraduate degree in physics at the Hong Kong University of Science and Technology.



Lauren McElvain will join USC as a Gabilan Assistant Professor in the Neurobiology Section of the Department of Biological Sciences in December 2022. Lauren received a Sc.B. in Neuroscience from Brown University and a Ph.D. in Neurosciences from the University of California, San Diego and the Salk Institute for Biological Studies. She completed postdoctoral training as an international collaboration between the Department of Physics at the University of California, San Diego and the Neurosciences Programme at the Champalimaud Foundation in Lisbon, Portugal. Her research group will investigate the neural circuits that control movement using multidisciplinary cellular and systems neuroscience approaches, including molecular biology, electrophysiology, behavior, and computational modeling. Her current research focuses on the organization and function of the basal ganglia and the circuit basis of common movement disorders, including Parkinson's and Huntington's diseases.



Julia Schwartzman will join the USC Department of Biological Sciences in the Marine and Environmental Biology Section as a Gabilan Assistant Professor in January 2023. Julia received her PhD in Microbiology from the University of Wisconsin, Madison studying how marine bacteria persist as animal symbionts. She subsequently trained as a Ruth Kirschstein Postdoctoral Fellow at Harvard Medical School where she investigated the evolutionary diversification of asnimal-associated bacteria, and as a Postdoctoral Associate at MIT where her work focused on the ecological consequences of phenotypic heterogeneity in marine bacteria. At USC, Julia's lab will investigate how complex bacterial behaviors shape coastal marine ecosystems through their contribution to nutrient cycling and the development of brown algae.



Souti "Rini" Chattopadhyay is an Assistant Professor of Computer Science at USC. She received her Ph.D. in Computer Science from Oregon State University. She works at the intersection of Human-Computer Interaction, Software Engineering, and Cognitive Science. Her work is focused on understanding how humans make decisions when interacting with interfaces, specifically programming interfaces. She is an intern alum of Microsoft Research and continues working with them to broaden the participation of future generations in computing. Some of her works were awarded best papers and honorable mentions by ACM and IEEE, including understanding cognitive biases in programmers, and exploring a plethora of challenges data scientists face. Her work on cognitive biases was also recognized as research highlights by CACM and that on supporting data scientists was featured in Nature articles.



Weihang Wang is an Assistant Professor in the Department of Computer Science, University of Southern California (USC). Her research interests are in software engineering. Before joining USC, she was an Assistant Professor at University at Buffalo from 2018 to 2022. She received her Ph.D. degree in Computer Science from Purdue University in 2018. She was awarded an NSF CAREER Award, a University at Buffalo Exceptional Scholar - Young Investigator Award, a Maurice H. Halstead Memorial Research Award, a Facebook Testing and Verification Research Award, and a Mozilla Research Award.



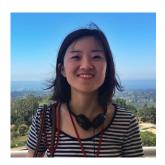
Neda Maghsoodi will join USC as a Gabilan Assistant Professor in the Department of Aerospace and Mechanical Engineering in January 2023. Neda is a postdoctoral scholar at the California Institute of Technology. Prior to this, she was a postdoctoral fellow at Harvard University. She received her Ph.D. in Mechanical Engineering and M.Sc. in Biomedical Engineering from the University of Michigan-Ann Arbor. Neda's research lies at the interface of applied mechanics, materials science, and biology and develops novel theoretical-computational models to elucidate complex behavior of soft structures in engineering and biology. In her academic career, Neda has received several honors and awards; including, she was named a Rising Star in Mechanical Engineering by UC-Berkeley and received the Best Paper award in the ASME International Conference on Micro- and Nanosystems.



Noelle Held is a microbial biogeochemist and oceanographer. Through proteomics and quantitative microscopy, she studies the inner workings of microbial cells, and how this scales up to ecological function and global scale processes. She received her PhD in Chemical Oceanography and Microbial Biogeochemistry from MIT and Woods Hole Oceanographic Institution, and was a postdoctoral fellow at ETH Zurich and the Swiss Federal Institute of Aquatic Sciences. Noelle is looking forward to 'launching' at USC in January 2024.



Kandis Leslie Abdul-Aziz will join the USC Department of Civil and Environmental Engineering as a Gabilan Assistant Professor in January 2024. She currently leads the Sustainable Catalysis and Materials laboratory (the-sustainable-lab.com) at the University of California, Riverside in the Department of Chemical and Environmental Engineering. Leslie received her Ph.D. in Chemistry from the University of Illinois at Urbana-Champaign. Before joining UC Riverside, she was a Provost postdoctoral fellow at the University of Pennsylvania. She has also worked previously as a Forensic scientist for the Philadelphia police department and as a Refinery chemist at Sunoco Chemicals in Philadelphia after receiving a B.S. in Chemistry from Temple University. Her research group develops sustainable catalytic processes using an interdisciplinary toolset from chemistry, materials and chemical engineering. Dr. Abdul-Aziz is a 2021 Scialog Negative Emissions Science and National Academy Frontiers of Engineering fellow. She was recently awarded a 2022 NSF Career Award in developing specialized catalysts for CO2 capture and utilization.



