CRESSTCON'18

Speaker Bios

Jessica Andrews Todd

Jessica Andrews Todd is an Associate Research Scientist in the Cognitive and Technology Sciences Center at Educational Testing Service. Jessica obtained a Ph.D. degree in learning sciences from Northwestern University. She has two lines of research in the areas of collaboration and cognition. One line of work examines the cognitive processes underlying collaborative learning, focusing particularly on how people encode into memory and rely upon accurate and inaccurate information as a function of their collaborative experiences. A second line of work explores the use of digital environments in supporting student learning during collaboration and assessing individuals' cognitive and noncognitive skills. Specifically, Jessica has developed and applied approaches for (1) identifying the measurable components of complex constructs such as collaborative problem solving and (2) reasoning up from learner behaviors in log data from games and simulations to inferences about high level proficiencies.

Eva L. Baker

Eva L. Baker is a distinguished Professor Emerita in the divisions of Psychological Studies in Education and Social Research Methodology at the UCLA Graduate School of Education and Information Studies, and has directed the UCLA Center for the Study of Evaluation (CSE) since 1975. She is also Founding Director of the National Center for Research on Evaluation, Standards, and Student Testing (CRESST), a competitively awarded national institution funded by the U.S. Department of Education.

Dr. Baker is a member of the National Academy of Education and a recipient of the 2007 ETS Henry Chauncey Award for Distinguished Service to Assessment and Educational Science. She was a congressionally appointed member of the National Council on Education Standards and Testing, and chair of the Board on Testing and Assessment, National Research Council, and The National Academies (2000-2004). Dr. Baker is a former president of the American Educational Research Association (2006-2007), former president of the Educational Psychology Division of the American Psychological Association, and a former editor of Educational Evaluation and Policy Analysis. She was co-chair of the committee to revise the Standards for Educational and Psychological Testing (1999). She has an extensive bibliography.

Dr. Baker's research is focused on the integration of instruction and measurement, including design and empirical validation of principles for developing instructional systems, and new measures of complex human performance. She is presently involved in the design of technologically sophisticated testing and evaluation systems of assessment in large-scale environments for both military and civilian education.

Jessica Berlinski

Berlinski serves as the Director K-12 of Ripple Effects, an innovative social change enterprise focused on leveraging personalized Social Emotional Learning (SEL) to improve students' behavior and academics, address trauma, and achieve equity. She also works as an SEL consultant, advocate and social changemaker with over a decade of experience leading organizations dedicated to supporting the "whole child" through academic and SEL tools and programs.

LEARNING TOGETHER

Prior, Berlinski co-founded and served as Chief Impact Officer and Chief Learning Officer of ed-tech start-ups Personalized Learning Games (renamed Centervention) and If You Can respectively. In these roles, she commercializing the first evidence-based SEL assessment and learning game for K-12 and the first SEL iPad game for the consumer marketplace. She also collaborated to create the country's first community-based SEL initiative in Newtown CT, where she worked with the school district, community leaders and victims' families to leverage technology to teach and assess SEL skills.

In the nonprofit arena, Berlinski served as Managing Director of GameDesk, a Bill & Melinda Gates Foundation funded nonprofit focused on innovative learning models. As National Director of Character Counts, she co-created and implemented values-based programs in urban and rural school districts across the country, as well as successfully advocated for the inclusion of programs and language supporting school climate in Obama's ESEA proposal.

Berlinski speaks on SEL, technology and equity at education and social change conferences nationally, and her work has been featured on National Public Radio, and in Forbes and Newsweek. Berlinski graduated from Northwestern University with a BA in Philosophy, with a focus on ethics and philosophy of religion.

Katie Buckley

Katie Buckley is the Managing Director of Research at Transforming Education where she ensures schools, LEAs, SEAs, and other education-related organizations have access to actionable, research-informed guidance for implementing, integrating, and sustaining evidence-based practices related to the development of students' social-emotional competencies and the learning environments needed to foster them. Previously, Katie was a Senior Analyst at Abt Associates, a Consultant at the Center for Assessment, and a Research Associate at the Northeast and Islands Regional Education Laboratory (REL-NEI) at Education Development Center. Katie holds an Ed.D in Quantitative Policy Analysis in Education from Harvard University, an M.P.P in Education, Family, and Social Policy from Georgetown University, and a B.A. in Political Science from Providence College.

Li Cai

Li Cai is a Professor of Education and Psychology in the Advanced Quantitative Methodology program within the UCLA Graduate School of Education and Information Studies. He also serves as Director of the National Center for Research on Evaluation, Standards, and Student Testing (CRESST). His research agenda involves the development, integration, and evaluation of innovative latent variable models that have wide-ranging applications in assessment research in educational, psychological, and health-related domains of study.

Sandy Chang

Sandy Chang is a Project Manager for assessment, standards implementation, and language and literacy development, with a focus on English language learners. She manages the dissemination program for the Center on Standards and Assessment Implementation, including the identification and review of

research-based practices that increase state, district, and school capacity. She is also the Project Coordinator for the Dynamic Language Learning Progressions, a project that examines key features in academic language development and assessment for English language learners. Dr. Chang writes and develops professional development resources to guide teachers in implementing formative assessment, new standards, and language progressions. She is a National Board Certified Teacher in Literacy. Prior to joining CRESST, she was a reading specialist and a K-8 classroom teacher. She earned her PhD in Human Development and Psychology from the University of California, Los Angeles and her EdM in Language and Literacy from the Harvard Graduate School of Education.

Jimin Cho

Jimin Cho is currently the vice president of Division of Educational Evaluation at the Korea Institute for Curriculum & Evaluation (KICE) in the Republic of Korea. She has an academic background in education specialising in educational psychology, including a Ph.D. from Michigan State University majoring in educational measurement and evaluation. She is in charge of national and international comparative studies such as PISA and TIMSS projects. Her major experience has been in developing the framework for student assessments, specifically in scoring and reporting based on in-depth analysis of various major assessments in Korea. She also currently serves in various capacities as a member of international steering committees for international evaluation projects.

