



ASU WISTEM'S

EmpowHER Summit

“A DIALOGUE ON STEM
INNOVATION & ADVANCEMENT”



APRIL. 05, 2024
MARSTON THEATER, ASU



SCHEDULE

Time	Event	Speakers
Session 1 : Research & Academia and The Path to Graduate School		
1:30 - 1:45	Welcome	Risha Das
1:45 - 2:15	How to Get Involved in Research at ASU Panel	Dr. Holechek, Dr. Haolin Zhu
Session 2: Advocacy, Politics, & Outreach- The Need for Intersectional Dialogue & Awareness for Women & Gender Minorities in STEM		
2:15 - 2:30	How Politics Play into STEM Talk	Risha Das
2:30 - 3:45	Intersection of Politics & Space	Ms. Lori Garver
	Intersectional Dialogue: Panel Discussion, via Zoom	Leah Kaplan Sam Campbell Lori Garver Thendral Kamal
3:45 - 4:30	Interdisciplinary Poster Session & Snack Break	
Session 3: Pursuing a Career in Industry		
4:30 - 4:45	Overview of careers in industry	Ulia Lopatin
4:45 - 5:15	Industry: Talk 1 (Passion), via Zoom	Dr. Diana Buist
5:15 - 5:45	Industry: Talk 2 (Leadership), via Zoom	Dr. Maddala
5:45 - 6:15	Industry: Talk 3 (Growth), via Zoom	Dr. Goddard
6:15 - 6:30	Closing Remarks	Risha Das



MEET YOUR
MODERATORS



RISHA DAS

PRESIDENT



Risha Das is a Brooke Owens Fellow and Flinn Scholar, double majoring in mechanical engineering and mathematics at ASU Barrett Honors College. Passionate about STEM research, Risha is simulating how mantle temperatures affect Mars' planetary development for her ASU/NASA Space project while designing a medical implant valve model to treat hydrocephalus for her Honors Thesis. Hand in hand, she has been President & Secretary General of the Model UN Team at ASU for three years. Winning numerous awards for her delegate performance at 10+ conferences to date, Risha believes in the power of reflecting on legal, ethical, and social consequences of engineering to reform policy and procure more inclusive spaces in STEM. Ultimately, Risha dreams of cross-applying the art of diplomacy and science to become an astronaut at the forefront of interdisciplinary exploration and equity.

ULIA LOPATIN

OUTREACH DIRECTOR



A senior majoring in Biological Sciences (Genetics, Cell, and Developmental Biology) and Neuroscience at ASU. She is also part of Barrett, the Honors College. After graduation, she will be attending the University of California, Irvine as part of the Cellular and Molecular Biosciences PhD program. As a PhD student, her goal is to investigate mechanisms of cancer immunotherapy resistance and contribute to the development and testing of novel therapy approaches to make a positive impact on cancer patient's lives.



