

# CREATIVE PROBLEM SOLVING AND INVENTING VIRTUAL WORKSHOP

July 12-14, 2021

## Speakers

### Yemi Alalade

Founder and Creative Director, Àníké and Co-founder, Matriarts Museum



Yemi Alalade is the founder of Àníké, an organization that explores indigenous knowledge inspired by nature and the evolution of such knowledge in ancient, historical and contemporary practices in Africa and the Diaspora. Yemi is also the Director of Alafia-Yinbol K-12 School — an affiliate of the MIT OpenCourseWare Mirror Site Program — in Nigeria, and a Consultant/Invention Education teacher at the Lemelson-MIT Program (LMIT), where she explores culture as a precursor to the Design Process.

### Gloria Bañuelos, PhD

Thinkabit Lab Lead, Qualcomm



Gloria R. Bañuelos is part of the Corporate Responsibility team at Qualcomm Incorporated, where she applies her background in science, education, and research to head the Qualcomm® Thinkabit Lab™, a homegrown STEM engagement program for students of all cultural and socioeconomic backgrounds. She oversees all aspects of the program and collaborates with internal stakeholders to engage Qualcomm employees in Thinkabit Lab's STEM activities and Qualcomm's sustainability programs.

### Juan Barraza

Director, Student Innovation, PSU Center for Entrepreneurship at Portland State University



Juan Barraza's experience spans all facets of the startup trenches, as a founder of a digital health startup, lead organizer of Portland Startup Weekend Latino, and Founder of Latino Founders, a professional organization empowering the next generation of Latino entrepreneurs. Juan leads all Center for Entrepreneurship Student Innovation programming and communications, including the PSU Cleantech Challenge and InventOR, where he weaves entrepreneurship into the PSU community. He brings in-depth knowledge of strategic planning and implementation of product and services rollouts and has a track record building and leading diverse, collaborative teams.

### Mark Bayaúa

Director of STEM Innovation Programs, Think Together



Mark is the Director of STEM Innovation Programs at Think Together where he provides ongoing support for academic and education leaders to open pathways of learning for students grades K-12, especially in out of school time. As a co-facilitator for Los Angeles County of Education Region 11 Communities of Practice, a UCCE Master Gardener, a CalSAC Trainer, and certified LEGO Education Academy trainer, he has organized numerous professional development opportunities over the years. Mark and his colleagues at Think Together piloted LMIT's Invention Adventures program and sent their first group of students to the state finals (CA Invention Convention) in the 2021 school year.

### Clare Bhakta

Multi Media Artist, Maker, Educator and LMIT Consultant



After receiving her master's in multi-media from Cal State East Bay in 2011, Clare Bhakta taught students in K-12 and college how to solve problems with technology through physical computing, game design and making. She is a founding member of Ninja Pandas — an ed-tech firm that creates curriculum and consulting for local museums, libraries and schools. She is also working with LMIT to create a capstone course that brings together invention, sustainable design and computer science to California students.

## Lee Blitch

Member Board Of Directors, Education Results Partnership and San Francisco Chamber of Commerce



Lee Blitch is a member of the Board of Directors of the San Francisco Chamber of Commerce and Educational Results Partnership (ERP). ERP, which Lee helped found in 2000, is a national organization that utilizes the nation's largest kindergarten through career database to identify best practices and improve equity and career readiness in the education system. Lee previously held senior management positions at AT&T and was President and CEO of the San Francisco Chamber of Commerce among other positions. He established the Center for Education Excellence at San Francisco State University.

## Suzie Boss

Writer & Educational Consultant



Suzie Boss is a writer and educational consultant from Portland, Oregon, working to harness the power of teaching, learning, and storytelling to improve lives and transform communities. Recent projects have taken her across the United States and around the globe to support schools that are shifting away from traditional instruction and engaging students in real-world problem solving. She has had the privilege of collaborating with educators everywhere from India, to Europe, to South America, and is a PBLWorks National Faculty emeritus, and long-time contributor to Edutopia.

## Christine Braun

I-Lab Manager and Design Engineering Teacher, The Nueva School, Hillsborough, California



Christine is a 2020 Lemelson-MIT Excite Award winning educator. She was a team mentor for two episodes of Shop Class which can be viewed on Disney Plus. She has coached robotics teams, one of which went to the FIRST World's Championship in St Louis. She co-founded a tech-education company to bridge the growing technology gap in rural communities and currently works with gifted students at the Nueva School, incorporating the design thinking process into the educational experience. She also mentors students at GOBabyGo, helping them to create PPE and fundraise.

## Evelyn Casas

InvenTeam alumna, 2018 Garey High School InvenTeam, Pomona, California



Evelyn was the technical lead of the 2018 Garey High School Lemelson-MIT InvenTeam. Their device, Heart & Sole, monitors the health of neuropathy patients' feet. A U.S. utility patent has been applied for with the assistance of the Microsoft MakeWhatsNext program. She is a first-generation college student and the daughter of two immigrants. She is currently a pre-physician assistant student at Mount San Antonio College majoring in English. Evelyn serves on the Miss Pomona 2019 court, and she hopes to help her community through her knowledge of medicine.