Jieyu Zhao is a postdoctoral research at UMD, working together with Prof. Hal Daumé III. She obtained her PhD from the department of Computer Science at UCLA where she was advised by Prof. Kai-Wei Chang. Her research interest lies in fairness of ML/NLP models. Her paper got the EMNLP Best Long Paper Award (2017). She was one of the recipients of 2020 Microsoft PhD Fellowship and has been selected to participate in 2021 Rising Stars in EECS workshop. Her research has been covered by news media such as Wires, The Daily Mail and so on. She was invited by UN-WOMEN Beijing on a panel discussion about gender equality and social responsibility. More detail can be found at https://jyzhao.net/.



Caroline Seyler will join the Department of Earth Sciences at USC in January 2024. She received her Ph.D. in Earth Sciences from McGill University in 2021 and has since been a postdoc at the University of Texas and an NSF postdoctoral fellow at the University of Minnesota. She is interested in the deformation of rocks at tectonic plate boundaries from earthquakes to ductile flow. Her work focuses on the rheology of faults and shear zones using a combination of field, experimental and microanalytical methods to determine how deformation mechanisms operating at the atomic scale control plate tectonics and influence seismic hazard.

WiSE Financial Awards

The WiSE Program has adhered closely to the original structure of funds allocation outlined by the 2000 WiSE Task Force: \$500k for Recruitment/Retention; \$100k for Undergraduate Research; \$250k for PhD Student and Postdoctoral Support; and the remaining funds to support new additional programs. Actual distribution of funds may vary slightly each year depending on the return of investment income on the WiSE endowment and on the number of candidates who accept WiSE awards.

WiSE Gabilan Assistant Professorships

During the 2021-2022 academic year WiSE awarded WiSE Gabilan Assistant Professorships to one (renewal) current faculty member and seven incoming faculty members.

- Vera Gluscevic | Physics and Astronomy | USC Dornsife (renewal)
- **Kelly Luo** | Physics and Astronomy | USC Dornsife
- Lauren McElvain | Biological Sciences (NEUR) | USC Dornsife
- Julia Schwartzman | Biological Sciences (MEB) | USC Dornsife
- Noelle Held | Biological Sciences (MEB) | USC Dornsife
- Neda Maghsoodi | Aerospace and Mechanical Engineering | USC Viterbi
- Jieyu Zhao | Computer Science | USC Viterbi
- Kandis Leslie Abdul-Aziz | Civil and Environmental Engineering | USC Viterbi

Formal Program Awards

Program	Number of Awards
Faculty Recruitment / Faculty Retention	21
Major Support for Current Faculty	1
WiSE Gabilan Assistant Professorship	8
WiSE Gabilan Distinguished Professorship	0
Lloyd Armstrong, Jr. Chair	1
Support for Facilitating Diversity in Faculty Searches	3
Faculty Bridge Funding	1
Supplemental Faculty Support	23
Merit Award for Excellence in Postdoctoral Research	1
Graduate Top-Off Awards	10
Merit Fellowships for Current PhD	8
Travel Grants	43
Undergraduate Research Grants	30
Child Care Subsidies (including temporary program expansion awards)	10
Support for Faculty Pregnancy, Childbirth, and Adoption	0
Support for PhD and Postdoc Pregnancy, Childbirth, and Adoption	0
WiSE Leadership Award for Students and Postdoctoral Scholars	2
WiSE Architects for Enduring Change Award	0

Total Program Awards:

Appendix 1:

Current WiSE Faculty, Tenured and Tenure-Track (Including New Hires)

USC Dornsife College of Letters, Arts & Sciences

Life Sciences

Sarah Bottjer Professor Biological Sciences (Neuro)

Liang Chen Professor Quantitative and Computational Biology

Suzanne Edmands Professor Biological Sciences (MEB)

Carol Folt Professor & President Biological Sciences

Susan Forsburg Professor Biological Sciences (MCB) Judith Hirsch Professor Biological Sciences (Neuro) **Emily Liman** Professor Biological Sciences (Neuro) Professor Jill McNitt-Gray Biological Sciences (HEB) Lorraine Turcotte Professor Biological Sciences (HEB) Irene Chiolo Associate Professor Biological Sciences (MCB) Naomi Levine Associate Professor Biological Sciences (MEB) Carolyn Phillips Associate Professor Biological Sciences (MCB) Wiebke Ziebis Associate Professor Biological Sciences (MEB) Noelle Held Assistant Professor Biological Sciences (MEB) Assistant Professor Carly Kenkel Biological Sciences (MEB) Assistant Professor Laura Melissa Guzman Biological Sciences (MEB) Lauren McElvain Assistant Professor Biological Sciences (Neuro)

Jazlyn Mooney Assistant Professor Quantitative and Computational Biology

Lindsey Schier Assistant Professor Biological Sciences (HEB)
Julia Schwartzman Assistant Professor Biological Sciences (MEB)

Physical Sciences / Mathematics

Professor Earth Sciences Sarah Feakins Susan Friedlander Professor **Mathematics** Professor Heidi Houston Earth Sciences Professor Juhi Jang Mathematics Professor Anna Krylov Chemistry Karen Loyd Professor Earth Sciences

Jia Grace Lu Professor Physics and Astronomy
Amber Miller Professor & Dean Physics and Astronomy

Susan Montgomery Professor Mathematics

Elena Pierpaoli Professor Physics and Astronomy

Hanna Reisler Professor Chemistry
Sami Assaf Associate Professor Mathematics

Physical Sciences / Mathematics (continued)

