

STEM Summit

November 9, 2023 | 11:00 AM ET | 10:00AM CT | 8:00AM PT

Agenda
Register Here



Claire Dutreix, Sr. Associate Director K-12 Education,
CHILDREN AT RISK

Claire Dutreix is the Senior Associate Director of K-12 Education at Children at Risk, where she plays a pivotal role in advancing educational opportunities for all children in Texas. As a former high school teacher in Houston, TX, and a dedicated Teach for America alumna, Claire was honored with the Rookie Teacher of the Year award for her outstanding contributions to education. Claire is deeply committed to ensuring that all children have access to equitable and excellent public education in Texas. She holds a Bachelor of Arts degree in Chemistry from The University of Mississippi, with minors in Intelligence and Security Studies, Legal Studies, and Mathematics. In her current role, Claire continues to drive positive change in the education sector, collaborating with schools, districts, and agencies to identify innovative practices and advocate for marginalized communities. Claire's dedication to addressing educational disparities and promoting social justice remains unwavering. She is a staunch supporter of the teacher workforce and envisions a Texas that invests in public education to meet all students where they are at and advance them to their highest potential.



Charanya Ravikumar, Chief Strategy Officer, CHILDREN AT
RISK

Charanya Ravikumar holds a B.S. in Electrical and Computer Engineering from U.T. Austin. After several years in the high-tech industry, Charanya switched career paths to pursue her true calling in the non-profit sector and obtained a Nonprofit Management certification from Duke University. She joined the Development team of CHILDREN AT RISK in 2016, primarily overseeing foundation and corporate partnerships. In 2022, she assumed the Chief Strategy Officer role, and is leading the development and implementation of the organization's new 3-year strategic plan with a focus on increasing the growth and impact of C@R and building strong and strategic collaborative partnerships. As a mother of two young children, Charanya is committed to improving equity and justice for Texas children and making Texas a great place for all children to grow up in.



Sabari Raja, Managing Partner, JFF Ventures

Sabari is Managing Partner at JFFVentures, an early stage impact fund that partners with entrepreneurs building solutions at the intersection of education, workforce development and human potential.

Earlier, she co-founded Nepris, an impact focused edtech platform connecting students to industry experts to bring real world relevance and career exposure to all students. As an entrepreneur she raised investment capital from impact and venture investors and led the company through early growth and eventual acquisition by a private equity firm in 2021. Post-acquisition, she assisted the company with the leadership transition, merger, and rebranding (Pathful, Inc) and continues to remain on the board of Pathful, Inc.

She is an active angel investor and limited partner in companies/funds focused on innovation in education and workforce with a passion for supporting diverse founders. She is a member of Hustle Fund Angel squad, Senior Advisor at New Markets Venture Partners, and a mentor at StartEd. She enjoys sharing her experiences to guide entrepreneurs through their startup journey.

She was the 2020 EY Entrepreneur of the year winner for the southwest region. Her journey and story has been captured in publications such as "Innovate Hers – Why purpose driven entrepreneurial women rise to top" and "Who you know – Unlocking students social capital".

Sabari has an undergraduate degree in Electrical Engineering from India, master's in computer science and an Executive MBA from Cox School of Business, SMU. She lives in Austin, Texas and is also a busy mom with 2 boys, one a high school junior and one heading to college this year.



Ganesh Padmanabhan, CEO, Autonomize Inc

Ganesh is the CEO & founder of Autonomize AI, a technology company applying Trusted Generative AI to healthcare and lifesciences. Autonomize's AI products organize, contextualize and summarize unstructured data so healthcare knowledge workers can make data-driven decisions, to improve patient outcomes. Autonomize AI is a founding member of CancerX, the US President Biden's Cancer Moonshot initiative. Ganesh is an accomplished business executive, entrepreneur and investor, with deep expertise in data and artificial intelligence (AI) related businesses. He is passionate about using technology to solve the biggest challenges for humankind and is a believer in the power of AI to augment human potential. He is an advocate for ethical use of data and AI, and using technology as a global equalizer to create opportunities for all.