Kilchan Choi

Kilchan Choi is the Associate Director of Statistics and Methodology at CRESST. His expertise is in the development of advanced statistical methodologies including latent variable hierarchical models, Bayesian analysis, and latent variable measurement models with hierarchical data and applications in large-scale assessment, multi-site evaluation, growth modeling, and the effectiveness/accountability of schools. He has developed latent variable regression approaches in modern psychometric models and hierarchical models and his current research focuses on integrating item response theory models, latent variable regressions, longitudinal analysis, and hierarchical models into a general comprehensive statistical model.

Greg Chung

Greg Chung is the Associate Director of Technology and Research Innovation. His current work focuses on the impact of various learning technologies, such as games and intelligent tutoring systems on learning and engagement outcomes, the design of telemetry systems for games, and analytical approaches to support the modeling of learning outcomes from fine-grained data. Greg has led research funded by the U.S. Department of Education, National Science Foundation, Office of Naval Research, Defense Advanced Research Projects Agency, and PBS KIDS. This work spanned the evaluation of learning technologies, development of computer-based games and simulations, assessments of learning processes and outcomes using sensors, web-based measures of problem-solving, concept mapping, and AI-based computational methods.

Seungwon Chung

Seungwon Chung is a Ph.D. candidate in social research methodology with a focus on psychometrics in the Graduate School of Education & Information Studies at UCLA. She received her master's degree in Educational Measurement and Evaluation and bachelor's degree in Education from Seoul National University, Korea. Her main research interests lie in the development and application of statistical methods and latent variable models, and measurement issues in social sciences. Specifically, she has worked with generalized linear/nonlinear mixed model, item response theory model, factor analysis model, structural equation model, diagnostic classification model, and multilevel model.

Adnan Darwiche

Adnan Darwiche is a professor and chairman of the computer science department at UCLA. He holds M.S. (1989) and Ph.D. (1993) degrees in computer science from Stanford University. He served as Editor-in-Chief for the *Journal of Artificial Intelligence Research* (JAIR) and is an AAAI Fellow. Professor Darwiche directs the Automated Reasoning Group at UCLA. His research interests span probabilistic and symbolic reasoning, and their applications including machine learning.

Girlie Delacruz

Girlie Delacruz is an experienced applied research scientist with over 18 years in the areas of assessment, learning, education, cognitive and learning science, and developmental psychology. Her primary research goals lie at the intersection of theories of assessment and learning in educational, training, and military contexts, with a focus on the design and use of various forms of technology including computers, web and mobile-based applications, video games, and sensor-based networks. In the area of assessment, her research focuses on issues of validity, effective and efficient assessment design, and the use of computational models to support formative assessment and adaptive learning. She is currently a Senior Research Associate at LRNG where she continues her research on the use of games for learning and assessment and applying her expertise to direct the assessment and badging work to help connect underserved populations to jobs and opportunities.

Dr. Delacruz has published numerous articles in scholarly journals and has written book chapters on the topic of technology in education. Because of expertise in learning and assessment technologies, she has been invited to sit on Small Business Innovation Research review panels in the area of mobile gaming for the National Institutes of Health and the U.S. Department of Agriculture. Dr. Delacruz is a MacArthur Foundation/ETS Edmund W. Gordon Fellow--awarded to emerging scholars concerned with the impact of new technologies, recent advances in the learning sciences, and the broader impact of assessment and learning on society in the 21st century.

David Feldon

Dr. David Feldon is a professor of Instructional Technology and Learning Sciences at Utah State University. His research examines the development and assessment of expertise—especially in STEM disciplines. One aspect of this work characterizes the cognitive components of expertise as they contribute to effective and innovative problem solving, as well as how they affect the quality of instruction that experts can provide. The other examines the development of research skills within

STEM disciplines as a function of instruction and other educational support mechanisms. These efforts often engage cognitive task analysis techniques for developing performance-based assessments and informing instructional design and development.

Teanna Feng

Tianying (Teanna) Feng is an undergraduate majoring in cognitive science and minoring in statistics at UCLA. Teanna started working as an undergraduate researcher at CRESST in the fall of 2017. She was interested in learning how we may theorize about the mind quantitatively and computationally by synthesizing research and perspectives from multiple disciplines. At CRESST, she helped with a project in collaboration with Public Broadcasting Service (PBS) KIDS. They evaluated instructional games that teach and assess how young children learn measurement concepts such as weight. Teanna's experiences with data collection and analyses of the data sparked her interest in developing useful measures of children's knowledge using simulations. Teanna also helped develop algorithms that aligned with past literature on children's intuitive knowledge to model such actions, and results fell in line with the statistical analysis of children's test scores. She is also one of the authors on three papers, including two for PBS KIDS.

Kimberley Gomez

Kimberley Gomez, Professor of Education and Information Studies, centers her work in examining teachers' and students' development and use of literate practices in formal and informal contexts. She views the investigation and support of literate practices as a foundational area of inquiry because of its singularly important role in providing access to educational opportunity, and supporting equitable achievement and attainment outcomes. She employs the design and study of literate practices to enhance learning in mathematics, science, and technology use with an aim of informing theoretical and practical understandings. She views context as the primary lens in understanding the development of experiences and outcomes associated with learning. A corollary of this commitment is that she designs educational interventions and professional development opportunities in a collaborative and participatory manner working side-by-side with teachers and other frontline practitioners. Her focus on literate practices provides a means for supporting instructors' ability to recognize the language and literacy skills that students bring to bear when learning content, as support for facilitating students' access to mathematics and science content and as tools and routines for quickly gauging what students understand and can represent through discourse (e.g., writing). She collaboratively designs interventions with practitioners to support teaching and learning.