Rosa di Felice Associate Professor Physics and Astronomy

Smaranda Marinescu Associate Professor Chemistry
Greta Panova Associate Professor Mathematics
Emily Cooperdock Assistant Professor Earth Sciences
Megan Fieser Assistant Professor Chemistry

Vera Gluscevic Assistant Professor Physics and Astronomy Kelly Luo Assistant Professor Physics and Astronomy

Caroline Seyler Assistant Professor Earth Sciences
Kate White Assistant Professor Chemistry

USC Viterbi School of Engineering

Andrea Armani Professor Chemical Engineering and Materials Science

Burcin Becerik-Gerber Professor Civil and Environmental Engineering
Amy Childress Professor Civil and Environmental Engineering

Leana Golubchik Professor Computer Science

Malancha Gupta Professor Chemical Engineering and Materials Science

Julie Higle Professor Industrial and Systems Engineering

Andrea Hodge Professor Chemical Engineering and Materials Science
Eva Kanso Professor Aerospace and Mechanical Engineering
Mercedeh Khajavikhan Professor Electrical & Computer Engineering

Yan Liu Professor Computer Science
Maja Matarić Professor Computer Science
Ellis Meng Professor Biomedical Engineering

Urbashi Mitra Professor Electrical and Computer Engineering
Mahta Moghaddam Professor Electrical and Computer Engineering
Alice Parker Professor Electrical and Computer Engineering
Michelle Povinelli Professor Electrical and Computer Engineering

Bistra Dilkina Associate Professor Computer Science
Eun Ji Chung Associate Professor Biomedical Engineering
Stacey Finley Associate Professor Biomedical Engineering
Megan McCain Associate Professor Biomedical Engineering

Kelly Sanders Associate Professor Civil and Environmental Engineering
Maryam Shanechi Associate Professor Electrical and Computer Engineering

Katherine Shing Associate Professor Chemical Engineering and Materials Science

Victoria Stodden Associate Professor Industrial and Systems Engineering
Kandis Leslie Abdul-Aziz Assistant Professor Civil and Environmental Engineering
Ananya Renuka Balakrishna Assistant Professor Aerospace and Mechanical Engineering
Theodora Chaspari Assistant Professor Electrical and Computer Engineering

USC Viterbi School of Engineering (continued)

Souti Chattopadhyay Assistant Professor Computer Science Heather Culbertson Assistant Professor Computer Science

Assistant Professor Aerospace and Mechanical Engineering Neda Maghsoodi

Maral Mousavi Assistant Professor Biomedical Engineering

Audrey Olivier Assistant Professor Civil and Environmental Engineering Feifei Qian Assistant Professor Electrical and Computer Engineering

Shaama Sharada Assistant Professor Chemical Engineering and Materials Science

Sze-Chuan Suen Assistant Professor Industrial and Systems Engineering

Swabha Swayamdipta Assistant Professor Computer Science

Jennifer Treweek Assistant Professor Biomedical Engineering

Assistant Professor Alejandra Uranga Aerospace and Mechanical Engineering Assistant Professor Phebe Vayanos Industrial and Systems Engineering

Weihang Wang Assistant Professor Computer Science

Renyuan Xu Assistant Professor Industrial and Systems Engineering Assistant Professor Mengjie Yu Electrical and Computer Engineering

Assistant Professor Cristina Zavaleta Biomedical Engineering

Assistant Professor Jieyu Zhao Computer Science

Appendix 2:

Faculty Candidates Interviewed Via Zoom

As in previous years, WiSE leadership offered to meet with faculty candidates, both to communicate information about the WiSE Program and resources and to provide opportunities for candidates to ask questions about USC and work-family issues that they might not feel comfortable discussing as part of their formal interview process. Departments continued to take advantage of this offer and senior WiSE faculty met with 42 faculty candidates over the course of 2021-2022. The list of candidates is below:

Industrial and Systems Engineering	1/19/2022
Industrial and Systems Engineering	1/21/2022
Physics and Astronomy	1/12/2022
Civil and Environmental Engineering	2/3/2022
Physics and Astronomy	2/4/2022
Earth Sciences	2/8/2022
Chemical Engineering and Materials Science	2/9/2022
Biological Sciences (MEB)	2/15/2022
Earth Sciences	2/16/2022
Civil and Environmental Engineering	2/17/2022
Biological Sciences (MEB)	2/18/2022
Biological Sciences (MEB)	2/21/2022
Aerospace and Mechanical Engineering	2/24/2022
Computer Science	3/1/2022
Aerospace and Mechanical Engineering	3/1/2022
Earth Sciences	3/4/2022
Biological Sciences (NEUR)	3/7/2022
Computer Science	3/8/2022
Chemical Engineering and Materials Science	3/8/2022
Physics and Astronomy	3/10/2022
Chemical Engineering and Materials Science	3/10/2022
Biological Sciences (NEUR)	3/16/2022
Chemical Engineering and Materials Science	3/17/2022
Electrical and Computer Engineering	3/18/2022
Computer Science	3/18/2022
Computer Science	3/22/2022
Computer Science	3/22/2022
Computer Science	3/24/2022
Aerospace and Mechanical Engineering	3/24/2022
	Industrial and Systems Engineering Physics and Astronomy Civil and Environmental Engineering Physics and Astronomy Earth Sciences Chemical Engineering and Materials Science Biological Sciences (MEB) Earth Sciences Civil and Environmental Engineering Biological Sciences (MEB) Biological Sciences (MEB) Biological Sciences (MEB) Aerospace and Mechanical Engineering Computer Science Aerospace and Mechanical Engineering Earth Sciences Biological Sciences (NEUR) Computer Science Chemical Engineering and Materials Science Physics and Astronomy Chemical Engineering and Materials Science Biological Sciences (NEUR) Chemical Engineering and Materials Science Electrical and Computer Engineering Computer Science Computer Science Computer Science Computer Science