He is also the Founder & Chief Creator of Stories in AI, an edu-tainment venture. He previously co-founded and scaled Molecula Corp, a data management company, and led growth and commercial at CognitiveScale, Inc, an Enterprise AI company. Prior to that he spent a 15 year career spanning Dell Technologies and Intel Corp.

He is an investor and advisor for several companies and has been active in the community by mentoring local entrepreneurs and startups at Capital Factory, Texas. In 2020, he served on the Texas Governor Abbott's COVID-19 Strike force on Innovation, helping them unlock data to better decisions on the response and recovery in the State.

A frequent keynote speaker, he is published at Forbes, Business Insider, Fast Company and other publications and was honored by the Enterprise Management 360 as one of the top 10 tech experts revolutionizing AI. Ganesh holds a bachelor's degree in Mechanical Engineering from University of Calicut, India, and an MBA from McCombs School at the University of Texas Austin.



Cathy Chen Arriaga- Executive Director, Fab Lab El Paso

Cathy Chen-Arriaga is the Founder and Executive Director of Fab Lab El Paso, an innovation skilling and STEM education hub at the intersection of technology and community. Fab Lab curates creative STEM and industry 4.0 educational programs with a strong focus on diversity, equity, and inclusion. With over 15 years of expertise in the socialization of tech and democratization of 21st century workforce skills, Cathy has successfully implemented programs with local and national stakeholders such as the U.S. Economic Development Administration, City of El Paso Department of Economic Development, National Aeronautics and Space Administration, Microsoft, Mark Cuban Foundation, League of United Latin American Citizens, Texas Commission on the Arts and many more.

Cathy is also the producer behind PBS documentary short film "Disrupted Borders" (2021), a story about young Latina inclusion in tech and winner of National Association of Latino Arts and Culture Adan Medrano Film Legacy Award, Cleveland International Film Festival Jackson Spaulding Audience Choice Award, San Diego Latino Film Festival Award, El Paso Film Festival Reel South Documentary Award, and El Paso Film Festival Filmmaker Award.

Cathy is an Aspen-Hunt Fellow of the prestigious Aspen Institute with an undergraduate degree in Political Economy (Gates Millennium Scholar) from Duke University and Executive Education certification from Harvard Business School. She currently serves on the advisory board for The College of Education at the University of Texas El Paso, El Paso Chamber's Workforce and Education Committee, and City of El Paso's Public Art Committee.



Sherrika Sanders- PhD, Sr Technical Engineer, Manner

Polymers

Sherrika received her undergraduate degree from Xavier University of Louisiana in Chemistry. After receiving a PhD in Inorganic Chemistry and completing postdoctoral research, Sherrika enjoyed a 9 year career as a Senior Scientist, Technical Services Scientist, and Group Leader for The Dow Chemical Company. Following her tenure at Dow, Sherrika became the R&D Director at Authentix, Inc. located in Dallas, TX. In this role, she managed development, formulation, scale-up, quality and commercialization of markers for authentication solutions while also leading the Environmental, Health and Safety function for the Company. In 2017, she was recognized as a “Hidden Figure of Dallas” for her many contributions to science and technology. In 2018, during Women’s History Month, Sherrika was listed as 1 of 20 “Most Influential Women in Manufacturing”. Currently, Sherrika has returned to the plastics industry as the Senior Technical Engineer for Manner Polymers in McKinney, TX. She was most recently named as one of “The Top 50 Advanced Manufacturing, Supply Chain & Logistics Influencers” by Warner Communications. Given the breadth of her role, no two days are the same. Each day is exciting and provides a unique opportunity to make a difference within the company and the customers they serve.



Liliana Gonzalez – Manager, Research & Impact, Society of Hispanic Professional Engineers (SHPE)

Liliana serves as Program Manager in Research & Innovation at SHPE. Based in Houston, she is currently leading the nationwide Equipando Padres program, designed to support parents of first generation to college engineering students. A lifetime learner who values creating opportunities, Liliana's experience lies in support services for K-12 education systems, community school models, and interagency partnerships. She holds a Master of Public Administration from the University of Texas-Permian Basin and a Bachelor of History- Mexican-American Studies from the University of Houston. Liliana is passionate about serving through assets-based engagement and has dedicated her life to what she learned best from her parents- providing respectful kindness.