Gomez received the Ph.D. from the University of Chicago in 1994. She served as a post-doctoral fellow and a research associate in the Center for Learning Technologies in Urban Schools (LeTUS) NSF-funded study at Northwestern, in Northwestern University's Learning Sciences program. Gomez is currently a tenured Professor of Education at the University of California, Los Angeles (UCLA). She is jointly appointed in the Information Studies department at UCLA. Since 2011, Gomez has been the lead language and literacy fellow at the Carnegie Foundation for the Advancement of Teaching. In 2017, she received the Distinguished Teaching Award from UCLA's Graduate School of Education. She is an Osher Fellowship recipient (awarded by the Exploratorium). She is a Sudikoff Family Institute for Education &

New Media fellow (2013-14) and received the Harold A. and Lois Haytin Faculty Award, from Graduate School of Education & Information Studies, UCLA for her collaborative work with practitioners. She is the author of over 50 refereed journal articles, book chapters, and conference proceeding articles.

Sandra Graham

Sandra Graham is a Distinguished Professor in the Human Development and Psychology division in the Department of Education at UCLA and the University of California Presidential Chair in Education and Diversity. She received her BA from Barnard College, an MA in History from Columbia University, and her PhD in Education from UCLA. Her major research interests include the study of academic motivation and social development in children of color, particularly in school contexts that vary in racial/ethnic diversity. Professor Graham has published widely in developmental, social, and educational psychology journals and received many awards. Among her awards, she is a 2011 recipient of the Distinguished Scientific Contributions to Child Development Award from the Society for Research on Child Development and the 2014 E. L. Thorndike Career Award for Distinguished Contributions to Educational Psychology, Division 15 of the American Psychological Association. More recently, in 2015 she was elected to the National Academy of Education. She is a Fellow in the American Psychological Association, Association of Psychological Science, and the American Educational Research Association.

Jennie Grammer

Jennie Grammer is an Assistant Professor at the UCLA Graduate School of Education and Information Studies. She received her Ph.D. in Developmental Psychology at the University of North Carolina at Chapel Hill and was a Postdoctoral Fellow at the University of Michigan and at the Albert Einstein College of Medicine. She explores changes in children's cognitive skills from early childhood across the transition to elementary school and the contexts that promote this growth. Specifically, employing both behavioral and neurological methods, she examines the development of executive functions, memory, and metacognition between the ages of 3-8. In addition, Grammer works to identify aspects of the classroom and home environment that promote this development. Bringing together these two parallel lines of research, the goal of this work is to understand the ways in which early enrichment and schooling experiences can positively impact brain and behavioral development.

Roxana Hadad

Roxana Hadad is Director of Math, Science, and Technology at the Center for College Access and Success at Northeastern Illinois University in Chicago, where she promotes STEM-based academics and careers for K12 students. She is the PI of Assessing Computational Thinking in Making Activities (ACTMA), an NSF-funded project that examines formative and summative assessment practices for computational thinking in informal and formal spaces. As a doctoral candidate in Educational Psychology at the University of Illinois at Chicago, Roxana is exploring promising practices for eliciting computational thinking in makerspaces.

Mark Hansen

Dr. Mark Hansen is an Assistant Professor in Residence in the UCLA Graduate School of Education and Research Scientist at CRESST. His work focuses on the use of latent variable models, particularly item

response theory and diagnostic classification models, to support the design of educational, psychological, and health-related assessments.

Heidi Harju-Luukkainen

Associate professor Heidi Harju-Luukkainen (PhD) from the University of Gothenburg (Sweden) holds a qualification in management and a special education teacher qualification from Finland. She is also an Adjunct Professor in student assessment at the University of Helsinki and the University of Jyväskylä, Finland. Harju-Luukkainen has worked in many Nordic and US universities where she has been involved in developing teacher education programs globally. Harju-Luukkainen has conducted research in Europe, the US and Saudi Arabia in some 25 different international research and developmental projects. She has published more than 100 journal articles, reports and books. Dr. Harju-Luukkainen has been working with the Ministry of Education in Finland (designing the future Finnish primary and secondary education) assessing education nationally, as well as working as a principal investigator on the Finnish PISA-team during PISA 2009, 2012 and 2015. She functioned as a president for the Finnish Parent's Association Hem och skola (NGO) during 2014-2016. Dr. Harju-Luukkainen is a founder of Research Solutions Inc. and is a board professional. Currently Dr. Harju-Luukkainen is a visiting scholar at CRESST, UCLA.

Mary E. Hewitt

Mary E. Hewitt is the Executive Director for the Los Angeles County Alliance for Boys & Girls Clubs. The Alliance is an umbrella organization that was created in 1998 to bring resources, marketing and fundraising to all Boys & Girls Clubs in Los Angeles County which serve over 140, 000 youth ages 6 to 18. For the past 6 years she has spearheaded innovative programs, special events and service to under-resourced communities in Los Angeles. With her experience working for the US Government in Washington DC, Mary has led the Alliance on college and career programs through the annual Teen Summit. She recently developed an Alliance Internship program to get the Boys & Girls Clubs youth meaningful employment through a comprehensive program. The platform integrates college-focused academics, technical skills training from different pathways in the high-demand industries, and intensive support for optimal long-term success.

Mary previously served as Director of Communications for the American Diabetes Association in Los Angeles and as the Senior Public Information Officer for PMC World, a planning, environmental, and municipal services company to public agencies, special districts, and public-oriented organizations. Mary serves as a board member for the South Bay Business Environmental Coalition as well as being a member of the National Diversity Coalition. She graduated from Central Washington University in Mass Communications in Broadcast Journalism and obtained a Master's Degree from Georgetown University in International Affairs.

Sijia Huang

Sijia Huang is a third-year doctoral student at the University of California, Los Angeles. Her research interest lies in Item Response Theory, Structural Equation Modeling and their applications in large-scale educational assessments. Her current work includes implementing a D-optimality criterion based

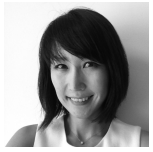
algorithm to improve the design, and utilizing a multiple-imputation based approach to improve standard error estimation of ELPA 21.