Aishwarya Ganesan	Computer Science	3/28/2022
Souti Chattopadhyay	Computer Science	3/28/2022
Roopsha Samanta	Computer Science	3/29/2022
Julie Rorrer	Chemical Engineering and Materials Science	3/29/2022
Lingjie Liu	Computer Science	3/29/2022
Weihang Wang	Computer Science	3/31/2022
Divya Mahajan	Electrical and Computer Engineering	4/1/2022
Kimberley Ingraham	Aerospace and Mechanical Engineering	4/5/2022
Suguman Bansal	Computer Science	4/5/2022
Priya Donti	Computer Science	4/8/2022
Theodora Chaspari	Electrical and Computer Engineering	4/11/2022
Beidi Chen	Computer Science	4/15/2022
Irene Dedoussi	Aerospace and Mechanical Engineering	4/19/2022

Appendix 3: Samples of WiSE Events Flyers



WISE ALUMNI LECTURE SERIES

Friday, September 17 9:00 - 10:00 am PDT Zoom Webinar

Blithe Rocher and Olivia Evanson will share their career path and what has helped them persevere over time.



BLITHE ROCHER

Blithe is a software engineering manager at Google. She leads engineering teams to help people get the answers they need from their data at Looker. Prior to becoming a developer, she received a PhD in physical chemistry from the University of Southern California.



OLIVIA EVANSON

Olivia completed her MS in Operations Research Engineering and PhD in Industrial and Systems Engineering at USC Viterbi (2015–2019). During her time at USC, she worked with Dr. Shinyi Wu in the Health Systems Engineering Lab. Olivia's research focused on analyzing newer care models designed to help treat patients with chronic conditions. After graduating, she began working at Boston Scientific in their Neuromodulation division as a product manager on the digital health team. Her job involves leading mobile app development teams to provide companion apps to patients during their treatment journey.

Register Here:
tinyurl.com/WiSERocherEvanson

WISE ALUMNI LECTURE SERIES



ROXANNA PAKKAR

Friday, February 25 12:00 - 1:00 pm PST Zoom Webinar

Finding Your Place in the Workspace

Roxanna is a proud 2-time Trojan alumna working in the Aerospace industry. She joined the Aerospace Corporation in 2020 after receiving her B.S. in Electrical Engineering from USC, and she recently completed her M.S. in Electrical Engineering at USC in December 2021. At the Aerospace Corporation, Roxanna works in the Embedded Control Systems Department where she works on a number of projects such as flight software development for satellite systems, launch support for Space X and ULA launch vehicles, and has been leading the development of a new robotics lab. She is also currently supporting the NASA JPL mission, Psyche. At USC, Roxanna worked in Dr. Maja Mataric's Interaction Lab, interned at NASA JPL and Microsoft, and was a counselor in Troy Camp.

> Register Here: tinyurl.com/WiSERoxannaPakkar

The USC WiSE Burg Communicating Science Program presents

Improve Your Odds of Winning a National STEM Fellowship



Wednesday, October 6 4:30 - 5:30 pm PDT Zoom Register here: tinyurl.com/WiSEPowell

Do you want to apply for a National STEM Fellowship for graduate school, but you're not sure where to start? Join us to learn how to create an application package that will stand out from the crowd and highlight your strengths. Led by Dr. James Powell, Executive Director of Graduate Fellowships for STEM Diversity.

Dr. Powell has a Ph.D. in Geochemistry from MIT. He served as Acting President of Oberlin College, President of Franklin and Marshall College, President of Reed College, President of Franklin Institute Science Museum in Philadelphia and President and Director of the Los Angeles County Museum of Natural History. Presidents Ronald Reagan and George H.W. Bush appointed him to the National Science Board, where he served for 12 years.



STEM Bytes Seminar

Thursday, November 4 3:00 - 4:00 pm PDT



Pahlavanneshan



Floback

Talks:

Developing a 3D Biomimetic Metastatic Liver Niche Model for Pancreatic Cancer Mahsa Pahlavanneshan, PhD Student in **Biomedical Engineering**

Rare earth element distributions in the Arabian Sea reveal the influence of redox processes within the oxygen deficient zone Alexis Floback, PhD Student in Marine and **Environmental Biology**



STEM Bytes Seminar

Wednesday, February 23 4:00 - 5:00 pm PST



Anahi Carrera



Hanieh Hashemi

Talks:

Rising from the Ocean: Testing Possible Mechanisms for the Uplift and Erosion of the Aleutian Islands Using (U-Th)/He Thermochronology Anahi Carrera, PhD Candidate in Earth Sciences

Data Privacy in Deep Learning Hanieh Hashemi, PhD Candidate in Electrical and Computer Engineering



Appendix 4:

WiSE Corporate Partnership Programming Summaries

Fall 2021: Professional Development Programming

Female Founders: Beyond the Glass Ceiling September 15

This webinar will explore the journeys of trailblazing women who are bridging the gender gap in business and entrepreneurship with their amazing work. We will hear about their triumphs as well as the challenges they faced along the way and learn what motivates them to keep going. We hope this discussion will inspire our audience to overcome their own hurdles and inhibitions as we advance towards a diverse and balanced future, together.

