

# Mind, Brain and Education: Research, Policy and Practice Collaboratory

Monday, October 9<sup>th</sup> 2017

## BIOS

### Keynote Speakers and Facilitators

**Joshua Aronson**, Ph.D., Associate Professor of Applied Psychology, is best known for pioneering research on “stereotype threat” and on “growth mindset,” research that helps explain and improve the performance of minority students confronted by unnerving expectations rooted in race and gender stereotypes about ability. Aronson founded and directs the Mindful Education Lab, which helps schools use cutting edge science to improve student learning and school culture. He also directs the School to Prosperity Pipeline, which nurtures young minority students through the ages of 4 to 22, in a community of scholars, independent schools, and business, to guarantee the success of students in high poverty environments. His research is focused on the question of how to design environments that bring out the best in people.

**Natalie Brito**, Ph.D., is an Assistant Professor of Developmental Psychology at NYU Steinhardt and director of the Infant Studies of Language and Neurocognitive Development Lab. As a developmental psychologist, her focus is on understanding how early social and cultural contexts (e.g., poverty, multilingualism) shape the trajectory of neurocognitive development.

**Thomas J. Carew**, Ph.D., Anne and Joel Ehrenkranz Dean of the Faculty of Arts and Science at NYU. A renowned scholar and the author of over 180 scholarly articles and three books, Dean Carew has focused his research on the behavioral, cellular, and molecular analyses of learning and memory. He was previously the Bren Professor and Chair of the Department of Neurobiology and Behavior at the University of California, Irvine, where, in addition, he served as Chair of the Task Force on Undergraduate Education, and as a member of the system-wide Commission on Undergraduate Education. He has also held leadership roles at Yale University and Columbia University. He is an elected Fellow of the American Academy of Arts and Sciences and served as President of the Society for Neuroscience in 2008. Dean Carew earned a B.A. from Loyola University, an M.A. in physiological psychology from California State College, and his Ph.D. in physiological psychology from the University of California, Riverside.

**Joanna A. Christodoulou**, Ed.D., is an Assistant Professor in the Department of Communication Sciences and Disorders at the MGH Institute of Health Professions. She integrates roles as a clinician, developmental cognitive neuroscientist, and educator, to study academic skill (reading, math, attention) development and difficulties. She holds appointments at the Harvard Graduate School of Education as adjunct lecturer and at MIT as a research affiliate.

**Debbie Cockerham**, M.Ed., managing director of the Research and Learning Center at the Fort Worth Museum of Science and History, also serves as Visiting Research Scholar at Texas Christian University’s Center for Science Communication. In these roles, she works to strengthen interdisciplinary communication and build connections between research scientists, educators, and the public, and has supported multiple museum-university research collaborations. For over twenty years, she worked as a learning disabilities specialist, teaching children and adolescents with a variety of learning and attentional differences. Her work with students who have attention deficit hyperactivity (ADHD) and/or autism

spectrum disorder (ASD) students has focused on socioemotional learning, based on connections between communication skills and the fine arts.

**Barry H. Cohen**, Ph.D., recently retired from his position as Clinical Associate Professor of Psychology at NYU, and is now a research affiliate with the Mindful Education Lab. As an instructor, he taught courses in statistics and research methods for more than 30 years, and as an administrator, he directed, or co-directed, the master's program in psychology for more than 25 years. He has been practicing meditation regularly for more than 48 years, and his research interests include understanding the psychological and physiological effects of various forms of meditation.

**Kelsey Finkel**, DPhil, is the Education Portfolio Lead at the Robertson Foundation, the family foundation of Julian H. Robertson based in New York City. In that capacity, she is responsible for the leadership and management of the Foundation's education grant-making, which aims to support equal access to quality education for all children to become responsible members of civil society. She holds a BA from Columbia College, an MA in Philosophy and Education from Teachers College, and an MSc in Education and Technology and a DPhil both from the University of Oxford.

**Nina Hood** is a lecturer in education at The University of Auckland, New Zealand and the founder of The Education Hub, a not-for-profit with a mission to foster innovation and improvement in schools by bridging the gap between research and practice. She is interested in improving knowledge translation work in education, particularly capturing and sharing the expertise and practice of outstanding teachers.