Karen Hunter Quartz

Karen Hunter Quartz directs the UCLA Center for Community Schooling and is a faculty member in the UCLA Graduate School of Education & Information Studies. She received her bachelor's degree from Huron University College, her master's degree in philosophy from the University of Western Ontario, and her doctorate in education from the University of California, Los Angeles. Her research, teaching, and service support community school development, teacher autonomy and retention, and educational reform. Professor Quartz led the design team in 2007 to create the UCLA Community School, and served in 2017 on the design team for a second site—the Mann UCLA Community School. She currently oversees a portfolio of research-practice partnerships at both schools designed to advance democracy, inquiry, and change. She is recipient of the 2001 Outstanding Book Award from the American Educational Research Association, the 2004 Outstanding Writing Award from the American Association of Colleges of Teacher Education, the 2017 National Teacher-Powered Schools Initiative's Advancement in Research Award, and the 2017 Outstanding Professional Teaching Award from the department of education at UCLA.

Markus Iseli

Dr. Markus Iseli is a Senior Research Scientist for CRESST with a focus on integration of engineering and technology for educational purposes. His specialization is in digital signal processing, speech and image analysis, pattern recognition, acoustics, and natural language processing. He has over 15 years of practical expertise as a technology and engineering consultant, applying data analysis and artificial intelligence algorithms for technology-based learning and knowledge assessment systems. Currently, he is involved as a knowledge engineer in various private and publicly funded projects. Dr. Iseli holds a PhD and an MS in electrical engineering from UCLA and from ETH Zürich, Switzerland.



Minjeong Jeon

Dr. Jeon is an Assistant Professor of Advanced Quantitative Methods in the Graduate School of Education & Information Studies at UCLA. Prior to coming to UCLA, she was an Assistant Professor of Quantitative Psychology at the Ohio State University. She obtained her Ph.D in Quantitative Methods and Evaluation and MA in Statistics from UC Berkeley.

Her research interests include developing, applying, and estimating a variety of statistical/latent variable models, such as multilevel models, structural equation models, item response theory models, and growth models. She is also interested in developing computational algorithms and software. Her recent interests include item response tree/process models, network analysis, and joint modeling of multivariate data (such as behavior, cognitive, neural data).

Jina Kang

Dr. Jina Kang is an assistant professor in Instructional Technology and Learning Sciences at Utah State University. Her work focuses on analytical approaches to understand the use of new technologies and methodologies in diverse learning environments, aiming to support educational practices and advances

for all stakeholders. Her research explores how students learn complex skills in open-ended learning environments. In particular, she studies diverse approaches of understanding multimodal data derived from different learning environments that could lead to novel insights into learners' unique behaviors such as solution paths to problems and actions in either physical or digital environments, and better designing learning environments including pedagogical approaches and materials. She completed her doctoral work at the University of Texas at Austin and her postdoctoral work at the University of Illinois at Urbana-Champaign.

Rebecca Kantar

Rebecca Kantar is the founder and CEO of Imbellus. Imbellus builds assessments that evaluate how people think instead of just what they know. Rebecca spent the last five years researching and understanding how moving beyond multiple choice college admissions tests can reshape K-12 education in America. Prior to launching Imbellus, Rebecca founded an expert network connecting entrepreneurs to Fortune 500 companies. That business was acqui-hired by GLG in 2012, where Rebecca was an Entrepreneur In Residence. Rebecca attended Harvard College and dropped out after her sophomore year.

Jenny Kao

Jenny Kao is a Research Scientist with many years of experience in educational research. Her research interests are in reading and language development, and in work that enhances education for English learners and students with disabilities. She has been involved in research on developing reading curriculum for elementary school students; examining assessment accommodations for middle school students; and exploring career-readiness features in assessments for high school students. Dr. Kao holds a Ph.D. in Cognitive Studies in Education from Teachers College, Columbia University.

EunHee Keum

EunHee Keum is a Research Scientist at CRESST. She received her PhD in Quantitative Psychology from Ohio State University. Her research interests involve the development of multi-stage testing approaches and the application of latent variable models, particularly item response theory and factor analysis models, to small-sample longitudinal data. Her work focuses on evaluating and improving the design and delivery of educational assessments. She also provides general assistance on statistical and psychometric issues arising in other ongoing CRESST research projects.

Alan Koenig

As a Senior Research Scientist, Dr. Alan Koenig's expertise is in the design and application of innovative uses of technology in instructional settings, particularly in the field of automated assessment within computer-based games and simulations. Since 2007, Dr. Koenig has managed the development of multiple U.S. Navy-funded research projects, each involving the automated assessment of cognitively complex tasks and decision-making skills occurring in high-stakes, simulated environments. These domains include shipboard firefighting, Combat Information Center (CIC) tactical decision making, and conning officer shiphandling maneuvering and safety. In addition, Dr. Koenig serves as the lead software project manager for several technology-focused efforts developed for the Smarter Balanced Assessment Consortium. These include RESTful web APIs for vendor assessment delivery system

compliance, prototype development of assessment delivery frameworks, and database design and development. Dr. Koenig holds a PhD in Educational Technology, a BS in Mechanical Engineering, and a BA in Economics.

Meredith Langi

Meredith Langi is a PhD student in the Social Research Methodology division of the Graduate School of Education and Information Studies at UCLA. She is broadly interested in latent variable modeling and quantitative methods in education research. Her current work explores attribute hierarchies in diagnostic classification models and studying sub-populations, both latent and observed, in latent variable models. She holds a Masters of Education in International Education Policy from Harvard Graduate School of Education.

Anna Lee

Anna Lee is a statistics undergraduate at UCLA. Anna is interested in data analytics mainly because she enjoys exploring and dissecting problems. She finds it very rewarding to do hands-on work in research. During the spring of 2017, Anna had the opportunity to volunteer at CRESST as a research assistant where she conducted statistical analyses and coding in R. Anna's project involved analyzing telemetry data, which logs events moment-to-moment (e.g., every button clicked) from the game, Martian Maze, designed by CRESST. The game itself was administered to 12th grade students, and its objective was to navigate a UFO through a 2D maze in darkness with the help of a flashlight.