Panelists:

Chorom Pak, CEO and Co-founder of LynxBio Oriana Papin-Zoghbi, CEO and Co-founder of AOA Jennifer Rohrs, Co-Founder, Biosystems Modeling and Analytics Engineer at Embody Biosciences Sally Wang, VP of Business Development at PepLib; former CEO, Co-founder of DocFlight

Conflict Management Workshop with USC Ombud, Dr. Kathie Greenwood October 19

Conflict happens, but, luckily, conflict management is a skill that can be developed. By learning to adroitly address organizational and interpersonal conflict, you can, over time, improve team dynamics and strengthen your professional standing. An important first step is to recognize the warning signs of conflict and to understand your personal conflict style. We will further explore different approaches to handling conflict, typical conflict triggers, and communication techniques that can be used to deescalate conflict and to promote discourse.

Acing Your Non-Academic Job Interview November 3

In this hands on workshop, you will learn how to ace the ever-important interview topic of, "Tell me about yourself." Each participant will leave with the confidence and skills to effectively answer this question and more. This workshop will be led by Dr. Glenn Fox from the USC Marshall School of Business. Glenn is at the forefront of research on gratitude and human performance. Glenn teaches "The Science of Peak Performance" during the Spring Semester, leads trainings with leaders and groups, and conducts research on mindset and physiology.



Spring 2022: Professional Development Programming

Proposal Writing with Dr. Heidi Smith Parker February 10

An informal discussion of graduate and postdoc fellowships. What makes a good grant proposal? In so few pages, how you can successfully tell the reviewers about yourself and your research plan? How is proposal writing different than manuscript writing? Learn about these questions and more from the Dornsife Grant Consultant.

The Performing Art of Science Presentation April 7

When giving presentations, many STEM research scientists focus solely on the subject matter and leave the quality of their speaking to chance. This workshop will offer some specific skills to become a more engaging and memorable speaker, whether at a professional conference, public event, job talk, or in the classroom. The workshop will begin with a short conversation about important elements: connection to the audience, purpose, physical and vocal presence, best use of PowerPoint, and stories and metaphors. Several participants will have the opportunity to present, receive personal coaching in a guided rehearsal, and demonstrate for the group how a few changes can immediately improve communication of their research.

Led by Nancy Houfek. Nancy was Head of Voice and Speech for the Tony Award winning American Repertory Theater at Harvard from 1997 to 2014, teaching vocal production, coaching the professional acting company, and administering the MFA program in voice training pedagogy.



Appendix 5:

WiSE Undergraduate Researcher Mini Symposium

WiSE Undergraduate Summer Research Mini Symposium



Friday, August 5, 2022 9:00 - 11:30 am

Schedule

9:00 - 9:05	Introductory Remarks
9:05 - 9:20	Alayne Morrel
7.03 7.20	Professor Maral Mousavi
9:20 - 9:35	Sofija Radulovic
	Professor Daniel McCurry
9:35 - 9:50	Shreya Agrawal
	Professor Julien Emile-Geay
9:50 - 10:05	Mengdi Chai
	Professor Jazlyn Mooney
10:05 - 10:15	Break
10:15 - 10:30	Aditi Jagannathan
	Professor Sarah Bottjer
10:30 - 10:45	Nettie Serena Ndjuissi Pawa
	Professor Andrew Gracey
10:45 - 11:00	Wanqing Pan
	Professor Adam MacLean
11:00 - 11:15	Mel Persell
	Professor Suzanne Edmands
11:15 - 11:30	Closing Remarks

Understanding Cholinergic Signaling in Alzheimer's Disease; Designing a Neural Probe for In-Vivo Recording of Acetylcholine

Alayne Morrel, Shahd Bawarith, Farbod Amirghasemi, Maral Mousavi

Alzheimer's disease (AD) is the most common form of dementia and the 6th leading cause of death in the US. The primary characteristic of AD is the accumulation of amyloid proteins to create neurofibrillary tangles that disrupt the neural network. Cholinergic signaling of acetylcholine (ACh), a neurotransmitter responsible for learning and memory, is also affected. As such, monitoring and understanding changes in ACh concentration in the brain and how it degrades will lead to a better understanding of AD and relevant therapeutic interventions, which are often cholinergic drugs. This project aims not only to develop a reliable ACh sensor, but one that is physiologically selective and sensitive to function in an animal model. We created a yarn-based electrochemical probe that detects ACh at physiological range of concentrations from 10mM to 0.1uM, significantly selecting AChCl over other similar ions such as ChCl, NaCl, and KCl all while retaining a quick response time. We aim to further improve the spatial resolution by nanopatterning conductive carbon fiber and developing a reference electrode to complete the potentiometric circuit. Finally, we will conduct in vivo studies on brain homogenate and mouse models before attempting to embed these electrodes in microfluidic devices for brain-on-a-chip applications for cholinesterase inhibitor drug screening and real-time drug interaction.

