

THE LAWRENCE HALL OF SCIENCE

ASCEND K-5: Advisory Board

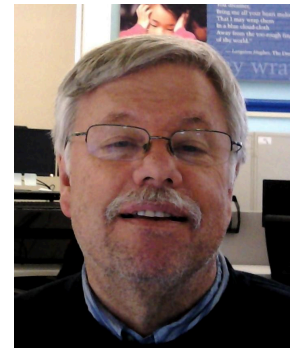
Kimberley Astle, Washington Office of Superintendent of Public Instruction

Kimberley Astle is the Associate Director of Elementary Science and Content Integration at the Office of Superintendent of Public Instruction in Washington State. She has served in education for 23 years; as a classroom teacher, a district administrator over K-12 science, and as a state K-12 science program supervisor. Kimberley is a member of the Council of State Science Supervisors (CSSS) and co-chaired their Supporting Elementary Science Committee. She just completed her term as the NSTA Division Director of Professional Learning in Science Education. She has engaged deeply around high-quality, NGSS-aligned curriculum review as a member of Achieve's EQUiP Peer Review Panel, as a science reviewer and facilitator for EdReports, and as a science reviewer for NextGenScience.



Greg Borman, New York City Department of Education

Greg Borman is presently Director of Science for the NYC Department of Education. He has spent 40 years as a secondary school science teacher, staff developer and administrator. His team is supporting the implementation of the NYS Science Learning Standards through professional learning, curriculum evaluation, and strong collaborations with higher education and informal science institutions. He helped develop the New York State Strategic Plan for Science, and is presently a member of the NYS Science Content Advisory Panel. Before returning to the NYCDOE, he was on the faculty of the CCNY School of Education, teaching science education courses and supporting and supervising preservice and inservice teachers.



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Jenn Brown-Whale, Maryland State Department of Education

Jenn Brown-Whale (they/she) is the Coordinator of Elementary Science for the Maryland State Department of Education (MSDE). They joined the MSDE science branch in July 2024 from Howard County Public Schools where they served since 2014 as the Elementary Science Resource Teacher. Jenn is tasked with providing evidence-based and standards-aligned program and initiative development and implementation to accelerate student achievement across Maryland’s 24 local education agencies (LEAs) at the PreK–5 level. Jenn was a member of the Achieve/WestEd NextGenScience Peer Review Panel for two years and continues to participate in and lead a variety of curriculum development and evaluation projects, including supporting the OSE Elementary unit review process. They hold a B.S. in Counseling and Human Services from Stevenson University and a Master of Arts in Teaching from Towson University. Jenn currently serves as a member of the steering committee for the National Academies of Science, Engineering, and Medicine (NASEM), Board on Science Education (BOSE) Collaborative for Advancing Science Teaching and Learning in K-12 (CASTL K-12).



Terrance Burgess, Michigan State University

Terrance Burgess, PhD is an Assistant Professor of science education in the Department of Teacher Education at Michigan State University. He holds a BA degree in Geological Sciences and a MA degree in Education from the University of North Carolina at Chapel Hill. He also has a PhD in Teaching and Curriculum (Science Education) from Syracuse University. Broadly, his research focuses on how engaging elementary youth of Color in participatory science learning influences their multiple identities within urban schools and promotes their activism within communities. His work utilizes qualitative methodologies to center youth’s voices as they engage in science learning to make sense of how they come to view themselves as scientists while also contending with their other identities as racialized students within their classroom spaces. Additional areas of his research explore how teacher education programs pursue racial equity through a networked improvement community. His work has been funded by the National Science Foundation (no 2237739) and the William and Flora Hewlett Foundation. Prior to joining the faculty at Michigan State University, Burgess was a secondary science teacher in Durham, NC.



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Kristoffer Carroll, Clark County School District, NV

Mr. Carroll currently serves as director of the Science, Health, Physical Education, and Driver Education Department in the Curriculum and Instruction Division (CID) of the Clark County School District. He formerly held roles as a high school science teacher, science project facilitator, curriculum and technology coordinator, and K–12 Regional Science Trainer for the Southern Nevada Regional Professional Development Program (SNRPDP). He has earned a Bachelors of Science in Education, a Master of Education in Curriculum and Instruction, and a Master of Educational Policy & Leadership from the University of Nevada, Las Vegas.



Mr. Carroll is a nationally-recognized science and STEM curriculum and instruction expert. He is one of a handful of Level 4 Leader Credentialed EQUiP Rubric for Science experts, consulted with Achieve, Inc. and serves as a consultant for NextGenScience at WestEd. Mr. Carroll has facilitated over a hundred Next Generation Science Standards–Designed evaluation sessions providing much needed support to state and school district leaders across the country to ensure that all students experience access and opportunity to engage in high-quality science instructional material. At a local level, he supports all Nevadans in moving toward more equitable access to high-quality STEM resources as a member of the Nevada Governor’s Office of Science, Innovation & Technology, Informal STEM Learning Environments (ISLE) Subcommittee and a Southern Nevada Regional STEM Network Advisory Committee Member.