## Michael J. Cima, PhD

Professor, Massachusetts Institute of Technology and Faculty Director, Lemelson-MIT Program



Michael Cima earned a bachelor's degree in chemistry in 1982 (phi beta kappa) and a doctorate in chemical engineering in 1986, both from the University of California at Berkeley before joining the faculty at MIT as an assistant professor that same year. He was promoted to full professor in 1995. Michael has an appointment at the David H. Koch Institute for Integrative Cancer Research; is a Fellow of the American Ceramics Society; was elected to the National Academy of Engineering; holds the David H. Koch Chair of Engineering at MIT; is a Fellow of the National Academy of Inventors; a co-director of MIT's Innovation Initiative; the associate dean of innovation for the School of Engineering at MIT; and the faculty director for LMIT. He is a co-inventor of MIT's three dimensional printing process and has over 58 U.S. patents.

## David Coronado

Program Officer, The Lemelson Foundation



David Coronado joined the Foundation as a Program Officer in 2015, and works to support student growth by promoting equal access to invention education, STEM coursework and out-of-school learning in K-12 schools. He is passionate about breaking the cycle of poverty that prevents many young people from succeeding. Past positions include executive director of the Oregon MESA (Mathematics, Engineering and Science Achievement) program at Portland State University; president of the MESA USA organization; academic coordinator at Harvey Mudd College Math and Science Center; and president of the Oregon College Access Network.

## Stephanie Couch, PhD

Executive Director, Lemelson-MIT Program



Stephanie Couch joined the Lemelson-MIT Program as Executive Director in 2016 where she leads research efforts, partnership development, and national awards and grants initiatives. Stephanie's past positions include the interim Associate Vice President for Research and Professional Development at California State University, East Bay; the Bayer Executive Director at the Institute for STEM Education; and Director of the Gateways East Bay STEM Network at California State University at East Bay. She received the Biotechnology Educator of the Year Award from California Life Sciences Association; was selected as one of San Francisco Business Times' Most Influential Women in Bay Area Business in 2016; and was inducted into Alameda County Women's Hall of Fame in the education category.

## Jesus de la Torre

Welding and Automotive Instructor, Sierra College



Jesus de la Torre is a welding and automotive instructor at Sierra College in Northern California, and is a lead faculty member on LMIT's new Invention and Inclusive Innovation (I3) initiative. He started his career as a bilingual para-educator for Santa Rosa City Schools while earning his AA at Santa Rosa Junior College, and then obtaining his BA in Chicano and Latino Studies from Sonoma State University. He received his CA Multiple Subject Teaching Credential from a Bilingual Authorization certification collaborative program from UC Davis and Sac State, and worked as a first-grade teacher in Galt, CA., for several years. Other positions include chassis and fabrication instructor for WYOTECH and north-west accounts manager for ESAB Welding and Cutting North America.

## John Diffley, JD

History Professor, Springfield Technical Community College



John Diffley is a professor of history at Springfield Technical Community College (STCC). At STCC, John also serves as Program Coordinator for the Liberal Arts Program as well as the Commonwealth Honors Program Director. In addition to teaching history, he also teaches courses in ethics. John is one of the Michelson Institute's and National Association for Community College Entrepreneurship IP Educators in Residence. He holds the degree of Juris Doctor from Western New England School of Law, a Master's of Arts in history from UMASS Amherst, and a BA in history from SUNY New Paltz. Currently John is admitted to the bar in both Connecticut and Massachusetts.

## Tony Donen, PhD

Principal, Hamilton County Schools, Chattanooga, Tennessee



Tony Donen has worked as a high school principal since 2003. He is the founding principal for STEM School Chattanooga, which had a 2017 InvenTeam and has been recognized by America Achieves as a "World-Leading Learner School," among other honors. Tony is committed to helping improve STEM education, having led professional development throughout Tennessee as one of the lead principals for the Innovative Leaders Institute for school leadership teams. He has also co-authored two books, "Grades Don't Matter: Using Assessment to Measure True Learning" and "Let Me Try It! Enhancing Maker Education Through Digital Fabrication." In 2018 Tony was awarded the Tennessee STEM Innovator Award.



## Leigh Estabrooks, EdD

Invention Education Officer, Lemelson-MIT Program



Leigh Estabrooks joined the Lemelson-MIT Program in 2006 to manage the day-to-day operations of the InvenTeams national grants initiative. She has been the invention education officer since 2008, overseeing all K-12 invention education initiatives. Estabrooks has been instrumental in the development and introduction of several new initiatives, including Junior Varsity InvenTeams and the 2010 launch of the Inventing Merit Badge, in partnership with the Boy Scouts of America. She has co-authored multiple research studies on invention education. She holds a master's degree in business management from Rensselaer Polytechnic Institute and a doctoral degree in educational leadership from Northeastern University.