Development of Headspace GC-MS/MS Method for Simultaneous Determination of Trihalomethanes and Haloacetic Acids

Sofija Radulovic, Marella H. Schammel, Xinle (Grace) Yao, Keith P. Reber, John D. Sivey, Daniel L. McCurry

Over 700 compounds have been identified as byproducts formed during water disinfection; however, only 11 classes of compounds are currently regulated by the EPA. The most commonly detected classes of disinfection byproducts are haloacetic acids (HAAs) and trihalomethanes (THMs). Due to regulatory requirements, accurate and efficient quantification of THMs and HAAs is of great concern to water treatment plants. THMs can be readily measured via gas chromatography mass spectrometry (GC-MS), but HAAs require an additional derivatization step to their methyl ester form prior to analysis. The EPA recommended derivatization method is time intensive and alternative methods have been proposed. Previous research has been conducted to develop a quick method for simultaneous derivatization and extraction of HAAs via headspace gas chromatography. Further work has been conducted to create a method to measure both THMs and HAAs. The proposed method, however, does not consider the possibility of artificial THM formation via decarboxylation of HAAs. This work seeks to develop a headspace GC-MS method to accurately and simultaneously quantify THMs and HAAs in source waters. Previously proposed methods were replicated to demonstrate artificial formation of THMs and ongoing work is being conducted to further optimize the headspace GC-MS method to minimize decarboxylation (and potential hydrolysis) of HAAs.

Using Data from Corals to Strengthen Current Paleoclimate Records

Shreya Agrawal, Julien Emile-Geay

Most instrumental records of Earth's climate only stretch back to about CE 1850. For paleoclimate evidence, research relies on documentary evidence of past climate events, which comes from natural archives like tree rings, corals, ice cores, lake and marine sediment cores, and others. Such paleoclimate "proxies" provide indirect evidence of climate fluctuations in the pre-instrumental era, some with nearly monthly sampling. This research project leverages such records to reconstruct climate conditions over the past 2,000 years using a technique called paleoclimate data assimilation. The Last Millennium Reanalysis (LMR) fuses information from such proxies and the output of physically-based climate models. Recent efforts have assembled a larger collection of coral datasets that could be leveraged to augment the published LMR dataset. We apply the LMR framework to these two data sources (CoralHydro2k, early instrumental data) to better characterize the climate of the early 19th century through a Climate Field Reconstruction. Assimilation of paleoclimate data through LMR will strengthen our understanding of past climate variability as well as our predictions of future climatic patterns. We assess similarities and differences between the information provided by those two independent sources and use instrumental data to help validate the proxy-based LMR.

Identifying Genes Associated with Coat Color in Tigers

Mengdi Chai, Jazlyn Mooney

Seeing a snow-white coat in tigers is a very rare occurrence. Previous work has hypothesized that the snow-white coat is a result of multiple recessive loci, SLC45A2 and CORIN. However, recent work identified an individual that is heterozygous at one of these loci, suggesting a more complex genotype to phenotype relationship. Thus, the goal of our work is to identify candidate regions for coat color genes by utilizing shared genomic segments between parent-offspring trios. We focus specifically on a parent-offspring trio where the mother (Zhara) and offspring (Kylo) are white with stripes, and the father (Assad) is snow white. By intersecting shared identity-by-descent (IDB) segments and runs of homozygosity (ROH) we identified 20 genomic regions that overlap seven loci potential candidate loci. One of these candidate loci, TRIM8, has previously been shown to be associated with coat color in cattle. We believe this loci may be responsible for coat color in tigers as well and requires further functional validation.

Investing Basal Ganglia Pathways that Mediate Vocal Learning in Songbirds

Aditi Jagannathan, Mira Nigudkar, Sarah Bottjer

Vocal learning in songbirds provides a powerful experimental model for motor skill learning, a term that refers to the acquisition of a stereotyped behavior through the refinement of variable actions. The neural pathways that mediate vocal learning are localized in two parallel circuits that traverse the cortical region LMAN, the basal ganglia, and the thalamus. The basal ganglia are known to have both a "direct" and an "indirect" pathway to the thalamus that are thought to have different roles in motor cognition and performance. "Direct" neurons send projections directly to the thalamus, whereas "indirect" neurons send projections onto the thalamus-projecting neurons. The direct pathway may be associated with positive reinforcement of behavior since it increases the activity of thalamic neurons while the indirect pathway inhibits thalamic activity. This study focused on a region of the basal ganglia essential for song learning called Area X. We used neuroanatomical and immunohistochemical techniques to identify "direct" neurons in Area X with one fluorescent label and expression of the transcription factor FoxP2 using a different fluorescent label. FoxP2 plays an important role in human language development, with mutations leading to speech disorders such as childhood apraxia. Knockdown of the FoxP2 protein in Area X of juvenile songbirds has also been shown to impair vocal learning. Based on previous research, we predicted that "direct" neurons that send a projection to the thalamus would not express FoxP2. Our initial results support this hypothesis: FoxP2-positive neurons in Area X do not project to the thalamus, indicating different subpopulations of neurons that likely correspond to a direct and indirect pathway. Future studies will test how these distinct pathways mediate different functions during the song learning process in juvenile songbirds.

