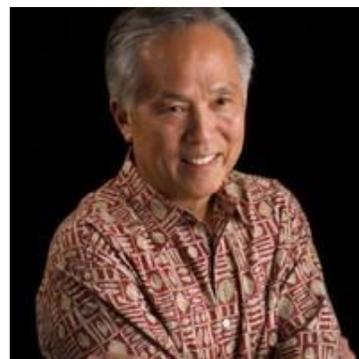# CAHSI Board of Advisors Bios

David Asai

David Asai is Senior Director for Science Education at the Howard Hughes Medical Institute. His work is guided by three principles: (1) the dynamic demographics of the U.S. population presents an historical opportunity and compelling challenge for U.S. science; (2) all students—regardless of where they come from and where they're going—deserve a meaningful, effective, and positive experience in science through which they will better understand the process of science; and (3) making that experience meaningful, effective, and positive is the responsibility of the faculty and administrators who define the institution's culture.

David's team at HHMI creates and leads grants and fellowships programs aimed at the development of students in science mainly at the undergraduate and graduate levels. Key programs include the Inclusive Excellence initiative, the Gilliam graduate fellowships initiative, the HHMI Professors initiative, and the Science Education Alliance.

David's bachelor's degree is in chemistry from Stanford University, and his PhD is in biology from Caltech. He was: a postdoc at Caltech and the University of California, Santa Barbara; a faculty member at Purdue University for 18.5 years where he was Head of Biological Sciences; and Stuart Mudd Professor and Chair of Biology at Harvey Mudd College for 5 years. His research focused on the structural and functional diversity of dyneins. Successful "Asailum" escapees include 11 PhDs and 77 undergraduate students. David came to HHMI in 2008.

Tony Baylis

Tony Baylis is the senior management advocate for diversity and inclusion for the Lawrence Livermore National Laboratory. Tony is responsible for overseeing the laboratory's interactions and successful execution in building and collaborating with academic, community, governmental, and industry stakeholders. Tony's career represents 33 years of administrative, project, program, technical, and organizational management. He has worked in a scientific and technical environment for over 28 years. He represents the Laboratory on the subjects of Diversity and Inclusion, STEM, Outreach Efforts, and Student Programs.

Tony has a long history in working and building programs that impact underserved communities, Minority Serving Institutions, specifically relationships with American Indian Institutions, Hispanic Serving Institutions, and Historically Black College and Universities. He serves as a Department of Energy Minorities in Energy Champion, a Board Member for the EmpowHer Institute, a NSF reviewer, and an Industry Advisory Board Member for the University of Florida Computer & Information Science & Engineering Department. He also serves as a conference program committee member and reviewer for the Grace Hopper Conference, Richard Tapia Diversity in Computing Conference, Supercomputing Conference, Women in Cybersecurity Conference, and NSF Cybersecurity Summit. Tony is an ACM and ACM SIGGRAPH member

and currently serves SIGGRAPH in the role of Diversity and Inclusion Committee Chair. His passion is to serve others. He is honored to have had the opportunity to give advice and mentor many students and professionals throughout his career.
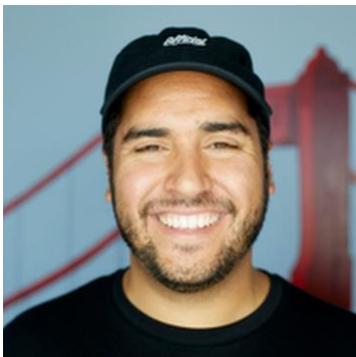
Ann Edwards

Ann Edwards is the Director of Learning and Teaching for the Carnegie Math Pathways, a network of faculty members, researchers, designers, students, and content experts committed to increasing student success in developmental mathematics and overall college and career outcomes. Edwards oversees the development and implementation of the Pathways instructional system, including Statway and Quantway curricula, assessments, pedagogy, and the faculty development system.

Edwards came to WestEd from the Carnegie Foundation for the Advancement of Teaching, and, prior to that, from the University of Maryland, College Park, where she was a faculty member focusing on mathematics teaching, teacher learning, and professional development in the university's college of education.

She brings a deep commitment to addressing issues of equity that shape mathematics teaching and learning at all levels. She has taught secondary and collegiate mathematics, and worked with mathematics teachers K–16. She has published in numerous journals and books including the *NADE Digest, Journal of Teacher Education, Journal for Research in Mathematics Education*, *Teachers College Record*, and the *Handbook of Research on Learning and Instruction*.

Edwards received a BA in applied mathematics from Harvard University; and an MA and PhD from the University of California, Berkeley in education in mathematics, science and technology.

Joshua Gutierrez

Joshua Gutierrez is a Google University Specialist focusing on Hispanic Serving Institutions (HSIs) across the US. Prior to Google, Joshua graduated from an HSI (CSU, San Bernardino) in 2009, then taught middle school science for three years on the Navajo Reservation in New Mexico, and began his recruiting career at Teach For America in 2012, where he recruited at a variety of universities in Boston - including MIT and Boston University.

He joined Google in 2014, where he's maintained his focus on recruiting students from underrepresented backgrounds and universities in the hopes of finding students from communities like the one he grew up in. Joshua currently lives in San Francisco, CA, but was proudly born and raised in the beautiful desert of Barstow, CA.

Patricia Lopez

Dr. Patty Lopez is a Senior Platform Applications Engineer at Intel Corporation, working to deliver Xeon high speed I/O tool solutions for customer platform validation. Prior to joining Intel in 2008, she spent 19 years as an Imaging Scientist for Hewlett Packard, creating and transferring technology in imaging into scanner, camera, and all-in-one products. She has released over fifty products across five business lines and holds seven imaging patents. A first-generation college student, she earned her BS (with honors), MS, and PhD in Computer Science from New Mexico State University (NMSU).

