LRDC Board of Visitors

Brief biographies of Members
(* Indicates new member in 2014)

GAUTAM BISWAS*
Gautam Biswas is a Professor of Computer Science, Computer Engineering, and Engineering Management in the EECS Department and a Senior Research Scientist at the Institute for Software Integrated Systems (ISIS) at Vanderbilt University. Biswas conducts research in Intelligent Systems with primary interests in hybrid modeling, simulation, and analysis of complex embedded systems, and intelligent learning environments. A primary research focus has been on developing open-ended learning environments to support K-12 STEM education. He has also developed innovative educational data mining techniques for studying students’ learning behaviors and linking them to metacognitive strategies. He is currently working on projects that combine computational thinking with visual programming to help K-12 students develop a deep understanding of STEM content using model-building and simulation, and then applying these models to address real-world problems.

HILDA BORKO*
Hilda Borko is a professor of education at Stanford University. She received her BA in psychology, MA in philosophy education, and PhD in educational psychology from the University of California, Los Angeles. Dr. Borko’s research explores teacher cognition, the process of learning to teach, and the impact of teacher professional development programs on teachers and students. Her current program of research includes a field test of the Problem-Solving Cycle professional development program for mathematics teachers (with Jennifer Jacobs and Karen Koellner), and a study of the effectiveness of a professional development program to improve discourse and inquiry in science classrooms (with Jonathan Osborne). Dr. Borko served as President of the American Educational Research Association (2003-2004). She is a member of the National Academy of Education and the 2014 recipient of the Excellence in Scholarship in Mathematics Teacher Education Award, Association of Mathematics Teacher Educators.

JILL BURSTEIN*
Jill Burstein is a Managing Principal Research Scientist at Educational Testing Service in Princeton, New Jersey. Her research interests span computer science, education, and linguistics, including inventions and publications related to automated evaluation of writing, educational technology, discourse and sentiment analysis, education policy, English language learning, natural language processing, and writing research. As a leader in the field of automated writing evaluation, for the past nine years, she has co-organized a yearly workshop: Innovative Use of NLP for Building Educational Applications, and has co-edited two books in this area. The most recent book was published in 2013, and is entitled: Handbook of Automated Essay Evaluation: Current Applications and Future Directions. Dr. Burstein holds 14 patents, including inventions for e-rater®, ETS’ automated essay evaluation application, and Language Muse®: an instructional authoring tool for teachers of English learners (funded by the Institute of Education Sciences).
THOMAS CARR
Tom Carr is Professor of Cognition and Cognitive Neuroscience in the Department of Psychology at Michigan State University. Dr. Carr focuses on perceptual recognition, attention, and the executive control of complex skills, including how skills are learned, how they are performed in their mature and well-practiced states, whether they are susceptible to choking under pressure or other kinds of cognitive and motivational stressors, what is their phenomenology including sense of agency and how one determines that one is exercising accurate executive control, and the neural substrates of these processes using fMRI. Skill domains have included word recognition and reading, writing, mathematical computation, mathematical problem solving, and sensorimotor skills. In addition to basic-science investigations, he is interested in the instructional implications of research on skill acquisition and collaborates with an aphasiologist on the behavioral, cognitive, and neural impact of aphasia rehabilitation programs.

GUINEVERE EDEN
Guinevere Eden is currently the Director of the Center for the Study of Learning (CSL) at Georgetown University Medical Center, a Professor in the Department of Pediatrics and the Department of Neuroscience, as well as a member of the Center for Neural Injury and Recovery (CNIR) and the Center for the Brain Basis of Cognition (CBBC). Her work has focused on characterizing visual processing in individuals with and without dyslexia using fMRI and extending this approach to other sensory domains, such as sensorimotor control. Under her stewardship, the Center for the Study of Learning’s (one of four national Learning Disabilities Centers funded by the National Institutes of Child Health and Development) research has focused on the neurobiological representation of reading and how it may be altered in individuals who are deaf or have dyslexia, and how it is affected by instructions or mode of communication. She is also involved in the Second Language Acquisition (SLA) program. Dr. Eden came to the United States from the United Kingdom to pursue a Fogarty Fellowship at the National Institutes of Mental Health, Bethesda MD, on the application of functional neuroimaging techniques to further study visual processing in individuals with dyslexia. Based on this work, she and her colleagues published the first functional magnetic resonance imaging (fMRI) study on dyslexia which further corroborated suggestions that the observed behavioral difference in visual processing in dyslexia are reflected in altered physiology in the visual areas of the brain.

ARTHUR GRAESSER *
Art Graesser is a professor in the Department of Psychology and the Institute of Intelligent Systems at the University of Memphis and is a Senior Research Fellow in the Department of Education at the University of Oxford. He received his Ph.D. in psychology from the University of California at San Diego. Dr. Graesser’s primary research interests are in cognitive science, discourse processing, and the learning sciences. More specific interests include knowledge representation, question asking and answering, tutoring, text comprehension, inference generation, conversation, reading, education, memory, emotions, computational linguistics, artificial intelligence, human-computer interaction, and learning technologies with animated conversational agents. Dr. Graesser and his colleagues have designed, developed, and tested software that integrates psychological sciences with learning, language, and discourse technologies, including AutoTutor, AutoTutor-Lite, MetaTutor, GuruTutor, DeepTutor, HURA Advisor, SEEK Web Tutor, Operation ARIES!, iSTART, Writing-Pal, AutoCommunicator, Point & Query, Question Understanding Aid (QUAID), QUEST, & Coh-Metrix.