**Patricia (Tish) Jennings**, Ph.D., is an Associate Professor at the University of Virginia and founder of SEL special interest group at AERA. Tish is also a 20 year veteran teacher and Author of "Mindfulness for Teachers." She studies the social and emotional dynamics of educational settings and apply this understanding to develop and test interventions designed to enhance teachers' capacity to cultivate supportive relationships with their students and provide a supportive and engaging social and emotional context for academic learning.

**Ian Kelleher**, Ph.D., is Head of Research for the Center for Transformative Teaching and Learning (CTTL) at St. Andrew's Episcopal School in Potomac, MD. He also teaches chemistry, physics and robotics, and coaches soccer. He is the co-author of Neuroteach: Brain Science and the Future of Education.

**Bryan Mascio** taught for 12 years in New Hampshire, primarily working with students who had been unsuccessful in traditional school settings. He is currently an advanced doctoral candidate at the Harvard Graduate School of Education studying the social-emotional- cognitive skills of teaching, and an adjunct faculty at the University of New Hampshire helping to prepare new teachers.

**Kimberly Noble**, M.D., Ph.D., is an Associate Professor of Neuroscience and Education at Columbia Teachers College, where she directs the NEED lab. The goal of Dr. Noble's research is to better characterize socioeconomic disparities in children's cognitive and brain development. Ongoing studies in her lab address the timing of neurocognitive disparities in infancy and early childhood, as well as the particular exposures and experiences that account for these disparities, including access to material resources, richness of language exposure, parenting style and exposure to stress. Finally, she is interested in applying this work to the design of interventions that aim to target gaps in school readiness, including early literacy, math, and self-regulation skills.

**Marc Schwartz**, Ph.D., is a Professor of Education at the University of Texas at Arlington where he directs the SW Center for Mind, Brain and Education. The Center seeks to identify and support promising research agendas at the intersection of the learning sciences and education. He also created and oversees a master degree program in MBE where graduate students work in contexts where the tools and ideas from MBE lead to promising and testable solutions in schools, hospitals, museums and other educational

contexts. Professor Schwartz is also a charter member of the International Mind, Brain and Education Society (IMBES), its past vice president and two term president.

**Carolyn Strom**, Ph.D., is a Visiting Assistant Professor at NYU Steinhardt Department of Teaching and Learning, where she studies reading and literacy development in young children and adolescents. As a state-certified Reading Specialist and former elementary school teacher, she has over fifteen years of experience researching and working closely with students who have difficulties learning to read. Her work focuses on the ways in which reading and vocabulary interventions work for children from linguistically diverse and high-poverty backgrounds.

**Kimberly Tanner**, Ph.D., is a tenured Professor of Biology at San Francisco State University. Her laboratory – SEPAL: The Science Education Partnership and Assessment Laboratory – investigates how people learn and teach science, especially biology. Having spent about a decade in K-12 science education, she learned almost all of the important things she knows about effective teaching from talented K-12 teachers. Then, she accepted a biology faculty position at a university to understand why scientists choose to teach the way they do (mostly lecture) and how to support them in shifting towards more effective, evidence-based teaching methods that are known to drive memory formation, synaptic plasticity, and long-term learning in the brain.

**Joan Walker**, Ph.D., is a program officer in the Division of Research on Learning in Formal and Informal Environments within the National Science Foundation’s Directorate of Education and Human Resources. In this role she provides feedback to researchers, holds review panels and makes recommendations about funding. She joins the Collaboratory wearing two hats: An NSF outreach hat and a researcher hat woven from a diverse background in the performing arts and psychology and a learning sciences post-doctoral faculty fellowship in a biomedical engineering research center. The hub of these disparate disciplines is curiosity about design and design thinking.

**Marsha Wallace** has been teaching science at the secondary level for the past 23 years, the first seven in Trinidad and the rest in NYC. She is a NBTS teacher for early adolescence science and holds licenses for School Building Leader, Biology (7-12) and Students with Disabilities (7-12). She currently works as an 8th grade science teacher and department chair at the Salk School of Science and as Urban Advantage Lead Teacher at Brooklyn Botanic Garden.

**Yana Weinstein**, Ph.D., is an Assistant Professor at the University of Massachusetts Lowell and co-founder of the Learning Scientists. She received her PhD in Psychology from University College London and had 4 years of postdoctoral training at Washington University in St. Louis. The broad goal of her research is to help students make the most of their academic experience. Yana’s research interests lie in improving the accuracy of memory performance and the judgments students make about their cognitive functions. Yana tries to pose questions that have direct applied relevance, such as: How can we help students choose optimal study strategies? Why are test scores sometimes so surprising to students?