John J. Lee

Dr. John Lee has been a Research Scientist for CRESST since 1999 and holds a PhD in Educational Psychology from UCLA. His current research focuses on technology-based assessments in a variety of military and civilian contexts with projects that involve the assessment of skills and competencies in many domains, including tactics planning and implementation, damage control, engineering, and shiphandling for the U.S. Navy, and in various skills in public education including teamwork and ultrasonography. His main research interests are in automated assessment of complex skills using ontologies and probabilistic inference models, and computer-based assessments in the public education area.

Marc Levis-Fitzgerald

Dr. Marc Levis-Fitzgerald was hired in 1999 as the Director of the newly established Office of Undergraduate Evaluation and Research. The office was renamed in 2009 and is now called the Center for Educational Assessment. Marc earned a B.A. in Economics and French at UCLA and an M.A. and Ph.D. in Higher Education at UCLA. His research interests include curriculum reform and evaluation, student and faculty development, and institutional transformation. He is particularly interested in documenting the experience of undergraduate students, and directs the development and implementation of the UCLA Senior Survey. He heads several undergraduate science initiative assessment projects funded by NSF and HHMI. In addition, he leads program review efforts related to the Transfer Alliance Program, a partnership between UCLA and community colleges in California. His recent work with large data sets and increased expertise in learning analytics are responding to the latest campus calls for more contextual, comprehensive, and long-term data, integrated and readily

available from multiple sources. In responding to this call, Marc's work is primed to evolve with the needs of research collaborators, increasing his capacity to measure and improve student outcomes.

Li Yanfang

Dr. Li Yanfang is a professor at the Collaborative Innovation Center of Assessment toward Basic Education Quality at Beijing Normal University and is responsible for the National Arts Education Quality Assessment. She received her doctorate from the School of Psychology, Beijing Normal University in 2007. Dr. Li's research focuses on the development of children and adolescents' mental behaviors, and the effects of environmental factors from family and school context. She is a member of the Chinese Psychology Society and Chinese Education Society.

David Lowenstein

As Senior Director of the CPB-PBS Ready To Learn Initiative, David Lowenstein oversees strategy and operations for Ready To Learn at PBS and helps manage teams responsible for content development, educator and family engagement, and relationships with contributing producers. Prior to joining PBS, David was a National Urban Fellow at Sesame Workshop and co-authored a policy brief entitled Game Changer: Investing in Digital Play to Advance Children's Learning and Health. Early in his career, David worked for the Hip-Hop Summit Action Network, the Minority Media and Telecom Council, National Urban League, Education Technology Think Tank, and U.S. Congressman Major Owens.

Luo Liang

Dr. Luo Liang is a professor and the Deputy Director at the Collaborative Innovation Center of Assessment toward Basic Education Quality at Beijing Normal University. He also serves as the Deputy Director of the National Assessment Center of Education Quality in China and the Director of the Institute of Developmental Psychology at Beijing Normal University. He received his Ph.D. from the School of Psychology, Beijing Normal University in 2008. His research interests include psychological development of children and adolescents, academic achievement, and the effects of environmental factors from family and school context. He has directed more than 10 national projects supported by the Chinese Ministry of Education, the National Natural Science Foundation of China, and the National Social Science Foundation of China.

Thomas Maierhofer

Thomas Maierhofer is a PhD student in the Statistics department at UCLA. Previously, he was a Senior Statistician at CRESST whose work focused on student evaluation in educational games. His field of expertise are regression models, specifically multilevel and mixed models, item response theory, machine learning and R-programming. He is interested in Natural Language Processing and Functional Data Analysis. He received his BSc and MSc in Statistics from the University of Munich, Germany.

Betsy McCarthy

Betsy McCarthy is a Senior Researcher in WestEd's STEM program. McCarthy received a bachelor's degree from Stanford University, a master's degree in developmental psychology from San Francisco State University, and a doctorate in education from Stanford University where she was twice a Spencer Foundation Fellow. She directs large research projects including an i3 grant with Sonoma State

University focused on secondary STEM learning, Twin Cities PBS's STEM Superhero School federal Ready to Learn project to develop television and digital learning resources for children ages 3-8, an NSF DRK-12 Development grant in Measurement—Development of the Electronic Test of Early Numeracy—and a five-year Race to the Top-District (RTT-D) personalized learning project.

Michelle McCoy

Michelle McCoy is the Manager of Assessment Design with the English Language Proficiency Assessment for the 21st Century (ELPA21) consortium. McCoy received her Masters of Education and her Bachelor of Arts at the University of Oregon. Currently, she is a doctoral candidate in Educational Leadership at Lewis & Clark College in Portland, Oregon. Prior to joining ELPA21 at CRESST, Michelle was an Assessment and Implementation Specialist for the Oregon Department of Education, focusing on English Language Proficiency.

Imelda L. Nava

Imelda L. Nava, Ph.D., has a strong dedication to urban education. She was a student, teacher and parent in Los Angeles' urban public schools. As a science educator in UCLA's Teacher Education Program, she works with pre-service and first year teachers as they obtain their teaching credential and Masters of Education Degree. She has guided teachers through science pedagogy, action research, and teacher identity. In her science education research, she is particularly interested in science teachers' social justice dispositions and science discourse in the classroom. As a part of the Urban Teacher Residency Program at UCLA (IMPACT), Dr. Nava has explored STEM teacher development and effectiveness using multiple measures, a framework for effective teaching and a conceptualization of Humanizing STEAM. She has presented her research in a variety of national and international education conferences. She has worked with educators from China, Argentina and Chile, in an effort to exchange best educational practices, leadership development, student engagement strategies, and cultural understanding. In addition, she has volunteered in many community based actions, most notably, on the Education Committee of Vecinos de South Pasadena where she served on the superintendent's focus group and assisted in ensuring all students at SPHS received A-G college admission course requirements and where she worked toward closing the opportunity gap.

Harry O'Neil

Harry O'Neil is a Professor of Educational Psychology and Technology at the University of Southern California's Rossier School of Education. Currently, O'Neil teaches courses in accountability and learning.