Tina Cheuk, California Polytechnic State University (Cal Poly, San Luis Obispo)

Tina Cheuk is an associate professor of elementary science education at Cal Poly in San Luis Obispo. Her research centers on developing culturally and linguistically diverse learners in science learning settings. Cheuk is a co-primary investigator of a five-year U.S. Department of Education Teacher Quality Partnership grant, which created a teacher residency program expanding pathways into special education and bilingual education in partnership with San Luis Obispo and Santa Barbara County school districts.



Cheuk has previously served as a committee member in developing California’s Science Curriculum Framework and State Literacy Plan and revising California’s Bilingual Authorization Program Standards. She was also a panel member in the 2028 National Assessment of Educational Progress (NAEP) Science Assessment Framework Update Steering

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and Development Committees. Most recently, she served as a member of a consensus study at the Board of Science Education in PreK–12 STEM Education Innovations.

She began her career in education as a fifth-grade science teacher in the South Bronx, followed by service as a secondary science teacher as a U.S. Peace Corps volunteer in Ghana, West Africa. Cheuk holds a B.S. in chemistry and biochemistry from the University of Chicago and an M.A. and Ph.D. in education policy from Stanford University.

Alicia Conerly, Marion County School District, MS

Dr. Alicia Conerly is an accomplished educator with over 15 years of experience, having served as a teacher, District Science Specialist, and administrator. She is a two-time Amazon Best-Selling Christian Women's Book Author and has successfully secured over \$175,000 in grant funding for her school. She founded the Barnes-Conerly STEM Scholarship and PUSH 4 Science Educational Services, LLC in 2017.

Dr. Conerly has earned numerous honors, including the 2017 MSTA Informal Science Educator Award, the 2016 NSTA Grand Prize Shell Science Lab Challenge Winner (\$20,000), and the 2015 NSTA Shell Urban Science Educator's Award. Additionally, she was recognized as Lawrence County School District's 2021 District Administrator of the Year and a finalist for Mississippi's 2021 3rd Congressional Administrator of the Year. She serves on both state and national boards of directors.



Betsy Davis, University of Michigan

Elizabeth A. (Betsy) Davis is a science educator, teacher educator, elementary educator, and learning scientist at the University of Michigan. She is interested in beginning and experienced elementary teachers learning to engage in consequential, equitable, and just science teaching, and the roles of curriculum materials and teacher education in promoting teacher learning. Davis received her doctorate from the University of California at Berkeley in 1998, and received the Presidential Early Career Award for Scientists and Engineers at the White House in 2002. Davis chaired the National Academies consensus committee that developed the report *Science and Engineering in Preschool through Elementary Grades: The Brilliance of Children and the Strengths of Educators*. She was named as an AERA Fellow in 2024. To better understand the improvement of elementary science instruction, Davis helped to lead (with Jim Spillane and Don Peurach) an NSF-funded project focused on educational systems. Currently, Davis heads the NSF-funded ASSETS project—Advancing, Supporting, and Sustaining Equity among Elementary Teachers of Science—focused on how teachers learn to promote justice.



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Maya Garcia, Beyond100K

As Beyond100K’s chief program officer, Maya Garcia leads the organization’s efforts to grow and nurture a vibrant network of diverse, powerful partners from across sectors to act as a community and make meaningful progress toward ending the STEM teacher shortage in the United States. An award-winning educator, Garcia taught eighth-grade science for eight years in Washington, D.C., where she also led professional development and served as a master teacher before shifting to a role in government. For more than 10 years, Garcia served as the science and STEM education lead for both the Colorado Department of Education and the D.C. Office of the State Superintendent of Education, where she oversaw standards implementation efforts and led strategic initiatives in STEM. In this capacity, she also cultivated cross-sector stakeholder groups that served to advance implementation efforts and launch STEM learning ecosystems. Garcia feels that educators must be intentional about co-creating affirming and justice-centered learning environments and learning experiences where students and their teachers can develop and refine their identities in STEM. She holds a bachelor’s degree in neuroscience and behavior from Mount Holyoke College, a Master of Arts in teaching from American University, and a Doctorate of Education in Leadership for Educational Equity from the University of Colorado Denver.



Taunya Nesin, WestEd

Taunya Nesin conducts studies to support the development of high quality instructional materials and edtech solutions for K-12 math and science teachers and students. She works with states and districts on various issues including professional learning implementation and charter school framework revisions. She served as the content lead for the NAEP Science framework update for the duration of the project that ran from June 2022 – February 2024. Nesin is currently involved in multiple projects including an Education Innovation Research (EIR) grant for the development of a K-8 science supplement and foundation funded work to conduct usability and feasibility studies during the creation of a new K-5 math program.



