

4th Annual Life Science Research and Innovative STEM Education Symposium

Hosted by

UCSD Division of Extended Studies & Boz Life Science Research and Teaching Institute

February 16th | 5 p.m. – 9 p.m.

February 17th | 9 a.m. – 1 p.m.

Register today!

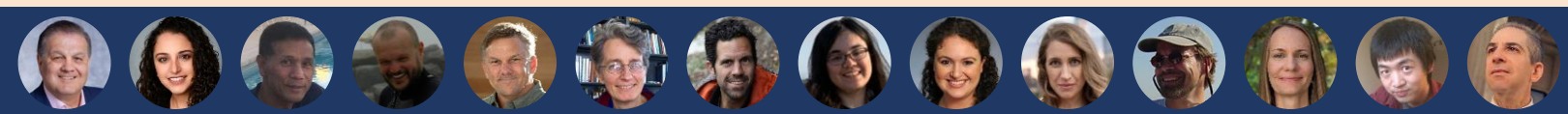
Location: UCSD Extension

6256 Greenwich Drive, San Diego, 92122



Presentations by accomplished academics, STEM educators, government and life science industry leaders, and young scholars; conversations about life science research and STEM innovation

Registration is free and open to the public



Friday, February 16th

5:00 p.m. – 5:10 p.m. Welcome from UCSD Division of Extended Studies Associate Dean, **Dr. Ed Abeyta**

5:10 p.m. – 5:25 p.m. **Maysoon Lehmeidi**, UCSD Division of Extended Studies: “The effects of pre-college research immersion programs on fostering interest in STEM”

5:30 p.m. – 5:45 p.m. **Ken Hirata**, Boz Institute: “Metagenomics and microbiology research immersion”

5:50 p.m. – 6:20 p.m. **Dr. Goran Bozinovic**, UCSD / Boz Institute: “Forging STEM future one research project at the time”

6:25 p.m. – 7:00 p.m. **Chris Stransky**, Aquatic Sciences & Toxicology Group at WSP USA: “Toxicity assessment of deep-sea sediments in the vicinity of DDT waste barrels off Catalina Island, Southern California”

7:05 p.m. – 7:45 p.m. **Dr. Marjorie F. Oleksiak**, University of Miami, FL: “Ecological, Physiological, and Genomics Networks: connecting the dots in a quickly changing environment”

7:45 p.m. – 8:00 p.m. Intermission

8:00 p.m. – 8:35 p.m. **Dr. Keith Lombardo**, National Park Service: “Creating the next generation of scientists and stewards – A Boz Institute & National Park Service collaboration”

8:40 p.m. – 9:10 p.m. **Flannery McLamb**, Boz Institute: “Sexually dimorphic transcriptome of *Drosophila melanogaster* young adult brains”

Saturday, February 17th

9:00 a.m. – 9:35 a.m. **Dr. Kari Sant**, SDSU: “Where rubber meets the road: How toxic are your tires?”

9:40 a.m. – 10:15 a.m. **Dr. Natalie Laub**, UCSD: “The acceleration of cannabis ingestions in young children and the relentless pursuit of policy reform”

10:20 a.m. – 11:00 a.m. **Dr. Douglas L. Crawford**, University of Miami, FL: “Can rapid evolutionary adaptation provide a future with global climate change?”

11:00 a.m. – 11:15 a.m. Intermission

11:15 a.m. – 11:55 a.m. **Dr. Annie Lindgren**, Portland State University: “Life in Extreme Environments: inhabitants of the oxygen minimum zone”

12:00 p.m. – 12:35 p.m. **Zuying Feng**, Boz Institute: “Spatial and temporal variations of environmental contaminants at the Tijuana River Estuary”

12:35 p.m. – 12:45 p.m. Closing Remarks from UCSD Division of Extended Studies Assistant Dean, **Dr. Morgan Appel**

Scan the QR code or click on the link below to register

https://docs.google.com/forms/d/e/1FAIpQLSfHggK9jhOcmSxK2JTSU7tNsInDuAKWDBPMpv_KjdDE_pgNzw/viewform?usp=sf_link



Edward Abeyta is the Associate Dean for Community Engagement and Director, Pre-Collegiate and Career Preparations Programs at UCSD Extension. Ed has a B.A. from the University of New Mexico, a M.A. from the University of San Diego and his Ph.D. in Post Secondary Adult Education from Capella University. He has been recognized from the UC Office of the President for his involvement in staff diversity and development initiatives and currently serves on the UC Diversity Commission, Post-retirement Task Force, and The Regents UC Commission on the Future.

Maysoon Lehmeidi (B.A. in Mathematics and Economics from UC San Diego, M.S. in Economics from Boston University) is a Program Manager at UCSD Extended Studies in the Education and Community Outreach Department; she oversees the development the Academic Connections, Research Scholars, and the Global Environmental Leadership and Sustainability education programs. She spearheaded Boz Institute's partnership with UCSD Ext. Studies to deliver the scientific research immersion program to pre-college students and will complete her Ed.D. at UCSD this spring.

Ken Hirata is a UCSD biochemistry / cell biology graduate and a former biomedical research lab manager at UCSD School of Medicine. He mentors University junior faculty, and medical, pharmacy, graduate, undergraduate, and high school students. Ken spent nine years mentoring 4th and 5th graders in an interactive after-school science program. He strives to build upon the Boz Institute community outreach and provide the critical thinking foundation and research experience for young students, cultivating their pursuit and sustainability in STEM career.