His research interests include the computer-based teaching and assessment of 21st Century Skills particularly adaptive problem-solving and collaboration (or teamwork) skills, the teaching and assessment of self-regulation skills, the role of motivation in testing, and the training effectiveness of simulations and games. O'Neil has conducted cross-cultural research in Japan on the role of test anxiety and performance, and in Taiwan and Korea on the role of self-regulation and achievement. In all of these research areas, he is interested in technology applications. He has published extensively. A prolific writer, O'Neil has co-edited several works – *What Works in Distance Learning: Guidelines* (2005), *Web-Based Learning: Theory, Research and Practice* (2006), *Assessment of Problem Solving Using Simulations*

(2008), *Computer Games and Team and Adult Learning* (2008), *Designing and Using Computer Simulations in Medical Education and Training* (2013, *Military Medicine*, special issue), *Teaching and Measuring Cognitive Readiness* (2014), and *Using Games and Simulations for Teaching and Assessment* (2016).

Prior to joining the USC faculty, O'Neil held a series of research managerial positions in Washington, DC, i.e. Program Manager of the Defense Advance Research Projects Agency and Director of Training Research at the Army Research Institute for the Social and Behavioral Sciences where he was a member of the Senior Executive Service. He earned his PhD in psychology from Florida State University, Tallahassee; his M.S. in Psychology from Hollins University and his B.A. in Psychology from Boston College. He is a Fellow of the American Psychological Association, a Fellow of the American Educational Research Association and a Fellow of the Association for Psychological Sciences.

Christine Ong

Christine Ong is a Research Scientist at CRESST. Having worked in the field of educational research and evaluation for over 10 years, she currently co-directs an evaluation of the STEM Teacher in Advanced Residency (STAR) program at California State University Domiguez Hills, funded by the U.S. Department of Education. She also leads CRESST evaluation efforts on the Mobilize project, an innovative computer science initiative for high school students, which is funded by the National Science Foundation (NSF), and serves as an advisor to the Exploring Computer Science project at the local and national level. Prior to her work at CRESST, Dr. Ong worked as a research analyst at First 5 LA and participated in the planning and dissemination of several large-scale evaluation studies, including the Los Angeles Universal Preschool Child Outcome Study (UPCOS) and the LA County Healthy Kids Insurance evaluation. She began her career in education as an early childhood teacher and museum educator.

Elizabeth Owen

Elizabeth Owen holds a doctorate in digital media—focused in game-based learning analytics—from the University of Wisconsin—Madison School of Education. Currently Director of Learning and Data Science at Age of Learning, she is committed to leveraging data science to optimize adaptive, engaging learning systems. Previously a data scientist and learning designer with GlassLab Games, LRNG, and Metacog, Elizabeth's doctoral roots lie with the Games+Learning+Society research and game development lab. Collaborators include EA, Zynga, and Popcap games, and Dr. Ryan Baker at the University of Pennsylvania in ongoing Educational Data Mining. Prior to graduate school, Dr. Owen was a K-12 educator for a decade, and founding teacher at a charter school in Los Angeles—LAAAE.org.

Charles Parks

Charles Parks is a Senior Game Designer for CRESST. His research interests are designing effective and engaging educational games and developing measurement tools for game telemetry.

CRESSTCON'18

Julia Phelan

Julia Phelan, PhD, is a Senior Research Scientist with extensive experience and expertise in the design and management of large-scale projects focused on K-16 educational assessment and standards, incorporating a wide range of quantitative and qualitative methodologies and coordinating with multiple stakeholders.

Dr. Phelan's experience also includes curriculum development in math and science with a focus on developing materials based on deep understanding of big ideas across the curriculum. Her recent work has integrated the Common Core State Standards in both math and literacy into multiple types of assessment format and strategies, including performance-based assessments, multiple choice assessments, and formative tasks. Other research interests include evaluating the efficacy of adaptive quizzing for improving student learning, the development and incorporation of formative assessment practices in curriculum design, and approaches for characterizing the validity and reliability of assessment-based judgments.

Elizabeth Redman

Dr. Elizabeth Redman is a Research Scientist whose interests include STEM education, educational games, and assessment design, particularly as it relates to incorporating assessment into educational STEM games. As a former teacher, Dr. Redman also has an interest in teachers' professional development and learning. A qualitative researcher by training, she has experience running observational classroom studies, creating and implementing interviews and surveys, and contributing qualitative analysis (such as feature analysis) to large-scale statistical models. Dr. Redman received her MA and PhD in Education from the Graduate School of Education and Information Studies at UCLA. She holds an undergraduate degree from Princeton University.

Jeremy Roberts

Jeremy Roberts is Senior Director of Learning Technologies for PBS KIDS Digital, where he works closely with award-winning content properties such as Curious George, Dinosaur Train, and The Cat in the Hat Knows a Lot About That! to deliver innovative educational media and real-world experiences to kids aged 2-8 across multiple platforms including web, phone, tablet, whiteboards, video and the real world. Roberts helps to oversee development of playful learning experiences utilizing newer and promising technologies for learning including personalized and adaptive content, voice and facial recognition, conversational user experiences and more.

One of Roberts' core initiatives is the development of the PBS KIDS Learning Analytics Platform, designed to help parents and educators track kids' progress and proficiency across a skill framework aligned to educational standards by capturing, storing and analyzing game play data for individual kids and groups, and to provide a quality measurement foundation upon which personalized and adaptive learning experiences may be pioneered. The system also includes tools to help game developers continue to improve the educational effectiveness of their games, and provides academic researchers access on an unprecedented scale to the granular in-game activity of millions of PBS KIDS.

LEARNING TOGETHER

A physicist by training, Roberts' passion for research and discovery has driven his extensive involvement with leading-edge technologies and has defined his work as strategist and developer. Over the past 20 years, he has cultivated a deep understanding of a quickly evolving information technology landscape, with a focus on media, entertainment and learning -- helping bring to life the AOL Entertainment, Music and Video Games channels in the early 90s; pioneering online video, mobile content delivery for PBS in the early 2000s; and guiding some of the era's first interactive television trials.