## Holly Fechner, JD

Partner at Covington & Burling LLP



Holly Fechner is a Partner at Covington & Burling LLP and a co-chair of the firm's technology industry group. She advises clients on complex public policy matters that combine legal and political opportunities and risks. Nationally ranked by Chambers, Fechner received the 2019 American Lawyer Magazine "Dealmaker of the Year" award. She is the Executive Director of Invent Together and a visiting lecturer at the Harvard Kennedy School of Government. She serves on the board of directors of the American Constitution Society, and was Policy Director for Senator Edward M. Kennedy and Chief Labor and Pensions Counsel for the Senate Health, Education, Labor & Pensions Committee.

## Randa Flinn

Teacher-Magnet Coordinator, Northeast High School, Oakland Park, Florida, and 2012 InvenTeam educator



Randa Flinn has been a science teacher with Broward County Public Schools in South Florida since 1985. Her students have competed and placed at regional, state, and international science fairs. She is a 2012 LMIT InvenTeam teacher and her students' project was invited to the White House Science Fair in 2013, where two of the students exhibited their bicycle-powered water filtration station to President Obama. She has led a Samsung Solve For Tomorrow team to National Finalist status in 2016, and is currently serving on Samsung Solve for Tomorrow Teacher Advisory.

## Nia Gipson

Director of STEAM and FIRST Robotics Coach, Saint Joseph Preparatory High School, Boston, MA



Nia Gipson has been working in STEAM education for the past 10 years in both formal and informal settings including working with museums, summer camps, afterschool programs, and other STEM/STEAM community organizations. Most recently she has been working with LMIT to digitize their JV InvenTeams Toy Design Activity Guide for online learning, and she is excited to add her skills and expertise to Biogen and LMIT's Biotech in Action: Global Team. Nia has a Bachelor's of Art in biology with a minor in psychology from Swarthmore College and a Masters of Education from Harvard Graduate School of Education.

## Evelyn Gómez

Invention Education Coordinator, LMIT, 2017 InvenTeam Educator, DIY Girls, Los Angeles, CA and MIT alumna



Evelyn Gómez has worked in education for over 10 years, first as a math and science teacher for K-15 students, and later as the executive director for DIY Girls, a nonprofit aimed at providing hands-on STEM education and mentorship to girls in her hometown of Pacoima, CA. Trained as both an engineer and educator, she leverages her experiences and technical skills to create innovative experiences for students. Evelyn first came to LMIT in 2016 as an InvenTeam educator for the DIY Girls who invented a solar-powered tent for the unhoused. Evelyn earned bachelor's and master's degrees in aerospace engineering from MIT and UCLA, respectively, and a master's in education from the Harvard Graduate School of Education.

## Pascha Griffiths, PhD

Invention Education Coordinator, Lemelson-MIT Program



Pascha has taken lead roles in LMIT's Inventing with Toy Design, Professional Development, Invention Adventures program, and the Massachusetts Invention Convention. Prior to this she worked in education for over 20 years, teaching a variety of subjects to a range of students from nursery school to adult learners. She relishes investing in educators because in her experience, educators make enthusiastic learners who multiply their learning by investing in their students. Since 2013, Pascha has been coaching pre-service science teachers at Harvard University's Graduate School of Education, Lesley University's Teacher Education Program, and College of the Atlantic's Teacher Certification Program.

## Joel Grimm

Invention Education Coordinator, MIT Lincoln Laboratory BeaverWorks



Joel earned a B.S. in optical engineering from the University of Rochester, and joined MIT Lincoln Laboratory in 1986. Since then, he has been involved in diverse projects from laser radars and airborne systems to large software development efforts. He joined the MIT Beaver Works team in 2019 to increase collaboration between MIT and Lincoln Laboratory by bringing real-world projects for students to develop solutions. MIT Beaver Works not only brings projects to MIT students but also develops AI and engineering courses for middle and high school students that are taught by Lincoln Laboratory staff and MIT faculty.

## Lynn Harrison-Benavidez

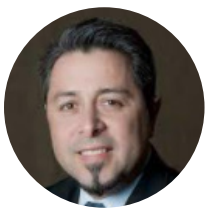
Mathematics Professor, Sierra College



Lynn Harrison-Benavidez is a mathematics professor at Sierra College and is a lead faculty member on LMIT's new Invention and Inclusive Innovation (I3) initiative. Her work focuses on equitizing mathematics education and closing the opportunity gap for underrepresented, underserved and minoritized students. She has a passion for invention education and maker-centered learning and has mentored faculty across disciplines to create curriculum that engages students in learning through open-ended problem solving, inquiry, dialectic discussion, and applied creativity. She has been named Faculty of the Year by the Associated Students of Sierra College, and holds an MA in applied mathematics from Washington State University, and a BA in mathematics from UC San Diego.