H.Puentes– Co-Founder, President and CEO, San Diego

Squared (SD2)

H. is Co-Founder, President, and CEO of San Diego Squared (SD2.org), a nonprofit focused in increasing diversity in STEM-driven companies through partnerships, programs, and financial support for high school students, college students, and their educators. Prior to starting SD2, H. served on the leadership team at CONNECT where he founded CONNECT ALL @ the Jacobs Center – the region's first diversity focused startup accelerator and business resource center. To-date, H. has raised over \$10M to increase diversity in tech and the life sciences helping over a thousand minority owned businesses and hundreds of talented, diverse students connect with industries that have often seemed so distant.

Prior to his work in diversity and inclusion, H. drove marketing at a venture-backed Bay area startup, worked as a management consultant in London, and served as regional director for an international non-profit. H. holds a master's degree from The London School of Economics and a bachelor's degree from George Mason University.

When he's not operationalizing innovative ideas that increasing diversity in STEM, H. is an ardent painter and digital artist, and he enjoys spending quality time with his two young children, Emily and Owen, and his boss wife Dr. Roisin Puentes, PharmD, PhD.



Dami Fasina, Graduate Student Researcher, Yale University

Oluwadamilola (Dami) Fasina is a graduate student researcher at Yale University pursuing a PhD in applied mathematics. He grew up in Auburn, Alabama, and completed his B.S. in Nuclear Engineering at North Carolina State University and M.S. in Medical Physics from Duke University. His current research focuses on signal processing and machine learning with an interest in

biomedical and nuclear engineering applications. In his free time, he enjoys watching/playing soccer, chess, reading, and spending quality time with friends.



Marisa Plescia– Senior Chemist, Bell International

Laboratories

Marisa Plescia is an experienced cosmetic chemist with extensive expertise and education, having received degrees and completed coursework in both the USA and Europe. She has earned four graduate degrees in Cosmetic and Fragrance Science, Business, and STEM education, graduating from both the University of Cincinnati's Cosmetic Science program and ISIPCA in France. Since 2017, Marisa has worked at Bell International Laboratories in Eagan, MN and is the Senior Cosmetic R&D Chemist. A dedicated member and volunteer in the Society of Cosmetic Chemists, she was the Twin Cities SCC Chair (2020-2022) and the NextGen Committee Chair (2020). Marisa has written articles on cosmetic chemistry as seen in trade publications, and has been quoted and featured in numerous magazines and newspapers, including in the Washington Post and New York Times. Marisa is extremely passionate about cosmetic chemistry and living her childhood dream of a career as a cosmetic chemist.



Brian Mandell, PhD, is the Division Director of Curriculum, Digital Media and Communications for the SSEC.

In this role, he provides support and direction for the talented Curriculum, Digital Media, and Communication staff in the development of world-class print and digital curricular resources. This work includes our curriculum, Smithsonian Science for the Classroom, which embeds objects and research from the Smithsonian Institution, is built to current science standards, asks students to design solutions to real-world problems, provides research-based support for common student

misconceptions, and seamlessly integrates print and digital resources. Brian joined the SSEC in 2014 as a Science Curriculum Developer, where he was responsible for developing print and digital curricular materials that were grounded in current scientific, educational and cognitive research, empowered teachers, and helped all students develop a deep understanding of science and engineering practices. Brian also served as the K - 12 Science Coordinator for Fairfax County Public Schools, the 10th largest school system in the country consisting of 189,000 students, over 6,000 science teachers, 32 units of study and an annual budget over \$350K. Prior to joining SSEC, Brian taught middle school science for 13 years in Virginia and Maine. In his free time, he has been an adjunct professor at George Mason University teaching classes that focus on curriculum and instruction, learning theory, and instructional design. Brian earned his PhD in Educational Psychology with a secondary emphasis in Instructional Design from George Mason University in 2013. Brian also has an undergraduate degree in Environmental Science from the University of Delaware and a Master's degree in Education from the University of Southern Maine.