Outside of his time in media and education, Jeremy has applied his technological insights to building physics simulation software for the astronomy department at George Mason University, plays the trombone with Washington, D.C. soul, ska, and reggae band The Pietasters, and has been known to moonlight on trombone with other artists including the late James Brown.

Bror Saxberg

As Vice President, Learning Science, Bror Saxberg is responsible for CZI's thinking about how to expand and apply learning science results and good learning measurement practice at scale to real-world learning situations across the full span of learning – pre-K, K-16, and beyond.

Saxberg most recently served as Chief Learning Officer at Kaplan, Inc. where he was responsible for the research and application of innovative evidence-based learning strategies, technologies, and products across Kaplan's full range of educational services offerings. He also worked to maintain consistent learning standards for Kaplan's products and services.

Saxberg speaks often at education, business, and public policy conferences, including: recent appearances at Microsoft's CEO Summit, TEDx, the Stanford Digital Learning Forum, and the "Education Datapalooza" conference, hosted by the White House and US Department of Education. He is the co-author of "Breakthrough Leadership in the Digital Age" (2014) with Frederick M. Hess. His articles have been published in a host of academic, educational, and scientific journals.

Saxberg previously served as Senior Vice President and Chief Learning Officer at K12, Inc., where he was responsible for designing both online and offline learning environments and developing new student products and services. Prior to joining K12, Inc., he was Vice President at Knowledge Universe, where he co-founded the testing and assessment division which became known as Knowledge Testing Enterprises (KTE).

Saxberg began his career at McKinsey & Company, Inc. and later served as Vice President and General Manager for London-based DK Multimedia, part of DK Publishing, an education and reference publisher.

Saxberg holds a B.A. in Mathematics and B.S. in Electrical Engineering from the University of Washington, both received in 1980. As a Rhodes Scholar, he received a M.A. in Mathematics from Oxford University, and also received his Ph.D. in Electrical Engineering and Computer Science from MIT in 1989 and a M.D. from Harvard Medical School in 1990. He is married with three children.

Katerina Schenke

Katerina Schenke is a Research Scientist at the National Center for Research on Evaluation, Standards, and Student Testing (CRESST). Her research is on understanding how and under what circumstances students are motivated towards learning, how we can measure motivation and engagement through digital games, and how we can develop models of assessment that are informative to students and teachers. Katerina received her Ph.D. in 2015 from the University of California, Irvine, and B.A. from the University of California, Los Angeles in 2009 in Psychology and German. From 2015 to 2016, she completed a Postdoctoral position at the Graduate School of Education and Information Sciences at the University of California, Los Angeles with an affiliation at CRESST.

Rosa Serratore

Rosa Serratore is the Math and Secondary Support Coordinator at Santa Monica Malibu Unified School District. She is a former middle and high school mathematics teacher. Her mission is to support teachers of all grades in effective instructional strategies, formative assessment use, data analysis, and use of curriculum guides and resources to help anchor professional learning communities and lesson study teams that design and collaborate in mathematics. She was selected by the California Department of Education to participate in the writing of the mathematics framework using the new state standards. She serves on the executive board of the California Mathematics Council as president-elect of the southern section and has participated in UC/CSU Mathematics Diagnostic Testing Project. Dr. Norman Webb used her local and state knowledge and expertise in a recent NAEP/ACT content alignment study. In all ventures, outstanding mathematics instruction and learning for all students is Serratore's goal.

Cat Still

Cathryn "Cat" Still is the Executive Director of ELPA21, an English language proficiency assessment system supported by a consortium of states and housed at CRESST. Prior to joining the team at CRESST, Cat worked as Program Director for ELPA21 at the Council of Chief State School Officers, which served as project management partner to the Oregon Department of Education in the development of the ELPA21 assessment system under an Enhanced Assessment Grant from the US Department of Education. Cat brings strong expertise in organizational management, operations, and contract management, as well as years of experience building new programs, developing and executing strategic plans, and deepening operational efficiencies.

Previously, Cat supported Los Angeles Unified School District's Comprehensive Assessment Program on behalf of the district's assessment vendor, CORE ECS. Cat has also worked with 2U and The Princeton Review. Cat received her MA from University of Texas and her BA from Trinity University.

Marcelo M. Suárez-Orozco

Marcelo M. Suárez-Orozco, the Wasserman Dean, UCLA Graduate School of Education and Information Studies, is a psychological anthropologist and a scholar of Globalization, Migration, and Education. He is the award-winning author and co-author of volumes published by Harvard University Press, Stanford University Press, University of California Press, Cambridge University Press, inter alia. The recipient of the Mexican Order of the Aztec Eagle, Dean Suárez-Orozco is a member of the American Academy of

Arts and Sciences, the National Academy of Education and a Trustee of the Carnegie Foundation for the for the Advancement of Teaching. He has served as Special Advisor to the Chief Prosecutor, The International Criminal Court and has authored multiple texts for Pope Francis' Pontifical Academies. At Harvard, he was the Thomas Professor of Education, Co-Founder and Co-Director of the Harvard Immigration Project. At NYU he was the inaugural Ross University Professor of Globalization and Education. In 2009-10 he was the Richard Fisher Member at the Institute for Advanced Study, Princeton. He has been Visiting Professor in Paris (EHESS), Barcelona, and Leuven and has lectured at the German Foreign Office, the Mexican Foreign Office, the Spanish Foreign Office, The Vatican, US Congress, the UN, US Congress, Davos, and in multiple other scholarly and policy venues in the Middle East, Europe, and Latin America. An immigrant from Argentina, he is a product of the California Master Plan, commencing his studies in Community College (where 40 years ago he met Carola Suárez-Orozco, the eminent psychologist and scholar of immigration), and transferring to U.C. Berkeley where he received his AB, MA and Ph. D. In January of 2018 His Holiness Pope Francis appointed Dean Suárez-Orozco to the Pontifical Academy of Social Sciences.