Nesin joined WestEd after serving as a Senior Program Officer at the Gates Foundation, where she focused on grants related to the availability, smarter demand, and implementation of high-quality K-12 instructional materials. Her prior experience includes work at the DC Public Charter School Board and policy research at The George Washington University. She also previously served on the advisory boards for DC STEM and OpenSciEd. Nesin was an editor at National Science Teachers Association, National Geographic School Publishing, and

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Houghton Mifflin Harcourt where she developed curricula for K–5 science and English and Language Arts. She began her career as a public-school teacher in Hoboken, Atlanta, and Boston.

K. Renae Pullen, Caddo Parish Public Schools, LA

K. Renae Pullen has been an educator for over 20 years. Currently, she is the Elementary Science Curriculum Instructional Specialist for Caddo Parish Public Schools and a member of the Caddo Teaching Academy faculty. Before being a science specialist, she was an elementary classroom teacher for 16 years. Besides being a dedicated science educator, Ms. Pullen has served on several local, state, and national committees as well as presented at numerous workshops and conferences. Ms. Pullen served on the NASEM committees that produced English Learners in STEM Subjects: Transforming Classrooms, Schools, and Lives and Science and Engineering in Preschool Through Elementary Grades: The Brilliance of Children and the Strengths of Educators. She is a member of the Board on Science Education for the National Academies of Sciences. She served on the National Science Foundation’s STEM Education Advisory Panel and is Teacher Leader Advisory for the Louisiana Board of Education. Ms. Pullen has received numerous awards including several grants, a Fund for Teachers fellowship to study creativity and STEM in Spain, and the Presidential Award for Excellence in Math and Science Teaching.



Meg Richard, Piper School District, Kansas City, KS

Meg Richard is the Curriculum, Instruction and Assessment Coordinator for the Piper School District in Kansas City, Kansas. Meg has served in multiple roles at the state and national level including representing Kansas as the STEM Program Manager for the Department of Education, supporting K-12 Science and serving as a board member for the Council of State Science Supervisors. Prior to joining the Department of Education Meg was a 7th Grade Science teacher in the Olathe School district and worked to support equitable student sense-making of high-quality phenomena. She was also a 2019 Kansas recipient of the Presidential Award for Excellence in Mathematics Science Teaching and achieved National Board Certification EA Science in 2019 and maintained certification in 2024. Meg is married to a high school physics teacher and the proud mother to her young son Edison, who serves as the family’s resident curiosity coordinator.



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Enrique Suárez, University of Massachusetts – Amherst

Dr. Enrique (Henry) Suárez is an Associate Professor at UMass Amherst, committed to making science education equitable for young learners and their teachers. Specifically, Henry’s research focuses on designing learning environments where elementary-aged emergent multilingual students leverage their conceptual resources and translanguaging practices when engaging in investigations. Henry also researches how professional learning can help develop pre- and in-service teachers’ equity-oriented science teaching, becoming attuned to and leveraging minoritized students’ sense-making repertoires. His work has been supported by the National Science Foundation, the NAEd/Spencer postdoctoral fellowship, and UMass Amherst. He was also a member of the National Academies committee that published the report on enhancing science and engineering education PK–5 in 2022. Henry received his PhD on Science Education from CU Boulder in 2017, and was a postdoctoral fellow at the Institute for Science and Math Education at the University of Washington 2017–2019. Before working in classrooms, Henry was an astrophysicist and studied the accelerated expansion of the universe.



Carrie Tzou, University of Washington

Carrie Tzou is a professor of science education in the School of Educational Studies and the Director of the Goodlad Institute for Educational Renewal at the University of Washington Bothell. She holds a PhD in Learning Sciences from Northwestern University and an M.S. in Teaching and Learning with a concentration in science education from Vanderbilt University. Her work applies sociocultural theories of learning and methods from anthropology, psychology, and design-based research to center learners’ cultural and linguistic knowledges and practices within K–16 science and place-based learning environments. She focuses on designing for and studying multiplicities of knowledge systems in learning settings. She has recently served on two committees of the National Academies of Sciences Board on Science Education—one that produced a report on the state of science education in grades PreK–5, and on equity in PreK–12 STEM education.



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Paola Valdivia, KIPP Foundation

Paola Valdivia is KIPP Foundation’s Director of Science, Technology, and Engineering. She has been working in science education for the last 15 years. She previously served as the Manager for 5-12 Science Achievement for KIPP New Orleans Schools. Prior to this work, she worked as a middle school science teacher for KIPP New Orleans and in public schools in Baton Rouge. She has worked in coaching and training teachers with KIPP, Teach For America and The New Teacher Project. She holds a bachelor’s degree in Neuroscience from UC Santa Barbara, and a master’s degree in educational leadership from the University of Houston. She is from Los Angeles, but now calls Houston home – by way of New Orleans!