## Ed Hernandez

Technology Teacher, Tustin High School, Tustin, California, and 2017 InvenTeam educator and LMIT Master Teacher



Ed Hernandez is the lead teacher and Program Director of the T-Tech Academy of Technology & Engineering at Tustin High School in Southern California. Tustin's program is a pre-engineering academy model with a hands-on approach to STEM instruction covering everything from 3D modeling to electronics, fabrication and more. Ed is an award-winning educator whose honors include his selection as California's Career Technical Education Teacher of the Year, and induction into UC Irvine's School of Engineering Hall of Fame. He has been affiliated with LMIT since 2015 as an Excite Award Winner, InvenTeam grant recipient, and currently as an LMIT Master Teacher.

## Diane Horvath

Technology Integration Specialist, Medfield Public Schools, Medfield, MA



Diane is a Technology/MakerEd Integration Specialist at Blake Middle School in Medfield Public Schools with a strong special education background. In her role, she was instrumental in the transition of the middle school to its current 1:1 mobile learning environment to include developing the Makerspace and Computer Science curriculum. Her mission is to shake up the traditional learning approach by bringing creative & innovative learning experiences using everyday materials, coding & circuits with a design thinking approach in an easy entry-level way. She also strives to empower girls as tech entrepreneurs and leaders with her involvement in the Technovation Challenge and the Learn Launch Student Showcase and has been a recipient of the MassCUE PathFinders Award.

## Lucie Howell

Chief Learning Officer, The Henry Ford



Lucie leads and manages the Learning & Engagement team in The Henry Ford (THF), and its projects, programs and products, including curriculum development, professional development, and experiential learning opportunities. A trained engineer and former science teacher, Lucie has extensive experience creating science professional development and curriculum in formal and informal settings. Lucie provides vision for THF's workshops, and has implemented changes including more variability and flexibility in the schedule and bringing in the Model I Actions and Habits of Innovators.

## Mitch Hufnagel

Manager of Invention Convention Worldwide Programming and Education, The Henry Ford



Mitch Hufnagel is the Manager of Invention Convention Worldwide (ICW) Programming and Education at The Henry Ford. Previously, Mitch was Manager of the Chicago Student Invention Convention, an affiliate program of Invention Convention Worldwide. During his time in Chicago, Mitch learned what it is like to implement and grow the ICW program through creative initiatives and dedicated fundraising. Mitch believes that collaborative partnerships are key to increasing impact and relevance and is dedicated to unlocking the full potential of the Invention Convention Worldwide program.

## Ken Kay

Retired CEO, EdLeader21



Ken spent nearly two decades promoting a new model of K-12 education. Most recently he served as CEO of EdLeader21, a professional learning community of more than 200 school districts around the U.S. Prior to this, Ken was the founding president of Partnership for 21st Century Skills, executive director of the CEO Forum on Education and Technology, and founder of a landmark coalition of U.S. universities & high-tech companies focused on research and development issues. Along with Valerie Greenhill, he has authored "The Leader's Guide to 21st Century Education: 7 Steps for Schools and Districts." Ken has also written the foreword to the book, "21st Century Skills: Rethinking How Students Learn." Currently, he serves on the board of the Buck Institute for Education.

## Deoksoon Kim, PhD

Associate Professor, Teaching, Curriculum, and Society, Boston College



Deoksoon Kim is an associate professor in the Lynch School of Education and Human Development at Boston College. Her research has focused on understanding the needs of immigrant students so that educators can more effectively help them learn English and succeed in school. She has worked on second language reading and literacy and on how to incorporate instructional technology in order to facilitate language learning and teacher education. Recently she has studied how digital storytelling can support English language learners and teachers. She is also working on using invention education to support English language learners in their development of scientific literacy.

## Lillian Labowsky, PhD

Science Teacher, Ridgewood High School, Ridgewood, New Jersey, and 2021 InvenTeam educator



Ridgewood High School (RHS) science teacher Hsuan-Lillian Labowsky, is the recipient of an "Advancement of Invention" award from the New Jersey Inventors Hall of Fame. She was one of 25 to receive the honor — among them three Nobel Prize Laureates. The award recognized Lillian for her work with students at RHS. "Her passion for science is inspiring," said Les Avery, President of the organization. "With teachers like her, New Jersey is assured of continuing its reputation as the Invention State." Lillian was also a 2021 InvenTeam educator for a team of RHS students who invented a system to generate hydrogen peroxide and sanitize water in a reusable water bottle.

## Pavithra Lakshminarayan

Founder, Mindbytes



Pavithra Lakshminarayan founded Mindbytes through which she creates and provides year-round programs that address core skills and create “Young Geniuses.” She has worked with LMIT on Full Steam Ahead, Biotech in Action, and the Let’s Invent! series of educator workshops. Pavi has over 22 years of experience in information technology and education. She has been an advisor for education and research-based projects around strategic planning, curriculum design, course development, training and integration. She is on the leadership team for the South Jersey STEM Innovation Partnership network and chairs an early childhood learning priority group at the New Jersey STEM Pathways Network. She holds an M.B.A in information technology and finance.