Yon Soo Suh

Yon-Soo Suh is a PhD student in the Social Research Methodology (SRM) program at UCLA, concentrating on advanced quantitative methods encompassing statistics and psychometrics. Prior to joining the program, she received a master's degree in education and a bachelor's degree in English language and literature, along with a national teaching certificate for English, from Yonsei University in South Korea. Her combined experiences of teaching and participating in large-scale test development projects within an education system emphasizing high-stakes and standardized testing fueled her interest in various measurement and evaluation related issues and theories. Her work focuses on the development and application of latent variable models, particularly item response theory and factor analysis, to promote more accurate modeling, interpretation, and use of educational data in assessment settings and empirical research.

Manie Tadayon

Manie Tadayon obtained his bachelor's degree and master's degree from the University of California, Los Angeles (UCLA) in 2015 and 2017, respectively. In the summer of 2015 and 2016, he was a research intern at the Jet Propulsion Laboratory (JPL), and during the summer of 2017, he was an intern for Qualcomm. He was the recipient of a UCLA graduate fellowship during the 2015–2016 school year. He is currently a Ph.D. student in the electrical & computer engineering department at UCLA, where his research focuses on machine learning and artificial intelligence to design a better and more intelligent educational system.

Phil Vahey

Phil Vahey, Ph.D. is Director of Strategic Research and Innovation at SRI Education. His research examines the design and use of technology-based systems that enhance the learning of conceptually difficult STEM concepts, as well as how to scale up the use of these systems. Specifically, his research has focused on the use of computer-based dynamic representations for making foundational concepts in mathematics accessible to a diverse middle school student population, and the use of media and

games for making ideas in Math, Science, and Computational Thinking more accessible for preschool children.

María Leonor Varas Scheuch

Dr. Varas has a professional degree in Mathematical Engineering and a Doctor degree in Engineering Science specialized in Mathematical Modeling, both from the University of Chile. She has been active in research in mathematical modeling, in mathematical education, standards setting and maintenance and educational assessment. She has participated in important national and international initiatives connecting researcher, educators and decision takers.

Terry Vendlinski

Dr. Vendlinski is currently Principal at TVATE Consulting. He received his Ph.D. from the Massachusetts Institute of Technology where his research concerned education technology and assessment. He did his graduate studies in education at the Harvard Graduate School of Education, and was a distinguished graduate of the M.B.A program at St. Mary's University in San Antonio, Texas. Dr. Vendlinski received his Bachelor of Science degree from the United States Air Force Academy.

Terry Vendlinski's extensive teaching experience includes teaching C++ and Java programming as both an adjunct professor (California State University, Sacramento) and as a head teaching Assistant (MIT); teaching statistics, finite math, and algebra at the community college level; teaching chemistry, math and computer programming at the secondary level; and teaching 8th grade algebra. He has also gained practical policy experience while assisting the Office of Educational Technology at the U.S. Department of Education with their efforts to fully fund the initial round of the federal E-rate program and as a member of that department's program to help schools wisely invest State Fiscal Stabilization Funds in educational technology. In his roles as Co-director, Assessment Research and Design in the Center for Technology in Learning at SRI, International and as Senior Researcher at the National Center for Research on Evaluation, Standards and Student Testing, he has authored papers on using Evidence Centered Design to improve inferential validity in technology (including games) based assessment and many technology-based, national, large scale assessments. He has also authored papers on the use of lag sequential analysis and artificial neural networks to help evaluate web-based student problem solving performances and to help evaluate the validity of inferences from various assessments of student learning. Other publications detail his methodologies to integrate neural network analysis with Markov and Logistic models of student ability and learning, as well as an innovative text and software to integrate pre-Algebra with World History. During the last several years, his research has principally concentrated on developing frameworks to improve assessments of and pedagogy to advance student understanding in Math, Science and English Language Arts.

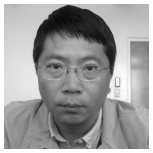
Jia Wang

Dr. Jia Wang is a Senior Research Scientist for CRESST. Her research interests emphasize applied educational measurement by designing and managing research studies to evaluate the effectiveness of multi-site intervention programs over time; investigating how school, teacher, and student factors affect student achievement; and developing, validating, and evaluating assessment systems.

Currently, she is leading evaluation work on magnet schools across multiple school district, two teacher training programs, a curriculum and in-service teacher professional development project, a Hispanic-Serving Institutions grant promoting college completion, and a standards alignment study. She led and completed projects on charter schools and the statewide evaluation of afterschool programs in California.

Dr. Wang publishes in professional journals and has authored numerous technical reports and book chapters. Additionally, Dr. Wang teaches graduate research and statistics courses at UCLA, including Survey Research, Experimental Design, and Linear Statistical Models.

Dr. Wang received her Ph.D. from UCLA with a specialization in Social Research Methodology. Prior to her current position at UCLA, Dr. Wang was vice president of research at a nonprofit educational consulting firm, assistant director for the UCLA's Global Center for Health and Education, and a statistics consultant for the World Bank and the World Health Organization.



Ying Nian Wu

Ying Nian Wu received his Ph.D. degree in statistics from Harvard in 1996. He was an assistant professor from 1997 to 1999 in Department of Statistics, University of Michigan. He joined University of California, Los Angeles (UCLA) in 1999, and is currently a professor in Department of Statistics, UCLA. His research interests include statistical modeling, computing and learning, with applications in computer vision.

Xin Tao

Dr. Xin Tao of Beijing Normal University has been chosen as the 2018 recipient of the Robert L. Linn Memorial Lecture Award. He will present his lecture at CRESSTCON'18. Dr. Xin Tao is the deputy director and a professor of statistics and measurement in the Collaborative Innovation Center of Assessment toward Basic Education Quality at Beijing Normal University. He also serves as the deputy director of National Assessment Center of Education Quality in China. He received his Ph.D. in Beijing Normal University in 1997 and in Columbia University in 2004. His research interests include education quality evaluation, psychometrics, test theory and developmental psychology. He has directed more than 20 national projects supported by Chinese Ministry of Education or granted by organizations such as UNESCO and UNICEF. Meanwhile, he has published more than 150 research articles that appear in academic journals such as Psychometrika, Applied Psychological Measurement, Acta Psychologica Sinica, and Educational Research.