Burcu Arslan is an Associate Research Scientist in the Cognitive and Learning Sciences group within Research and Measurement Sciences at Educational Testing Service (ETS) in Princeton, NJ. She has a Ph.D. in Artificial Intelligence (AI), a M.Sc. in Cognitive Science, and a B.Sc. in Statistics. Her areas of interest and expertise include computational cognitive modeling, learning, transfer of skills, skill acquisition, working memory, and feedback.

At ETS, Dr. Arslan works on: i) enhancing the use and design of technology-enhanced items and complex tasks to allow valid interpretations from the process data they produce, and ii) developing hybrid methodologies that combine top-down computational cognitive theory and bottom-up data driven methodologies to explain significant behavior patterns in process data to better understand the construct we are measuring.

Beata Beigman Klebanov is a Senior Research Scientist at ETS in Princeton, NJ. She received her Ph.D. in Computer Science (with Computational Linguistics) in 2008 and her B.S. (Magna Cum Laude) in Computer Science in 2000, both from the Hebrew University of Jerusalem. She received her M.S. degree (with distinction) in Cognitive Science from the University of Edinburgh in 2001.

At ETS, Dr. Beigman Klebanov develops language-based technology for education, including automated scoring, feedback, and assisted learning, mainly in the areas of reading and writing. She leads the work on Relay Reader (<u>www.relayreader.org</u>) – a reading and listening app that supports development of reading fluency in English. Her book titled "Automated Essay Scoring" (with N. Madnani) is under contract to be published by Morgan & Claypool publishers. More broadly, she is interested in computational methods for analysis of meaning management in text, including argumentation, topic development, figurative language, factuality, etc.

Jill Burstein, Ph.D., is a Director in the Personalized Learning & Assessment Lab in the ETS AI Research Labs at ETS in Princeton, New Jersey. Her interests lie at the intersection of AI, education and measurement, equity in education, learning analytics, and user-centered design. Dr. Burstein has led cross-disciplinary, collaborative research teams in the development of patented, educational technology for writing and reading. These include: e-rater®, an automated essay scoring system used in large-scale assessment, Criterion® - ETS' online essay evaluation product, and Writing Mentor® - a Google Docs Add-on for academic writing help, and Language Muse® - a reading and English language support app. She is the Chair of SIG EDU, an Association of Computational Linguistics (ACL) Special Interest Group on Building Educational Applications. Dr. Burstein holds a B.A. in Linguistics and Spanish from New York University, and M.A. and Ph.D. degrees in Linguistics from the Graduate Center, City University of New York.

Aoife Cahill is a Managing Senior Research Scientist in the Research and Development (R&D) division at ETS in Princeton, NJ. She received her Ph.D. (2004) and B.Sc. (2001) degrees in Applied Computational Linguistics both from Dublin City University (Ireland). Aoife works in the Natural Language Processing (NLP) research group, where she contributes to the NLP research agenda related to automated scoring.

Kadriye Ercikan is CEO and President of ETC Canada Inc. as well as Vice President of Research and Measurement Sciences at ETS. She is also Professor Emerita at the University of British Columbia. She is responsible for foundational and applied research and data analysis and psychometric support of ETS's major testing products and contracts. Her research focuses on designing and validating assessments of complex thinking, the assessment of linguistic minorities, and fairness and validity issues in cross-cultural and international assessments. Ercikan is a Fellow of the International Academy of Education. Her research has resulted in six books, four special issues of refereed journals and over 100 publications. She was awarded the AERA Division D Significant Contributions to Educational Measurement and Research Methodology recognition for another co-edited volume, *Generalizing from Educational Research: Beyond Qualitative and Quantitative Polarization*, and received an Early Career Award from the University of British Columbia. Ercikan has been selected to serve as the NCME Book Series Editor (2021-2026).

Carol Forsyth is a Research Scientist in the Cognitive and Learning Sciences group within Research and Measurement Sciences at ETS in San Francisco, CA. She earned her Ph.D. in Cognitive Psychology with Cognitive Science Graduate Certification from the University of Memphis in 2014. Her research at ETS has focused on innovating and improving technology-enhanced assessment and learning environments primarily via theoretically grounded data mining techniques. She explores and develops computerized environments for learning and assessment that include conversation-based assessment, game-based assessment, and simulation-based assessment.

Findings from theoretically grounded data mining explorations within these environments are used to a) improve existing systems, b) inform the larger scientific community about relevant findings for learning and assessment, and c) create new learning and assessment environments. Her work in these areas have yielded over 4 dozen peer-reviewed publications and presentations. She just completed serving as a Co-Principal Investigator (PI) on an NSF-funded project, currently serving as a guest co-editor for the Journal of Educational Data Mining and is consistently a program committee member for the International Conference on Artificial Intelligence and Education and the International Conference on Educational Data Mining.