## Christine Lawlor-King

Executive Director, Connecticut Invention Convention



Christine Lawlor-King exemplifies an educator who is both pioneering innovation and entrepreneurship learning in the classroom, and a visionary in her own right. She created the first district-wide K-12 STEM program in CT; was the catalyst for implementing invention education curriculum in 500+ CT schools; and established Invention Convention Worldwide (annually brings innovation & entrepreneurship teaching to 100k+ students globally). She works with the Lemelson-MIT Program on several initiatives including the Invention Adventures program, preparing educators for the MA and CA Invention Conventions and professional development workshops.

## Anne Leak, PhD

Assistant Professor, Science Education, Stout School of Education, High Point University



Anne Leak is an assistant professor in the Stout School of Education. She received her BA in physics from Gettysburg College and her PhD in science education from the University of California at Santa Barbara. Anne has taught pre-school through graduate level science and currently participates in the NSF-funded American Physical Society (APS) PIPELINE network to develop strategies for integrating innovation and entrepreneurship into physics departments nationally. Anne was a Fulbright Fellow exploring science education in Cameroon, West Africa and has been awarded grants to develop approaches for community-driven and place-based science pedagogy in Kenya. Her research focuses on learning contexts and communities – including curriculum, culture, technology, and environment – as students learn science.

## Brianna Livingood

Principal, New Covenant School, Arlington, Massachusetts



Bri Livingood is a lifelong educator with over fifteen years of classroom and school leadership experience. She is currently the Principal at New Covenant School in Arlington, MA. She received her undergraduate degree from Simmons College and completed her graduate work at the University of Arizona. Bri is passionate about developing educational resources that engage students in practical understanding of the world around them and their personal contributions to everyday problems. She also enjoys engaging an entire school community to grow and expand their learning all together. Bri and teachers at New Covenant School were among the first to participate in Massachusetts’ first annual Invention Convention (LMIT as the State Affiliate).

## Carlos Marquez

Program Development Specialist – STEAM, Think Together



Carlos is an educator in the field of Expanded Learning. What he loves about his work is that he has the opportunity to develop engaging programs that demystify STEM and provide equitable access to the obtainment of critical thinking and innovation skills. Carlos strives to develop programs that help youth discover a passion for STEM and equip them with a skill set that can be used for economic empowerment as they move towards college and career. Carlos has been involved in LMIT’s Invention Adventures coaching and mentoring program for after-school and summer. Marquez and his colleagues at Think Together piloted LMIT’s Invention Adventures program and sent their first group of students to the state finals (CA Invention Convention) in the 2020-21 school year.



## Jennifer Mead

Educator, Fremont, California



Jennifer Mead has been an innovative educator for over three decades, teaching a wide range of students from 1st through 8th grade, including GATE (Gifted and Talented Education) students and children with special needs. She has been recognized with several awards, including 2020 Teacher of the Year from Junior Achievement of Northern California, the 2020 Lemelson-MIT Excite Award, and first place in the 2019 Henry Ford Teacher Innovator Awards. Jennifer has worked with the California Invention Convention since 2018 — she spearheaded participation at her school and district, and championed state-wide involvement. Jennifer has helped LMIT's collaboration with California's Think Together program, and developed PDs for teachers, showcasing literature as a catalysis for invention learning.

## Natalie Mondesir

STEM Teacher, Liberty Elementary School, Midway, Georgia



Natalie Mondesir is a fourth grade STEM teacher at Liberty Elementary School in Midway, Georgia. She has two sons, one of whom has just started college. Natalie has been motivating and developing future STEM leaders for the past eight years. She loves using technology to prepare her students for the future.

## Jelani Odum

Program Manager, Michelson Institute for IP



Jelani Odum is passionate about the intersection of philanthropy, education, and innovation. She is a Program Manager at the Michelson 20MM Foundation in Los Angeles, where she oversees the Michelson Institute for Intellectual Property. Previously, she facilitated commercialization accelerator programs for science and technology entrepreneurs. Jelani holds a B.A. in political science from the University of Southern California.

## Carlos Osorio, PhD

Co-Founder and Partner, Yuken and LMIT Consultant



Carlos Osorio is co-founder and partner of Yuken, the first impact research lab in Latin America that partners with people and organizations all over the world to create positive and lasting change for their innovation, learning and design challenges. His work focuses on innovation processes and innovation in complex socio-technical systems. He has experience in the biotech, finance, telecom, energy, natural resources and utility sectors. He holds a PhD in technology, management and policy from MIT. Carlos has been assisting LMIT with the development of the Invention and Inclusive Innovation (I3) initiative at California Community Colleges.