JUDITH HARACKIEWICZ *
Judith Harackiewicz is a Professor of Psychology in the Department of Psychology at the University of Wisconsin-Madison. She is interested in human motivation, specifically intrinsic motivation, interest, and achievement motivation. Harackiewicz studies how different kinds of performance evaluation and feedback influence an individual’s intrinsic interest in an activity. For example, she studies how achievement goals, rewards, competition, and cooperation influence task enjoyment and interest, and how personality variables moderate these effects. She is also interested in motivational issues in educational psychology and studies how goals affect the development of interest in academic subjects.
CAROL D. LEE
Carol D. Lee is the Edwina S. Tarry Professor of Education and Social Policy in the Learning Sciences Program at Northwestern University. She is a past president of the American Educational Research Association (April, 2009-May, 2010), AERA’s representative to the World Educational Research Association, a member of the National Academy of Education, She is a recipient of the Distinguished Service Award from the National Council of Teachers of English, and Scholars of Color Distinguished Scholar Award from the American Educational Research Association, Professor Lee is the author of three books including the most recent Culture, Literacy and Learning: Taking Bloom in the Midst of the Whirlwind and co-editor of Vygotskian Perspectives on Literacy Research, along with numerous other scholarly publications. Her research focuses on ecological influences on learning and development, including the Cultural Modeling Framework for the design of instruction that scaffolds knowledge constructed from youth’s everyday experience to support discipline specific learning. She is a co-founder of four schools in Chicago spanning a 38 year history, including three charter schools, serving as chairman of the Board of Directors of the Betty Shabazz International Charter Schools.

NONIE K. LESAUX
Nonie K. Lesaux is Marie and Max Kargman Associate Professor in Human Development and Urban Education Advancement at the Harvard Graduate School of Education. She leads a research program that focuses on increasing opportunities to learn for students from diverse linguistic, cultural, and economic backgrounds, a growing population in today’s classrooms. In 2007, Lesaux was named one of five WT Grant scholars and in 2009, she was a recipient of the Presidential Early Career Award for Scientists and Engineers, the highest honor given by the United States government to young professionals beginning their independent research careers. Her studies on reading and vocabulary development, as well as instructional strategies to prevent reading difficulties, have implications for practitioners, researchers, and policymakers. This research is supported by grants from several organizations, including the Institute of Education Sciences, Eunice Kennedy Shriver National Institute of Child Health and Human Development, the William and Flora Hewlett Foundation, Robert Wood Johnson Foundation, and the Council of the Great City schools. A native of Canada, Lesaux earned her doctorate in educational psychology and special education from the University of British Columbia.

BRIAN J. REISER
Brian J. Reiser is Professor of Learning Sciences in the School of Education and Social Policy at Northwestern University. Reiser was a member of the National Research Council committees authoring the reports Taking Science to School (2007) which provided research-based recommendations for improving K-8 science education; A Framework for K-12 Science Education (2012), which guided the design of The Next Generation Science Standards; and Developing Assessments for the Next Generation Science Standards (2014). Reiser’s research examines how to make the scientific practices of argumentation, explanation, and modeling meaningful and effective for classroom teachers and students. Reiser leads the Scientific Practices project studying how students learn to construct, apply, and refine scientific knowledge with increasing sophistication from elementary to middle school. Reiser co-led the development of IQWST (Investigating and Questioning our World through Science and Technology), a three-year middle school curriculum that supports students in science practices to develop disciplinary core ideas.

LEONA SCHAUBLE (Chair)
Leona Schauble’s research areas include the development of scientific thinking; theory change; modeling approaches to science and mathematics; professional development of teachers. She is a cognitive developmental psychologist with research interests in the relations between everyday reasoning and more formal, culturally-supported, and schooled forms of thinking, such as scientific and mathematical reasoning. Her research concerns topics such as belief change in contexts of scientific experimentation, strategy change, and causal inference. Her current research focus, in collaboration with Professor Richard Lehrer, is on the origins and development of model-based reasoning in school mathematics and science. In this project, the researchers work
collaboratively with teachers on an extended basis to generate reform in teaching and learning of mathematics and science, at levels from elementary through middle school. As participating teachers collectively develop an educational agenda that emphasizes representational competence and modeling, researchers conduct studies that track the long-term development of forms of epistemology that would otherwise be very difficult or impossible to study.

TIMOTHY SHANAHAN
Timothy Shanahan is Distinguished Professor Emeritus at the University of Illinois at Chicago's College of Education. His research focuses on how to improve reading achievement, particularly in urban schools, the relationships between learning to read and write (that is how learning each influences how students learn the other), family literacy, and disciplinary literacy. He was a member of the National Reading Panel, that reviewed research on the teaching of reading for the U.S. Congress, and he has chaired two other national research panels (National Early Literacy Panel, National Literacy Panel for Language Minority Children and Youth). Currently he is principal investigator on the U.S. Department of Education’s National Title I Study of Implementation and Outcomes: Early Childhood Language Development funded by the Institute of Education Sciences.

REED STEVENS*
Reed Stevens is a professor of the learning sciences at Northwestern University. His research program focuses on learning and activity in a wide range of places and situations including classrooms, design-centered and scientific workplaces, and science museums. Across this spectrum of places, he is interested in understanding how people make and use knowledge and where that knowledge comes from. Context is a core issue for research. As a former teacher, he is very interested in the places that are designed for learning to happen. Watch Reed Stevens’ TEDx talk at http://www.youtube.com/watch?v=WwAslKQSXPE