Nicholas Mendoza, School Founder, Alchemy Studio and

Labs

Nicholas is an award-winning teacher who has contributed to the training and preparation of almost 300 plus Houston educators over the past 8 years and has worked in more than 10 districts across the state training leaders and teachers on the implementation of High Quality ELA materials. Nicholas is currently designing Alchemy Studios and Labs, a montessori-inspired High School that envisions a world where everyone connects with, grows, and contributes their unique genius. Nicholas channels human connection and creativity through teaching and learning. He makes decisions by trusting stories, data and intuition in pursuit of a compassionate world.



Arthur Mitchell – Executive Director, STEM Equity Alliance

(STEM EA)

Arthur Mitchell is the Executive Director for the STEM Equity Alliance (STEM EA), a nonprofit dedicated to three goals: creating systems whereby STEM subjects are taught using culturally responsive approaches; increasing the diversity of STEM educators; and creating a more durable STEM pipeline for groups which are underrepresented in STEM career fields. Through the STEM EA he provides clients and partners key strategic direction and leadership development in systems change aligned to cultural proficiency and equity goals. STEM EA has partnered with the PA Department of Education to create a statewide network to increase STEM teacher diversity through the creation of school district and higher education strategic planning and action teams. He also serves as a technical advisor for equity for the Washington STEM and Washington LASER networks where he has helped them refine their strategic plan to intentionally center on equity and helped to build the capacity of their regional networks. Arthur is also the inaugural STEM Equity Fellow for the Philadelphia Regional Institute for STEM Educators (PRISE). In addition to his work with at STEM EA, he is a co-founder of the National Institute for Inclusive Competitiveness (NIIC), a national hub of strategists playing a critical role creating the regional economic infrastructures needed to increase asset ownership, entrepreneurship, and productivity for America's Most Vulnerable Populations. The NIIC's mission is to accelerate economic productivity in targeted vulnerable communities in partnership with HBCU and regional economies. Through the NIIC Arthur leads a collaboration with the Southern Regional Education Board (SREB) where they developed and manage the Takeda STEM HBCU Innovation, Industry, and Immersion (I3) program, sponsored by Takeda Pharmaceuticals. I3 is a pipeline to the doctorate program for STEM students from HBCUs.



Jamie Heilingoetter –Program Director, School

Empowerment Network

Jamie Heilingoetter has been a Texas educator for nearly 20 years. A native of Chicago, Jamie graduated from the University of Texas at Austin with a degree in Journalism and decided to make the Austin area her home. After a couple of years working in media, Jamie's desire to teach became undeniable. She pursued alternative certification and began her classroom career as a special-education teacher serving students with Autism and behavior-related disabilities. During her years as a teacher, Jamie taught students at all grade levels with the same goal: to ensure every student has access to rigorous, evidence-based instruction designed to prepare them for their chosen path. Jamie's unwavering commitment to serving all learners and ensuring educational equity inspired her to pursue school leadership; she has since served as a middle-school principal and district special education administrator. Most recently, Jamie served in a leadership role with the Texas Education Agency, where she had the privilege of supporting the launch of Texas Reading Academies. When not educating Texas students, Jamie loves to spend time in her garden and cook for family, friends, and neighbors!



Michael Odell, Ph.D – Ph.D. Professor of STEM Education and holds the endowed Roosth Chair in Education, University of Texas at Tyler

Michael R.L. Odell, Ph.D. is a Professor of STEM and holds a joint appointment in the College of Education and Psychology and the College of Engineering. He is currently the Co-Coordinator for the Ed.D. in School Improvement program and the Co-Director of the UTeach Program. He has been instrumental in implementing innovative programs that have resulted in increased enrollments, extramural research grants, and gifts from alumni and industry. Programs initiated by

Dr. Odell include the UTeach Replication, which has doubled the number of STEM teachers produced by the university. He co-founded the UT Tyler University Academy charter schools, which also serve as Laboratory Schools for the School of Education located at the UT Tyler main campus (Tyler, TX) and extension campuses in Longview and Palestine. He also established the Ingenuity Center, one of seven designated STEM Centers in Texas. Dr. Odell developed the agreement for the UT Tyler Partnership to manage the Discovery Science Place, a Family STEM Museum and associated Mobile STEM Outreach. Dr. Odell was instrumental in growing the research enterprise at UT Tyler and in the College of Education.