## Katherine Owens

Innovator for STEM, Design, and Entrepreneurial Education, Washington Episcopal School, Bethesda, MD



Katherine Owens is an award-winning educator and curriculum developer in STEM, innovation, entrepreneurship, and design. She employs proficiency in teaching through engaging, applicable, and purposeful classes, which instills content, fosters skills, inspires creativity, celebrates diversity, and emphasizes social and environmental responsibility in students. Katherine leverages a career in business development to educate and advocate the importance of modernizing education to meet the workforce demands of the 21st century through student-focused solutions, institutional objectives, and strategic partnerships.



## Brenda Payne

Executive Director, California Invention Convention



Brenda began her career as an educator in Northern California where she introduced invention education to students, utilizing an engineering curriculum that she helped develop for her district. Continuing on as a principal at several schools in Northern and Central California and a superintendent in a small district in Santa Cruz County, she began the California Invention Convention (CAIC), a program that today serves thousands of students, as an annual celebration of K-12 inventors and entrepreneurs from across the state. Brenda has provided the professional development for the CAIC curriculum that teachers use in their classrooms and after school programs.

## Tony Perry

Invention Education Coordinator, Lemelson-MIT Program



As the Invention Education Coordinator at LMIT, Tony Perry supports teams of high school students, teachers, and mentors from around the country as they work through the invention process from problem identification to building a working prototype during their InvenTeam grant year. Prior to joining LMIT Tony taught high school science in Chicago and worked in museum education. He received his master's degree in science education from Northwestern University and bachelor's degree in astronomy-physics from the University of Wisconsin-Madison. In addition to his role at LMIT, Tony is a PhD student at Texas Tech University, concentrating in curriculum and instruction.

## María Renard

Co-Founder and Partner, Yuken



Maria Renard is co-founder and partner of Yuken Impact Research Lab, with expertise in developing and mobilizing innovation and creativity skills in children and adults, learning in the innovative design process, human-centered design solutions and strategic visual communication for academic settings. She leads the design and learning teams at Yuken. She has been a professor of design for more than fifteen years, and founding director of the School of Design at Univ. Gabriela Mistral. She is a designer from PUC and holds a master's degree in innovation from UAI. Maria has been assisting LMIT with the development of the Invention and Inclusive Innovation (I3) initiative at California Community Colleges.

## Diane Sabato

Business Professor, Springfield Technical Community College



Diane Sabato joined the Springfield Technical Community College (STCC) faculty in the School of Business & Information Technology in 2009. She serves as the lead faculty for entrepreneurship and innovation. Previously, she was Director of the Entrepreneurial Institute at STCC, responsible for programs in entrepreneurship education and student business incubation. Diane is one of the Michelson Institute's IP Educators in Residence at STCC. She received a VentureWell E-Team grant, funded by The Lemelson Foundation, to create and run an STCC Honors Program course in innovation. She holds a master's in curriculum and instructional technology from Framingham State University and a bachelor's in psychology from the University of Manitoba.

## Cristina Sáenz

Innovator for STEM, Design, and Entrepreneurial Education



Cristina Sáenz is a second-year doctoral student at the University of Central Florida in the education program with an emphasis on inclusive STEM. Her research has focused on identifying the networks of support for invention education as well as exploring the life experiences of Latina inventors.

## Amy Schulz, PhD

Dean of Career, Continuing and Technical Education, Sierra College



Amy Schultz is the administrative lead for Sierra College, working with LMIT's new Invention and Inclusive Innovation (I3) initiative for community colleges. As the CTE dean at Sierra College, Amy oversees workforce development and 12 instructional programs. Past positions include co-creator of the New World of Work 21st Century Skills, an ecosystems coach for the California Community College Maker Initiative, Vice President of Education and Membership for the National Association for Community College Entrepreneurship, and Director of Career Technical Education at Feather River College. Amy holds a PhD in organizational systems from Saybrook University, an MBA from University of Texas, Rio Grande Valley, and a BA in economics from UC Davis.

## Roxane Scrima

Teacher, John F. Kennedy Elementary, Somerville, Massachusetts



Roxane Scrima is a veteran kindergarten teacher who loves hands on activities. She joined LMIT this year to experience and explore Invention Convention with her kindergartners. She worked with Invention Convention expert, Jennifer Mead, and did a 6-week professional development for pre-K to grade 2 teachers in her home town of Somerville, Massachusetts. Roxane would love to share her personal experiences and how she developed lessons through literacy to build a inventors mindset using the S.C.A.M.P.E.R. model.

## Doug Scott

Teacher, Hopkinton High School, Hopkinton, Massachusetts,  
and 2014 InvenTeam educator and LMIT Master Teacher



Doug Scott is a robotics and information technology teacher at Hopkinton High School in Massachusetts. He was a business undergraduate student at Framingham State University, but was always a lifelong inventor at heart. Doug first became involved with LMIT as the InvenTeam educator for the 2014 Natick High School InvenTeam. Doug accompanied two students from the Natick High School InvenTeam to the fourth White House Science Fair in May 2014, and their invention was awarded a U.S. Patent. Doug was awarded the 2014 Massachusetts STEM Teacher of the Year and the 2020 Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST) from the White House.