Patty grew up in rural northern New Mexico, the sixth of seven children. She has spent the past two decades as a change agent, studying, understanding, and addressing the impact of organizational culture on the recruitment, retention, and progression of women and minorities in STEM careers. She has extensive experience across all stages of the STEM pipeline, including K-12, academia, industry, and research organizations (industry/government labs, and defense). Her volunteer efforts are focused on building the STEM pipeline for K-12 and beyond, and creating an inclusive work culture. She has received the 2010 HENAAC/Great Minds in STEM Community Service Award, the 2015 Society of Women Engineer's Advocating Women in Engineering Award, and the NMSU James F. Cole Memorial Award for Service, where she is a Distinguished Alumna. She served as the general co-chair (Industry) for the 2013 Grace Hopper Celebration of Women in Computing Conference, and in many other leadership roles in the years that preceded it. She is founding member and co-chair of Latinas in Computing since 2006, and serves on the Computing Research Association of Women (CRA-W) Advisory Board (since 2010), the Computing Association of Hispanic Serving Institutions (CAHSI) (since 2010), and on the National Academies of Science STEM Undergraduate Roundtable (since 2018).

Carlos Rodriguez

STEM Senior Research Scientist, Carlos Rodriguez, Ph.D, is a nationally recognized expert with 35 years of experience in STEM research, evaluation, education and workforce development. With expertise on diversity in STEM in the K-12, post-secondary and workforce arenas, his seminal work has contributed importantly to the knowledge base on broadening participation in STEM education and workforce pathways, especially for Hispanic Americans, African Americans, Native Americans, and women.

Retired from the American Institutes for Research (AIR) as a Principal Research Scientist, currently he provides consultant services on STEM education and workforce pathways to the American Petroleum Institute of Washington, DC, Great Minds in STEM of Los Angeles, California, and the United States Department of Defense through BEST (Building Engineering and Science Talent). He delivered prepared remarks on the *Educational Landscape for Hispanics in the United States* in 1999 for the First White House Conference on Hispanic Children and Youth at the White House in Washington, DC.

During his tenure at AIR, Dr. Rodriguez served as Project Director or Principal Investigator for evaluation studies of national programs for NSF & NASA ($120 million), HRSA & HHS ($10 million), NSF ($100 million), and the College Board ($36 million). Among his publications, for the Presidential Commission on Educational Excellence for Hispanic Americans, Dr. Rodriguez authored the national report, *America on the Fault Line: Hispanic American Education (1997),* for the National Science Foundation he authored *Broadening Participation in STEM (2012).* He is a Spencer Fellow of the Woodrow Wilson Foundation for his national study, *Patterns for Success: Minorities in Science and Engineering*.

Luis Rodriguez

Luis is part of Honeywell's Commercial Security business, as a Director of Product Management for Connected Security. Luis is responsible for driving growth and profitability through an ecosystem, cloud, and IoT-based approach to integrated security.

Prior to joining Honeywell, Luis worked at IBM for 16 years in various executive roles, including Product Management, Strategy, Business Development, and Ecosystem Development. His areas of experience include the Internet of Things, enterprise asset management, facilities and real estate management, IT service management, and collaboration. Prior to IBM, Luis worked for a start-up called photo.net, McKinsey and Company, and the Xerox Palo Alto Research Center. Luis holds PhD, Master's, and Bachelor's degrees in computer science from MIT.

Robert Schnabel

Bobby Schnabel is Professor of Computer Science, external chair of the department (including strategic planning, tech community and alumni relations, and faculty mentoring), College of Engineering and Applied Science Faculty Director for Entrepreneurship, and Campus Thought-Leader on Computing. Previously he was CEO of ACM (Association for Computing Machinery) from 2015-17, Dean of the School of Informatics and Computing at Indiana University from 2007-2015, and on the Computer Science faculty at University of Colorado Boulder from 1977-2007. At CU Boulder he also was CS department chair from 1990-95, CEAS associate dean for academic affairs from 1995-97, founding director of the ATLAS Institute from 1997-2007, and vice provost for academic and campus computing and campus Chief Information Officer from 1998-2007. He is a co-founder of the National Center for Women & Information Technology and continues to serve on the NCWIT executive team.

Valerie Taylor

Valerie E. Taylor is an African American computer scientist who was a professor at Texas A&M University working on high performance computing. From 2003 until 2011, she was the Head of the Department of Computer Science and Engineering. She most recently served as the senior associate dean of academic affairs in the College of Engineering and a Regents Professor and the Royce E. Wisenbaker Professor in the Department of Computer Science and Engineering at Texas A&M University. Currently, she is the Director of the Mathematics and Computer Science Division of Argonne National Laboratory in Illinois.

In 2013, Dr. Taylor was elected a fellow of the Institute of Electrical and Electronics Engineers for for contributions to performance enhancement of parallel computing applications, and in 2016 as a Fellow of the Association for Computing Machinery for her leadership in broadening participation in computing.

She has received numerous awards for distinguished research and leadership and authored or co-authored more than 100 papers in the area of high-performance computing, with a focus on performance analysis and modeling of parallel scientific applications. She is known for her work on "Prophesy," described as a database used to collect and analyze data to predict the performance on different applications on parallel systems.

Dr. Taylor is the Executive Director of the Center for Minorities and People with Disabilities in IT (CMD-IT). The organization seeks to develop the participation of minorities and people with disabilities in the IT workforce in the United States.