PANEL I : RESEARCH &
ACADEMIA AND THE PATH TO
GRADUATE SCHOOL



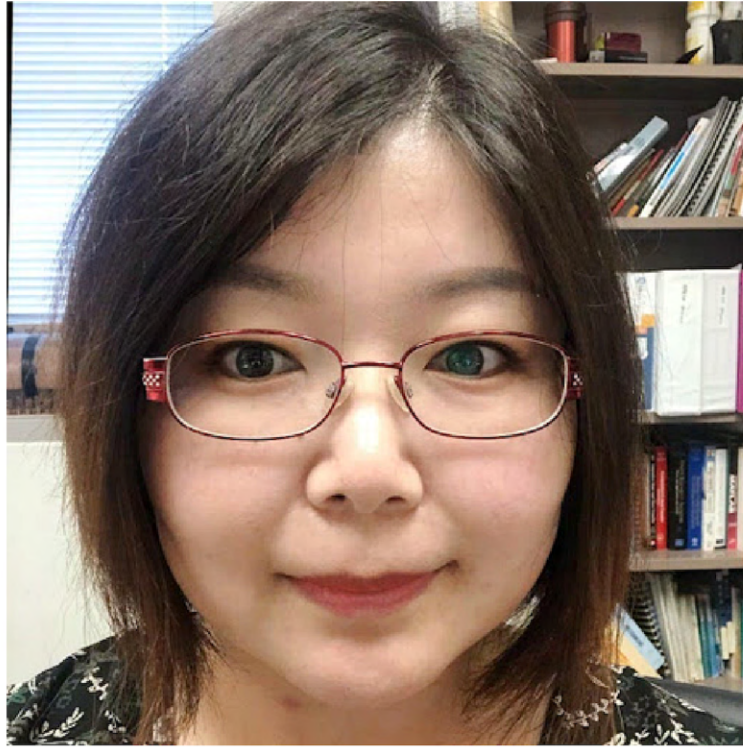


DR. SUSAN HOLECHEK



Dr. Susan Holechek is a Teaching Assistant Professor at the School of Life Sciences at Arizona State University with an affiliated appointment at the Simon A. Levin Mathematical, Modeling and Sciences Center. Following her undergraduate degree, she worked at the Molecular Biology Division of the Peruvian NIH studying dengue and was part of the response team for the first dengue outbreak with hemorrhagic cases in 2000. Her graduate research at Arizona State University involved the study of vaccinia virus pathogenesis and her post-doctoral research was focused on the role of the immune system in the modulation and transmission of infectious diseases using both experimental and mathematical modeling approaches. Her current research is at the intersection of population genetics and chronic diseases. Dr. Holechek has received numerous grants to expand her students research opportunities and has been honored with The Pat Tillman Veterans Center Honor Roll Award, Outstanding Faculty Mentor, the College of Liberal Arts and Sciences Outstanding Instructor Award and most recently with the Catalyst Award by the Arizona State University Committee for Campus Inclusion and the School of Life Sciences Teaching Excellence and Innovation Award. She is currently the Director of the School of Life Sciences Undergraduate Research (SOLUR) program and Lead Ambassador for the All of Us Research Program at ASU. Dr. Holechek also facilitates and promotes undergraduate research opportunities for both in-person and online students at Arizona State University

DR. HAOLIN ZHU



Dr. Haolin Zhu is an Associate Teaching Professor of the freshman engineering education team in the Ira A. Fulton Schools of Engineering at Arizona State University (ASU). In this role, she focuses on designing the curriculum and teaching in the freshman engineering program and the mechanical engineering program. She is also the Co-Director of the Grand Challenges Scholars Program (GCSP) at ASU. Dr. Zhu was also involved in the ASU ProMod project, the Engineering Projects in Community Service program, the Engineering Futures program, the Global Freshman Academy/Earned Admission/Universal Learner Courses Program, and the ASU Kern Project. Her Ph.D. research focuses on multi-scale multiphase modeling and numerical analysis of coupled large viscoelastic deformation and fluid transport in swelling porous materials, but she is currently interested in various topics in the field of engineering education. She has published over 30 papers and presented at various conferences about her work. She is recognized as an Engineering Unleashed Fellow and won the Fulton Outstanding Lecturer Award for her contributions in Engineering Education.



PANEL 2: ADVOCACY,
POLITICS, & OUTREACH- THE
NEED FOR INTERSECTIONAL
DIALOGUE & AWARENESS FOR
WOMEN & GENDER
MINORITIES IN STEM



LORI GARVER



Lori Garver is a renowned aerospace policy analyst, business executive & philanthropic founder, with experience leading innovative teams in government, non-profit and private sector organizations. Ms. Garver is a former Deputy Administrator of NASA, as nominated by President Barack Obama in 2009, along with Charles Bolden as NASA Administrator. Ms. Garver is the founder of Earthrise Alliance, an initiative to improve policy and technical solutions that utilize space data to address the climate crises. She is a Senior Fellow at the Belfer Center for Science and International Affairs at Harvard's Kennedy School, an Executive Residence at Bessemer Venture Partners, a Member of the Board of Hydrosat and an Advisory Board Member at World View. Garver co-founded the Brooke Owens Fellowship and serves on the selection committee of the Pritzker Environmental Genius Award. Her memoir, *Escaping Gravity: My Quest to Transform NASA and Launch a New Space Age*, was released on June 7, 2022

LEAH KAPLAN



Leah Kaplan is a PhD candidate in Systems Engineering at George Washington University and fellow with GW's Co-Design of Trustworthy AI Systems Program. Leah's research interests center on understanding how to leverage emerging technologies for the benefit of, rather than detriment to, society. In particular, her dissertation research focuses on the potential impacts of autonomous vehicles. Prior to beginning her doctorate, Leah worked on science policy issues in Washington, DC with the House Committee on Science, Space, and Technology and a science-policy think tank based out of Arizona State University. She holds a Bachelor's in Chemical Engineering with a minor in Communication from the University of Arizona.