Lin Gu is a Research Scientist in the Center for Language Education and Assessment Research. Lin has broad training in the areas of language pedagogy, language testing, and educational measurement. She received her Ph.D. in Second Language Acquisition from the University of Iowa. Since joining ETS, Lin has focused her research on validity issues in assessing English language learners, technology-enhanced language assessments, and feedback used in learning and assessment contexts. Working with cross-functional teams, Lin has developed AIaugmented educational solutions that are well-grounded in language learning principles and measurement theories.

Laura Hamilton is General Manager of the Research Centers at ETS, where she leads a portfolio of research on assessment and learning related to K-12 and postsecondary education and workforce development. Prior to joining ETS, she served as distinguished chair in learning and assessment, directed the RAND Center for Social and Emotional Learning Research, and co-directed the American Educator Panels.

Much of her research has focused on promoting effective use of assessment data to support social, emotional, and academic learning and on providing evidence-based guidance to local and state education leaders. She has also explored how civic education can contribute to a more equitable and informed society. She's served on numerous committees and panels including the National Academies of Sciences, Engineering, and Medicine Committee on Developing Indicators of Education Equity, the steering committee for the CASEL Assessment Work Group, and the technical advisory committees for several state assessment programs. She recently received the Joseph A. Zins Award for Social and Emotional Learning Action Research and currently serves as associate editor for the journal *Educational Researcher*. She holds a Ph.D. in Educational Psychology and an M.S. in Statistics from Stanford University.

Kara McWilliams is the General Manager of the ETS AI Research Laboratories. Kara leads the R&D efforts across ETS's three inaugural AI Labs – the NLP Lab, the Personalized Learning and Assessment Lab, and the Language Learning, Teaching, and Assessment Lab. Her vision in the labs is a user-obsessed culture as she believes a deep, sustained commitment to users is how we both meet user needs and bring the EdTech field closer to equity. The labs Kara oversees are responsible for the ideation, co-design, development, and optimization of assessment and learning prototypes and capabilities that meet user needs.

Prior to joining ETS, Kara was the Vice President of the Learning Science and Design division of Macmillan Learning. At Macmillan, Kara drove the organization's educational strategy through a research agenda integrating data analytics, learning science, and efficacy research to understand student learning and apply insights to new capabilities and products that support student success.

Much of Kara's work has focused on how to understand user needs from the perspective of their values, beliefs, and experience and merge the research on how people learn most effectively with an intuitive user experience to meet those needs. Most of Kara's research focuses on methods for measuring what EdTech works, for whom, and why. Kara holds a doctorate in Educational Research, Measurement and Evaluation and a master's degree in Curriculum & Instruction from Boston College.

Swapna Somasundaran is a Managing Senior Research Scientist in ETS' R&D Division in Princeton, NJ. Her expertise is in NLP and Computational Linguistics. Her interests include narrative analysis, opinion analysis, discourse and semantics. At ETS, she is contributing to building and employing these technologies in automated scoring of test items and in developing items efficiently.

Before joining ETS, Swapna was a Research Scientist at Siemens Corporate Research, Princeton, where she built systems to perform information retrieval and relationship mining. Her other industrial positions include: Software Consultant at IBM, where she contributed to the IBM UIMA project (now known as IBM Watson), and Software Engineer at Tata Infotech Ltd., where she built NLP question answering tools.

Swapna received a Ph.D. in Computer Science from the University of Pittsburgh, a MSE, also in Computer Science, from the Johns Hopkins University and a BE in Electronics Engineering from the Mumbai University (India).

Caitlin Tenison is a Research Scientist in the Cognitive and Learning Sciences group within Research and Measurement Sciences at ETS. Caitlin received her Ph.D. in Psychology in 2016 from Carnegie Mellon University under the supervision of Dr. John Anderson. Prior to joining ETS, Caitlin was a Lead Scientist at Soar Technology where she was principle investigator on research projects spanning multiple Department of Defense agencies.

Caitlin's research focuses on modeling the learning mechanisms and cognitive changes that underlie the acquisition of skills, by using a mixture of cognitive modeling, statistical modeling and machine learning approaches. Her research is characterized by the use of multi-modal data to provide convergent evidence about the skill level of an individual. Using these approaches Caitlin contributes to the theoretical understanding of human learning but also explores how these models can be used to support learning and build technology to improve training.