## Jaared Scott, PhD

Associate Superintendent, Francis Tuttle Technology Center



As associate superintendent, Jaared Scott provides visionary leadership and oversight of Francis Tuttle's career training programs, college preparatory academies and workforce and economic development initiatives. Past positions include Technology Center Coordinator at the Oklahoma Department of Career and Technology Education (ODCTE); instructor at the Meridian Technology Center; and Regional Cisco Academy Coordinator. Jaared holds a bachelor's in computer science from Northwestern Oklahoma State University, a master's in engineering and technology management from Oklahoma State University, and a doctorate in education from Oklahoma State University. He was recently named a mentor for the OKC Thunder Launchpad.

## Arlyne Simon, PhD

Biomedical Engineer, Author, Inventor, and Entrepreneur



Honored as a trailblazing female innovator by the United States Patent and Trademark Office, Arlyne Simon is on a mission to inspire kid inventors everywhere. She is a biomedical engineer, patented inventor, author of the "Abby Invents" picture book series and founder of Abby Invents – a K-5 invention education company ([www.abbyinvents.com](http://www.abbyinvents.com)). As an author, Arlyne crafts stories about a girl inventor who creates things kids wish existed like unbreakable crayons and foldibots! Arlyne is also staying busy as an AAAS IF/THEN® Ambassador, advocating for girls in STEM.

## Audra Skukauskaitė, PhD

Associate Professor, University of Central Florida



Audra Skukauskaitė is an associate professor at the University of Central Florida and a Senior Research Scientist on a 4-year research grant at Klaipeda University, in Lithuania. She has worked with LMIT on numerous research studies informing our understanding of the importance of invention education and played a lead role in the compilation of research on invention education published by the Invention Education Research group. Her teaching and research focus on ethnographic and qualitative research methodologies and their utilization to study complex educational and social issues.

## Tokiwa Smith

Cultural Competency and STEM Education Consultant, Nonprofit Founder and Executive, Author and Speaker



Tokiwa T. Smith is a chemical engineer, social entrepreneur and leader in STEM education and philanthropy. She is the Principal of Tokiwa T. Smith Consulting, a boutique consulting firm that specializes in cultural competency training for the education and philanthropic sectors. She also serves as the Founder and Executive Director of Science, Engineering and Mathematics Link Inc., a nonprofit organization, and she is the CEO and Principal Consultant of Kemet Educational Services, a STEM educational consulting firm. An alumna of Florida A & M University, Tokiwa is the author of the books “Experimental Design Process: A Guide for High School Students to Conduct Research Like A Research Scientist” and “A Guide to Hosting STEM Events.”

## Michelle Sullivan

PhD student, University of Central Florida



Michelle Sullivan is a second-year doctoral student and graduate assistant in the methodology, measurement, and analysis track of the PhD in education program at the University of Central Florida. Her research interests include the methodological challenges of working with previously collected records, researcher positionality, and the role of diversity, equity, and inclusion in education.

## Katelyn Sweeney

MIT alumna and InvenTeam alumna, 2013 Natick High School InvenTeam, Natick, Massachusetts



Katelyn, a patented inventor, is a mechanical and aerospace engineer who has led design processes at every stage from ideation to impact. A self-proclaimed “space nerd,” Katelyn loves leveraging aerospace engineering for human impact. She has worked on projects all over the world, including developing satellite-enabled connectivity solutions in rural Alaska, Rwanda, and the Caribbean. Katelyn holds a B.Sc. in mechanical engineering from MIT (2018) with a minor in innovation & entrepreneurship. She was a leader on the 2013 Natick High School InvenTeam during her 11th grade in high school.

## Amy Taber

Executive Assistant, MIT’s Abdul Latif Jameel World Education Lab (J-WEL)



Amy Taber is a member of the operations team at J-WEL and executive assistant to Vijay Kumar, J-WEL’s executive director. She coordinates J-WEL’s Higher Education Innovation Grants program and oversees various special initiatives. Amy works with J-WEL’s Workforce Learning Collaborative to develop and deliver virtual human skills sessions for experiential learning cohorts. Amy’s experience in education research comes from TERC in Cambridge, MA, in her role as an events planner for curriculum implementation institutes and project manager for revising Investigations in Number, Data, and Space 2nd Edition™, a nationally recognized math curriculum.

## Rachel Thibault

Teacher/Adjunct Professor at SOAR High School at Antelope Valley College, Lancaster, CA, and 2014 and 2018 InvenTeam educator



Rachel, a patented inventor, is a teacher of biological and behavioral sciences at SOAR High School in Lancaster, California. SOAR is an AVID school located on the Antelope Valley Community College campus. She was the founding faculty member of the high school when it was established in 2012. There have been two InvenTeams from SOAR High School. Rachel led both teams and both teams have received U.S. patents. She has recently begun her journey at Johns Hopkins University School of Education in the Mind, Brain, and Teaching Ed.D. program.