Determination of Cytoplasmic Viscosity Trends using Thermal Adaptation in C. elegans

Nettie Serena Ndjuissi Pawa, Andrew Gracey

In U.S adults 65 years+, the rate of chronic diseases is as high as 73.% and is projected to rise with life expectancies. Because aging has been identified as a genetically hereditary, mediated, and shapeable trait, organisms with conserved evolutionary pathways such as Caenorhabditis elegans are ideal to observe. The goal of this experiment is to establish the role of cytoplasmic viscosity adaptation in Caenorhabditis elegans' thermal tolerance, therefore, the expression of the genes relating to homeoviscous response of nematodes using genetic tools with aging. During a 'homeoviscous response', organisms adapt lipid composition of their membrane to adjust to the existing environmental temperature, therefore matching the fluidity of the membrane at that temperature and thus its aging process. The role of this process in an organism's thermal adaptation was previously unexplored and its implications deepen the understanding of human aging and co-morbidities through conserved evolutionary pathways. Previous research on cytoplasmic viscosity with aging has been done on other organisms in research papers such Yeast As A Tool to Identify Anti-Aging Compounds, and Nanoscale Viscosity of Cytoplasm Is Conserved in Human Cell Lines. This experiment explores the correlation between cytoplasmic viscosity adaptation and aging by measuring the thermal tolerance of Caenorhabditis elegans against a constant cold environment. Our results showed a negative correlation between the percentage of survival in cold challenged regular strand N2 Caenorhabditis elegans and time, suggesting that their viscosity of the cytoplasm decreases. The change in thermal tolerance of continuously challenged cold tolerant worms over multiple generations shows that thermal tolerance at cold temperatures is also a product of genetic adaptation.

Investigating How Differentiation of Myeloid-Derived Suppressor Cells are Altered in Cancer

Wanqing Pan, Jesse Kreger, Adam MacLean

Myeloid-derived suppressor cells (MDSCs) are pathologically activated neutrophils and monocytes (subtypes of immune cells) with immunosuppressive activity. They are implicated in the regulation of immune responses in many pathological conditions and are closely associated with poor clinical outcomes in cancer. Recent studies have indicated key distinctions between these MDSCs and classical neutrophils and monocytes. Amongst other pathologically activated microenvironments, long-term intensive production of cytokines, chemokines and growth factors by cancer and stroma creates a tumor microenvironment that induce the formation of MDSCs. MDSCs can not only inhibit anti-tumor immune reactions but also directly stimulate tumor growth and metastasis. Therefore, understanding the mechanisms of their generation, differentiation, and activation based on environmental cues is required for the development of novel strategies for tumor therapeutics. A small-scale mathematical model was proposed based on ordinary differential equations (ODE) to describe cell differentiation of myeloid c origin in healthy versus tumor microenvironments. The model has initially investigated the differentiation pathways from MDSC's progenitor hematopoietic stem cell (HSC), to granulocyte-monocyte progenitor cell (GMP), to monocytic (M-MDSC) and polymorphonuclear myeloid-derived suppressor cells(PMN-MDSC). I analyzed the 4 populations' proposed model's fixed points and stable states, possibility of oscillations and bifurcations that represent conditions of the system that induce stability, direction, and diversion in cell lineage. Based on initial results, cancer alters myeloid-derived cellular differentiation by significantly increasing the rate of polynuclear myeloid cells deriving from progenitors of the mononuclear cellular lineage instead of the regular granular progenitor cells. As the model is being further developed and refined with increased databases, future studies will improve upon the biological accuracy of the mathematical model and test how different cancers provide different computational context for the model, and how the myeloid-derived cellular differentiation pathways are influenced by the context.

Effects of Dietary Restriction in Early Life on Survivorship of Tigriopus Californicus

Mel Persell, Suzanne Edmands

Dietary restriction (DR) is thought to increase lifespan in many organisms. Under the disposable soma theory, in reduced food conditions, there is a tradeoff between survival and reproduction. This was a pilot study over the summer that examined Tigriopus californicus, a copepod (zooplanktonic crustacean), as a model organism to explore ideal and lethal food concentrations. This information will allow for larger studies on survivorship and reproductive success, using concentrations determined in this pilot study. Copepods are a good model organism because they are easily and affordably raised under laboratory conditions. Their lack of sex chromosomes, which can produce sex specific mitochondrial effects, allows the sex differences in aging and dietary restriction to be studied while controlling for mitochondrial influence. Preliminarily, a lower threshold for food was determined which will be used in subsequent studies. In the coming weeks, two studies will stem from the results of this pilot study, one an expansion on DR and lifespan, the other an examination of DR's impacts on reproduction. This data will also allow for a more complex study to study dietary restriction and mitochondrial effects, controlling with mitotypes. This information on dietary restriction and lifespan would be applicable to many other organisms, including humans.