Goran Bozinovic (Ph.D. - NC State University; Oleksiak Lab) is interested in gene-environment interactions: how individuals and natural populations respond, cope, and adapt to stress. He teaches bioinformatics, genetics, and molecular biology laboratory courses at UCSD, serves as an Adjunct Assistant Professor at SDSU Graduate School of Public Health, and a research faculty at the Portland State University Center for Life in Extreme Environments. He founded the Boz Institute with his wife Liisa and three UCSD undergraduates in March 2019.

Chris Stransky (B.A. in Aquatic Science - UC Santa Barbara; MS in Ecology from SDSU) manages the Aquatic Sciences & Toxicology Group at WSP USA in San Diego. His experience and interest are toxicology and ecological risk assessment programs in support of regulatory compliance, developing and testing new innovative methods for monitoring, and characterizing the health of the biological communities in our local bays, harbors, and watersheds. Chris have been an active member of Society of Environmental Toxicology and Chemistry (SETAC) for over 25 years.

Marjorie Oleksiak is a professor in the Department of Marine Biology and Ecology at U of Miami, FL. She earned her B.A. from Wellesley College, BSBA and Ph.D. from MIT. Margie's research focuses on the importance of biological variation and how populations adapt to environmental change, addressing the fundamental importance of the variation among individuals and populations. The goal is to define the biological importance of this variation by interrogating genomic data using evolutionary analyses and quantitative measures of animal physiology.

Keith Lombardo (Ph.D. in Geography from the University of Arizona) is a Coastal Ecologist and the Director of the Southern California Research Learning Center (SCRLC), where he is charged with facilitating cross-cutting scientific partnerships, engaging the public in scientific exploration and communicating science that supports our stewardship of three uniquely southern Californian National Parks (Cabrillo National Monument, Santa Monica Mountains National Recreation Area and Channel Islands National Park). Keith's current research interests include topics such as coastal ecology, genetic conservation and ecosystem responses to climate change.

Flannery McLamb graduated UC San Diego with a major in general biology. Flannery manages bioinformatics and statistical analysis on various research projects at Boz Institute, helps develop our analytics curriculum, and manages the Boz Metagenomics and Transcriptomics database. Since joining Boz in 2020 at the undergraduate senior, she authored seven scientific manuscripts. Flannery will start a Ph.D. program in Biostatistics / data science this fall.

Kari Sant (MPH and Ph.D. - University of Michigan) is a toxicologist specializing in health consequences of developmental exposures to common water pollutants. She studies how exposures to endocrine disrupting chemicals (EDCs) affect embryonic and juvenile development and predispose to metabolic diseases such as diabetes and kidney dysfunction. She uses the zebrafish model to investigate how emerging surface and drinking water contaminants influence both human and marine reproduction and health throughout the lifespan. She serves as the Chair of the Gordon Research Conference on Cellular & Molecular Mechanisms of Toxicity; Kari is associate professor at SDSU Graduate School of Public Health, and the President of the Molecular and Systems Biology Specialty Section of the Society of Toxicology, and a coordinator for the Committee on Diversity Initiatives for SOT.

Natalie Laub (f/k/a Stavas) is an Assistant Professor of Pediatrics at UCSD and the Program Director for Child Abuse Pediatrics. When not providing patient care, Natalie focuses on research related to drug exposed children and equitable systems of care. She recently launched the Pear Center (www.pearcenter.org), a research center focused on pediatric advocacy, prevention, and health equity. Natalie's research mission is to utilize an evidence to action model promoting meaningful change and optimal health for children who have experienced adversity and/or maltreatment.

Douglas Crawford's academic interests are to understand the basic properties of adaptation (e.g., the importance of standing genetic variation, are many of loci involved in adaptation, are there conserved pathways to resolve specific selective pressures, etc.). This information provides insights into human health and diseases and how organisms will respond to global climate change. Doug is a professor in the Department of Marine Biology and ecology at U of Miami, FL. He earned his BA from U of Washington, M.S. from U of Kanas, and Ph.D. from John Hopkins U.

Annie Lindgren is a deep-sea biologist studying evolution, biogeography, taxonomy and systematics of cephalopods, with emphasis on deep sea squids. She has worked at Portland State University since 2011 as a researcher, professor, Director for the Center for Life in Extreme Environments and now as the Interim Associate Vice President for Research. She teaches marine science courses at PSU, including field courses where she takes students on research cruises to collect deep sea animals. Annie can often be found at the "Meet a Scientist" events or at a local school encouraging the next generation of STEM leaders.

Zuying Feng is a SDSU graduate (M.S. Environmental Health Sciences) studying mechanisms of aging. His interest stem from philosophy and psychology studies while completing biochemistry and cell biology degree at UCSD. Zuying's research focus is on the connection between reproduction and aging. He is one of the three Boz Institute student founders; as the researcher at Boz since 2019, Zuying authored ten science manuscripts.

Morgan Appel is Assistant Dean for Education and Community Outreach (ECO) at the Division of Extended Studies at UC San Diego, overseeing a diverse array of globally based programming for PK-post retirement, including opportunities for students, practitioners, administrators, parents, and community stakeholders in English and Spanish. He previously served as Director of Education Programs at UC Irvine's Division of Continuing Education (DCE) following a research appointment at the Claire Trevor School of the Arts at UC Irvine.