## Erin Tochen

Director, InventEd Network, The Lemelson Foundation



Erin Tochen is the InventEd Network Director. In this role she develops program strategy, designs and implements systems/processes, and leads community engagement efforts. Prior to this role, Erin spent the last 15 years in the invention education and innovation space, including as a Program Officer for Invention Education at the Lemelson Foundation, a Kiva Fellow supporting artisan entrepreneurs, and a Foundation Relations Director building innovation programs at the University of Portland. She's thrilled to be reconnecting with the growing community of Invention Education champions!

## Jaime Turcotte

STEM Educator/ Curriculum Developer



Jaime Turcotte has been working as a middle and high school STEM educator and curriculum developer for over 3 years. She has a passion for invention and inspiring students to pursue paths in science technology and engineering.

## Joyce Ward, JD

Director, Education & Outreach, USPTO



Joyce is the Director of the Office of Education and Outreach for the United States Patent and Trademark Office. She is tasked with expanding the reach of the USPTO's outreach offerings to provide educators and students with unique USPTO learning experiences and resources designed to integrate knowledge of invention, innovation, entrepreneurship, and STEM. Under Joyce's leadership the USPTO has launched several projects for educators and students such as the Science of Innovation series, a collaboration between the USPTO, the National Science Foundation, and NBC Learn; a national summer institute for teachers with a focus on intellectual property; and the first USPTO Inventor Trading Card series. Past positions include the Director of Program Support and Intellectual Property for the National Inventors Hall of Fame, and Trademark Examining Attorney.

## Kevin Warfield

Project Lead The Way Teacher, Greenbrier East High School, Lewisburg, WV



Kevin Warfield is an experienced Project Lead The Way teacher at Greenbrier East High School in Lewisburg, West Virginia, teaching pre-engineering and architecture. Prior to becoming a teacher in 2006, Kevin worked for 15 years in civil engineering and architecture. In 2015, Kevin was named Greenbrier County Teacher of the Year and was a finalist for West Virginia Teacher of the Year. His students partner with local businesses on local and global design problems including designing the multi-million dollar Greenbrier Aquatic Center which will open in fall 2021 and a sustainable courtyard in Sorocaba, Brazil.

**George Westerman, PhD**



Principal Research Scientist, MIT's J-WEL Workforce Learning, and Senior Lecturer, MIT Sloan School of Management



George Westerman has spent over 17 years with MIT Sloan School of Management where he is co-chair of the MIT Sloan CIO Leadership Awards. He has written three award-winning books, including "Leading Digital: Turning Technology Into Business Transformation." As a pioneering researcher on digital transformation, George has published papers in Harvard Business Review, Sloan Management Review, and other top journals. He is a member of the Digital Strategy Roundtable for the U.S. Library of Congress and earned his PhD from Harvard Business School. He focuses on helping employers, educators, and others to rethink the process of workforce learning.

## Mark Westlake

Innovation Center Director, Saint Thomas Academy Innovation Center, Mendota Heights, Minnesota, and 2008 InvenTeam educator and LMIT Master Teacher



Mark Westlake has been working at Saint Thomas Academy since 1989 and he currently works as the director of the newly renovated Innovation Center. Mark loves working at Saint Thomas Academy because he works with such brilliant and creative students. He also loves celebrating his colleagues, "I love any time one of our faculty or staff is recognized for the amazing job they do!" Something that people may not know about Mark is that he has a 1968 BMW R60/2 motorcycle.

## John Wohner

Engineering technology teacher and InvenTeam educator



John Wohner is an applied engineering technology teacher and InvenTeam educator at Ridgewood High School in New Jersey. In addition to teaching, John has extensive experience with digital fabrication and prototyping technologies and more than two decades of experience operating a specialty wood products manufacturing company.

## Susan Young

Assistant Director, Workforce Learning, MIT's Abdul Latif Jameel World Education Lab (J-WEL)



Susan Young is assistant director of Workforce Learning at MIT J-WEL. Susan leads membership development and community building, manages the Workforce Learning research grant program, and supports program development and research activities. Past roles include producer of the MIT Inclusive Innovation Challenge, MIT's premier future of work prize, awarding over one million dollars each year to entrepreneurs that are using technology to drive economic opportunity for workers. Susan managed partnerships with collaborators and local teams responsible for implementing the IIC at a regional level across the globe. Susan holds an MA in International Relations from New York University and a BA in Political Science from the University of Chicago.

## Helen Zhang, PhD

Lynch School of Education, Boston College and LMIT Consultant



Helen Zhang has over 15 years of experience in designing and implementing STEM activities in formal and informal settings. Her work with LMIT includes the development of online webinars addressing key issues related to invention education, workshops to engage teachers in integrating invention projects in their classrooms, the development of instructional resources and programs, and research.