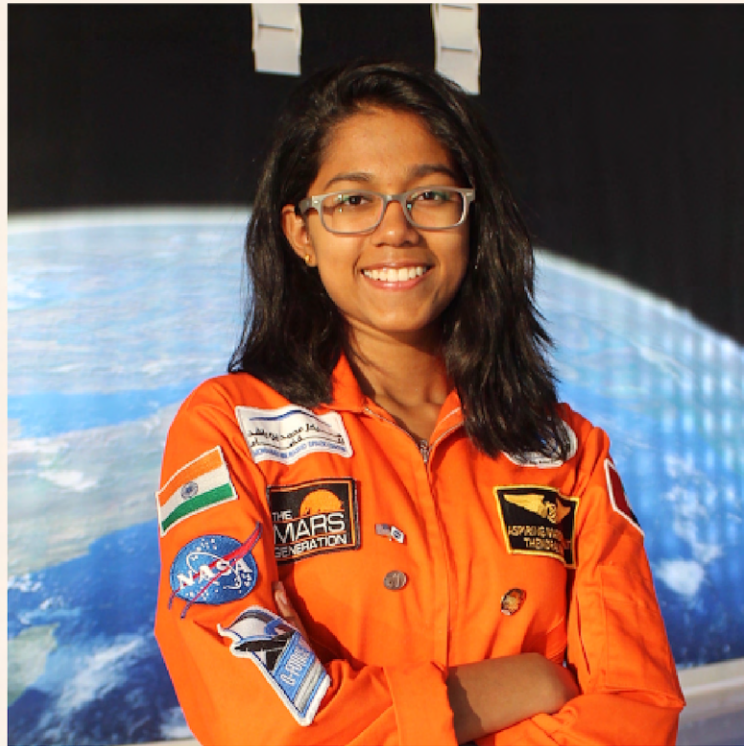


SAM CAMPBELL



Sam Campbell (They/Them) is a Barrett Honors College student majoring in astrobiology and working towards a certificate in planetary science. They hold two associate degrees from Ohlone College in Fremont, California as well as a Bachelor's degree in communication with a certificate in queer ethnic studies from San Francisco State University. As an indigenous student, Sam recognizes the importance of community advocacy and its cross-applications with the world of STEM. They have been involved on the ground level of community action for many years. Through giving 2 TEDx talks, one about gender diversity and another on the missing and murdered indigenous women epidemic, running against Eric Swalwell for congress in 2020, and as a current sitting board member for the Bay Area American Indian Two Spirits (BAAITS) in San Francisco, California, they continue to use their voice to stand for those who need it most. Sam is currently a NASA Space Grant Intern working with the Buseck Center for Meteorite Studies and was this year's featured student speaker for Alumni Night where they spoke on outreach and inspiration.

THE NDRA L KAMAL



Thendral Kamal is a Brooke Owens Fellow (2023) and a sophomore studying Aerospace Engineering and Political Science at Purdue University. She is currently working as an Aircraft Structural Support Co-op at Delta Air Lines (Atlanta, GA), and also spent a summer at SES Satellites (Washington, D.C.) as a Space Sustainability Intern. Being the first international student from Purdue to become a Brooke Owens Fellow, Thendral is passionate about advocating for DEI in the aerospace and STEM community. Born and raised in the cultural melting pot of the Middle East as an Indian immigrant, Thendral seeks to bring a unique multicultural facet to every project she works on, and was recognized for her passion, most notably, by VP Kamala Harris, Vogue India, and The Mars Generation 24 Under 24 STEAM & Space Leaders. Since the age of 13, she has been working towards her goal of becoming the first Indian woman to set foot on the planet Mars, and has given several talks on what it means to have a passion that drives you, from the TEDx stage in Dubai to conferences across the United States. She last spoke about 'Finding Your Personal Mars,' at the Indiana University's 2024 Women in Technology Summit. She frequently talks about her love for aviation and space on Instagram (@thendralkamal) and LinkedIn to over 2,000 inspired followers



PANEL 3: PURSUING A CAREER
IN INDUSTRY





DR. DIANA BUIST



Dr. Diana Buist is an epidemiologist and health services researcher. Her educational path included an undergraduate degree in biological sciences at UCSB, a Master in Public Health in chronic disease epidemiology at Yale School of Public Health and a PhD in epidemiology at University of Washington School of Public Health. She spent 25 years in an academic position, where she conducted population-based research focused on cancer screening and outcomes at Group Health Cooperative (then Kaiser Permanente) in Washington State. Additionally, she had affiliate appointments in the Departments of Epidemiology and Health Systems/Population Health and at Fred Hutchinson Cancer Research Center. During that time, she competed for NIH grants and published peer-reviewed papers that led to national and international improvements in health and healthcare and trained a number of students and junior faculty. In 2022, she joined GRAIL, where she has been able to engage in research focused on changing the paradigm of cancer screening from a single organ screening test to a multi cancer blood test that is based on a common shared cancer signal.

DR. TARA MADDALA



Dr. Tara Maddala is the founder and CEO of Pandora Bio, focused on precision early detection tools for student mental health. She is also principal and owner of TM Biostats LLC, a clinical development and statistics consulting firm. Tara has spent 20+ years working to bring clinically impactful cancer diagnostics to market at various Silicon Valley companies (Delfi Diagnostics, GRAIL, Genomic Health, and Clinimetrics). She is co-inventor on several cancer genomic patents and has co-authored over 20 peer-reviewed publications. In addition to SV2, Tara regularly lectures for the UCSF-Berkeley Translational Medicine program and is a Board member of Bay Area Biostatistics Working group (BBSW). She also enjoys playing tennis and biking. Tara holds a PhD in Biostatistics from The University of Texas and Engineering BS and MS degrees from The University of Florida and Georgia Tech.



DR. AUDREY GODDARD



Dr. Audrey Goddard is Executive Director of Biomarkers Sciences and Diagnostics at Gilead Sciences. The inventor of over 500 patents, Dr. Goddard specialized in the integration of drug and diagnostic research and development, first at Genentech and then with Genomic Health. Dr. Goddard earned her Ph.D. in cancer genetics at the University of Toronto, then was a Postdoctoral Fellow at London's Imperial Cancer Research Fund. She spent thirteen years at Genentech, starting by leading high-throughput DNA sequencing for research and new drug discovery, then applying genomics and genomic technologies to companion diagnostics for oncology drug development. Dr. Goddard was also the Vice President of Research and Development at Genomics Health and Kean Health.

THANK YOU FOR
COMING!