Reagan Flowers, PhD, Chief Education Officer, Sustainable

Forestry Initiative

Dr. Reagan Flowers is the Chief Education Officer (CEO) for the Sustainable Forestry Initiative (SFI) and Founder of C-STEM Teacher Student and Support Services, Inc. As CEO, she leads the SFI Lifetime of Learning Division global strategy, sustaining global networks in North America, Chile, and Japan. Annually, Project Learning Tree reaches over 2 million PreK-12 students through approximately 12,000 educators. In addition to her professional work, Flowers is active on the frontlines of education and workforce development issues. Her leadership led to her election to the Houston Community College System Board of Trustees. In this position, her track record of education advocacy, community stakeholder engagement, and demonstrated business acumen has enabled her to strike the right balance as an elected representative. In addition to having served as Chair for the Board of Trustees and Audit Committee, Dr. Flowers has \$400 MM budget oversight and received an appointment to the Association of Community Colleges Trustees Diversity, Equity, and Inclusion Committee.

In the early 2000s, when Dr. Reagan Flowers worked as a science teacher at the storied Jack Yates High School in Houston, she won a grant from NASA to implement STEM learning in her classroom. Using the engineering principles she learned over the years, Dr. Flowers developed a robotics program that taught students STEM using themed-based learning to provide relevant content, experiences, and opportunities for students to create and innovate through project-based learning.

In 2002, Dr. Flowers founded C-STEM Teacher and Student Support Services, Inc., an organization committed to supporting teachers in delivering project-based learning that ignites curiosity and teaches Communications + STEM (C-STEM) skills to students historically underrepresented in STEM fields. C-STEM aims to create a world where minority and economically disadvantaged students have high-quality communication and STEM experiences that catapult them into transformative spaces, creating economic and social mobility opportunities. During the first five years of C-

STEM's operation, Dr. Flowers spear-headed fund development and grew the annual program budget from 10,000 to over \$500,000.

Working with organizations tackling challenging issues related to equitable education, social mobility, economic disparity, and diversity and inclusion is Dr. Flowers's personal mission and passion. Over her career, she has leveraged her love for STEM, education, and people to successfully advocate for access to the right opportunities for those who need it most.

Dr. Flowers is a first-generation college graduate blazing her unique path in STEM education and social entrepreneurship. She was raised in Mississippi by way of Michigan, where she developed an appreciation for learning and the power of creative thinking. Thanks to the selfless investments of elementary and secondary school teachers who nurtured her ingenuity and creativity, Dr. Flowers overcame many challenges that accompany being raised in a bottom-income quintile family. With the support of her teachers early on, she found herself on a path to college and career success she could have never imagined—going on to earn a BS in Biology from Texas Southern University, an MA in Counseling from Prairie View A&M University, and Ph.D. in Education Leadership/Systems from the Union Institute and University. The combination of Dr. Flowers grit and countless official and unofficial mentors has shaped her into the educator, advocate, philanthropist, businesswoman, and social entrepreneur she is today.

Dr. Flowers has received numerous awards and recognition for her leadership and service over the years. Some notable mentions include being named a global finalist for the World Innovation Summit on Education award (2011), a STEM Access Champion of Change Recognition from the Obama White House (2014), receiving the Lifetime Achievement Award (2022) by the International Association of Top Professionals, and the Unsung Heroine Award from the Wells International Foundation (2023).

Dr. Flowers resides in Houston with her husband and enjoys culinary arts and traveling worldwide.