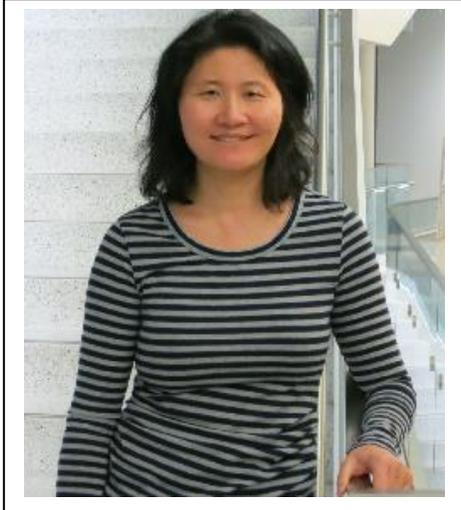


# ASSISTID Programme



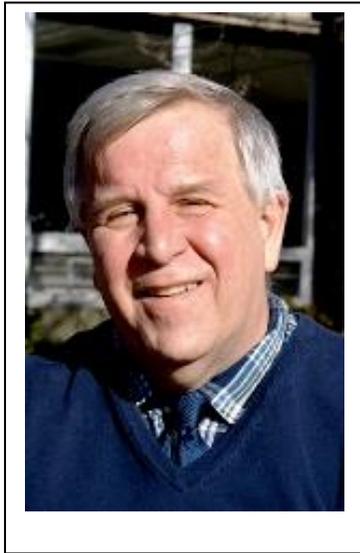
Teresa V. Mitchell, PhD  
Assistant Professor, Eunice Kennedy Shriver Center  
University of Massachusetts Medical School

Dr. Mitchell's primary interest is in visual perception and attention. She has published several articles and chapters on effects of congenital deafness and sign language use on visual processes, including motion processing, attention, and face processing. Her laboratory uses a variety of techniques, from behavior to eye tracking to event-related potentials. She has recently extended this work to examine similar processes in school aged children with autism spectrum disorders and Down syndrome. Fellowships in this laboratory would afford the opportunity to practice and/or acquire skills in the application of cognitive neuroscience techniques to cognitive and perceptual questions in a broad range of pediatric populations.



Hong Yu, PhD  
Professor  
Department of Quantitative Health Science  
University of Massachusetts Medical School

Prof. Hong Yu of the Department of Quantitative Health Sciences of the UMass Medical School is an elected fellow of the American College of Medical Informatics. Her research focuses on information retrieval and natural language processing (NLP) and their applications to the biomedical and healthcare domain. Recently, she is awarded a project by the Department of Veterans Affairs to develop NoteAid ([www.clinicalnotesaid.org](http://www.clinicalnotesaid.org)), an intelligent NLP system that translates electronic health record (EHR) notes to lay language comprehensible to patients. Funded by the National Institutes of Health, her research team also mines data from EHRs for healthcare outcome studies including pharmacovigilance of cancer and cardiovascular drugs (<http://23.23.239.90/aderepository/adehome.uwm>). She is interested in working with the ASSISTID program to develop new NLP approaches for the meaningful use of EHRs and for EHR-based healthcare outcome studies.



William J. McIlvane, PhD  
Director, Intellectual & Developmental  
Disabilities Research Center, UMMS  
Director, Academic Development, Commonwealth  
Medicine Division, UMMS  
Professor of Psychiatry & Pediatrics, UMMS  
University of Massachusetts Medical School

Dr. McIlvane leads a research and development effort, virtually all of which pertains to the development of assistive technologies to enhance the functional capabilities of persons with autism and related neurodevelopmental disorders and people who provide therapeutic and educational services to them. His program is focused particularly on individuals with severe intellectual disabilities and/or minimal functional language. One major focus area is computer-aided augmentative and assistive communication technology to support functional nonverbal communication, including instructional technology to enhance functional communication training efforts. Another area of interest is neurobehavioral assessment of attention, memory, and executive functions of people who do not understand the verbal instructions used in most such assessments. Finally, McIlvane's program has an ongoing interest in non-invasive technologies for monitoring biological state (e.g., electrodermal activity to gauge level of biological arousal) and other emerging technologies that can support therapeutic and educational efforts for his populations of interest.



Jean Frazier, MD  
Professor  
Vice Chair of Child & Adolescent Psychiatry  
Robert M. & Shirley S. Siff Chair in Autism  
Child & Adolescent Psychiatry Division  
University of Massachusetts Medical School

The Child and Adolescent Neurodevelopment Initiative is a lab that is committed to enhancing the lives of individuals with neurodevelopmental disorders including autism. We focus predominantly on neuroimaging and intervention studies. A fellow in our lab would have the opportunity to learn about imaging and intervention methodology. We have collaborative relationships with the Shriver Center, which is co-located in our suite and they are experts in behavioral research, eye tracking and quantitative EEG. There are a number of potential technological opportunities that are ripe for a project including evaluating the impact of an inflatable occupational therapy vest, evaluating the efficacy of an on line social skills training program, and assessing the impact of an on line modules for work related training.