Appendix 6:

WiSE Undergraduate Research and Professional Program Events



WISE UNDERGRADUATE PROFESSIONAL **PROGRAMMING**

FALL 2021

DATE	EVENT	TIME L	OCATION
Tuesday, August 24	Introduction and Ice Breakers	2 - 3 pm PDT	Outside DRB
Wednesday, September 1	WiSE Alumni Talk: Joycelyn Yip	3 - 4 pm PDT	Zoom
Thursday, September 9	Career Centers	10 - 11 am PDT	DRB 232
Friday, September 17	Alumni Talk: Blithe Rocher & Olivia Evanson	9 - 10 am PDT	Zoom
Tuesday, September 21	Preparing Resume Workshop	1 - 2 pm PDT	Outside DRB
Monday, October 4	Alumni Talk: Carolina Amador	3 - 4 pm PDT	Zoom
Thursday, October 21	Preparing for an Interview	2 - 3 pm PDT	Outside DRB
Wednesday, October 27	Alumni Talk: Ahuva Weltman Hirschberg	12 - 1 pm PDT	Zoom
Tuesday, November 2	Practice Interview Event	1 - 3 pm PDT	TBD
Tuesday, November 9	Alumni Talk: Diya Dwarakanath	6 - 7 pm PDT	Zoom
Wednesday, November 17	Alumni Talk: Heidi Tu & Luann Raposo	12 - 1 pm PDT	Zoom
Thursday, December 2	Identifying Summer Opportunities	10 - 11 am PDT	Outside DRB

This programming is for the Fellows in the WiSE Undergraduate **Professional Program** for Fall 2021.

You may register for the Alumni Talks in advance by visiting: linktr.ee/uscwise

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WISE UNDERGRADUATE PROFESSIONAL **PROGRAMMING**

SPRING 2022

DATE	EVENT	TIME	LOCATION
Tuesday, January 25	Welcome Event	9:30-10:30 am PST	Zoom
Friday, February 4	Academic Honors and Fellowships	2:30-3:30 pm PST	Zoom
Wednesday, February 9	Alumni Talk	1-2 pm PST	Zoom
Friday, February 18	Sciences and Engineering Librarians	10-11 am PST	Zoom
Friday, February 25	Alumni Talk	12-1 pm PST	Zoom
February 28- March 4 (TBD)	Personal Statement Workshop	TBD	TBD
Tuesday, March 8	Alumni Talk	9:30-10:30 am PST	Zoom
Monday, March 21	How to Dress for Success	2:30-3:30 pm PDT	TBD
Friday, April 1	Alumni Talk	12-1 pm PDT	Zoom
Tuesday, April 5	Interview Prep	9:30-10:30 am PDT	TBD
Wednesday, April 13	Alumni Talk	1-2 pm PDT	Zoom
Friday, April 22	90-minute Interview Event	TBD	TBD
Monday, April 25	Semester Wrap-Up	4-5 pm PDT	TBD

This programming is for the Fellows in the WiSE Undergraduate **Professional Program** for Spring 2022.

You may also register for the Alumni Talks in advance by visiting: linktr.ee/uscwise

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WISE UNDERGRADUATE RESEARCH **EXPERIENCE PROGRAMMING**

FALL 2021

DATE	EVENT	TIME	LOCATION		
Thursday, September 2	Welcoming Event	3 - 4 pm PDT	TBD	This programming is for the Fellows in the WiSE REU Program for Fall	
Thursday, September 9	STEM Bytes Seminar	3 - 4 pm PDT	Zoom	2021.	
Thursday, September 16	Program Meeting	3 - 4 pm PDT	TBD	You may register for STEM Bytes in advance by visiting:	
Thursday, September 23	STEM Bytes Seminar	3 - 4 pm PDT	Zoom	linktr.ee/uscwise	
Thursday, September 30	Program Meeting	3 - 4 pm PDT	TBD	FOLLOW US	
Thursday, October 7	STEM Bytes Seminar	3 - 4 pm PDT	Zoom	of y in	
Thursday, October 21	STEM Bytes Seminar	3 - 4 pm PDT	Zoom	@USCWISE	
Thursday, October 28	Program Meeting	3 - 4 pm PDT	TBD	CONTACT US	
Thursday, November 4	STEM Bytes Seminar	3 - 4 pm PDT	Zoom	Email: wiseprog@usc.edu	
Thursday, November 11	Program Meeting	3 - 4 pm PDT	TBD	Website:	
Thursday, November 18	STEM Bytes Seminar	3 - 4 pm PDT	Zoom	wise.usc.edu	
Thursday, December 2	End of Semester Social	3 - 4 pm PDT	TBD	USC University of Southern California	



WISE UNDERGRADUATE RESEARCH EXPERIENCE PROGRAMMING

SPRING 2022

DATE	EVENT	TIME	LOCATION
Monday, January 24	Welcome Event	3-4 pm PST	Zoom
Friday, February 4	Academic Honors and Fellowships	2:30-3:30 pm PST	Zoom
Monday, February 7	STEM Bytes Seminar	3-4 pm PST	Zoom
Friday, February 18	Sciences and Engineering Librarians Meeting	10-11 am PST	Zoom
Wednesday, February 23	STEM Bytes Seminar	4-5 pm PST	Zoom
Monday, February 28	Faculty Panel Research	3-4 pm PST	Zoom
Friday, March 11	Alumni Panel Research	10-11 am PST	Zoom
Wednesday, March 23	STEM Bytes Seminar	4-5 pm PDT	Zoom
Monday, March 28	STEM Bytes Seminar	3-4 pm PDT	Zoom
Monday, April 4	Conference Poster Presentation Tips	3-4 pm PDT	TBD
Friday, April 15	STEM Bytes Seminar	10-11 am PDT	Zoom
Friday, April 22	Final Event - Earth Day	10-11 am PDT	TBD

This programming is for the Fellows in the WiSE Undergraduate Research Experience Program for Spring 2022.

You may also register for STEM Bytes in advance by visiting: linktr.ee/uscwise

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