### **Fireside Chat**

**Keng-Yen Huang**, Ph.D., is an associate Professor of Population Health and Child and Adolescent Psychiatry at NYU School of Medicine, specializing in child development, psychiatric epidemiology, prevention, implementation, and global public health research. Her current research efforts focus on child mental/behavioral health implementation and epidemiological research both in low- and middle-income countries (LMICs) and in the US.

**Michelle Mondesir** is a ParentCorps Educator in the Center for Early Childhood Health and Development in the Department of Population Health. Michelle serves as a coach and trainer for ParentCorps implementation, as well as a liaison to ParentCorps implementers and school administrators at public schools throughout New York City.

**Katherine Rosenblatt**, LCSW, is a Clinical Assistant Professor in the Department of Population Health, NYU School of Medicine, and Co-Director of ParentCorps Academy.

### **Fire Talk Presenters**

**Debbie Cockerham** (see design thinking tables)

**Sarah Creider** has an Ed.D. in Applied Linguistics from Teachers College, Columbia University and is a Visiting Assistant Professor of Multilingual Multicultural Studies at New York University. Using conversation analysis, she looks closely at teacher-student interactions and teacher-fronted questions. Her research offers teachers concrete practices that encourage student engagement and student agency.

**Nicole Furlonge**, Ph.D., is Director of Teaching and Learning and Chair of the English Department at Holderness School in Plymouth, New Hampshire. She received her Ph.D. in English in 2006 from the University of Pennsylvania. Her book, *Race Sounds: The Art of Listening in African American Literature* explores how 'listening' is both an African American literary trope and actual communal practice that provides a deeper, more intimate engagement with American citizenship and racial difference. *Race Sounds*, published by University of Iowa Press, is due on the shelves March 2018. Nicole is also a Lead Teacher in English and co-designer of the Diversity curriculum in the Klingenstein Summer Institute for early career Independent School teachers. Nicole's additional research and teaching interests include exploring the connections between listening and mind, brain, and education research.

**Efrat Furst**, Ph.D., is a cognitive neuroscientist who is fascinated by the neural substrates of learning and memory. Efrat is working to bridge the science of learning with the practice of learners and educators across levels and fields. She is dedicated to advance learning by both research-inspired teaching and teaching-inspired research.

**Ian Kelleher** (see design thinking tables)

**Robert Muratore**, Ph.D., is a faculty member at the Bronx High School of Science and a Math for America Master Teacher. He is an adjunct Assistant Professor in Hofstra University's School of Engineering. He serves as Editor-in-Chief of the *Journal of Therapeutic Ultrasound*. Robert holds three patents in ultrasound, two of them related to its application as a non-invasive modality for neuromodulation

### **Co-organizers of the collaborator**

**Ido Davidesco**, Ph.D., is a postdoctoral fellow at NYU Psychology department where he uses EEG to study the nature of interactions between students as well as between students and teachers as classroom activities unfold. He and his colleagues' goal is to identify neural correlates to the experience of synchronicity in classrooms, and to see whether the neural markers for synchronicity change across classroom experiences. Dr. Davidesco is also doing pioneer work with EEG mobile headsets in classrooms as a tool to explore the nature and process of the scientific method with teachers and students. Prior to joining NYU, Ido was a postdoctoral fellow at Princeton University. He holds a Ph.D. in Cognitive Neuroscience from the Hebrew University of Jerusalem, Israel.

**Vanessa Rodriguez**, Ed.D. is an Assistant Professor in the Center for Early Childhood Health and Development within the Department of Population at NYU School of Medicine. Vanessa taught middle-school humanities in the New York City public schools for more than ten years before completing her doctorate in Human Development and Education at Harvard. She is motivated by contributing to the science of teachers as learners. Dr. Rodriguez is a teacher and researcher focused on expanding our understanding of the cognitive development of teachers using a dynamic skills framework. She explores the social emotional cognitive competencies underlying teaching to create new models and tools for measuring this skill development. She utilizes mixed methods including cognitive interviews, surveys and psychophysiological approaches to explore a skill scale for how teachers understand their own

development and how it evolves throughout their career. In addition to her academic publications, Rodriguez wrote the “The Teaching Brain” in which she married her extensive teaching experiences with novel research literature to put forth a new vision for the future of teaching.

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