

IU Calendar

Event Information		SOIC Master Calendar IUB
Title:	ISE Colloquium: Silvina Ferradal, PhD, Harvard Medical School	
Sharing:	Public	
Start Time:	Friday, January 11, 2019 3:00 PM	
End Time:	Friday, January 11, 2019 4:00 PM	
Location:	Luddy 1106	
Contact:	Martin Swany	
Url:	https://scholar.google.com/citations?user=2JcHy3wAAAAJ&hl=en	
Free/Busy:	busy	

	<p>School of Informatics, Computing, and Engineering (SICE) Intelligent Systems Engineering Colloquium Series (ISE) Speaker: Silvina Ferradal, PhD., Harvard Medical School Where: Luddy Hall 1106 (Dorsey Learning Hall) When: Friday, January 11, 2019 at 3:00 PM Title: Neuroimaging Tools for Exploring the Developing Brain Abstract: The study of early brain development is one of the most important areas of brain research. Characterizing the structural and functional changes in the developing brain and how these relate to specific functions such as language or learning can provide unique insights into developmental disorders and guide early interventions for improving neurodevelopmental trajectories. Although neuroimaging approaches have contributed significantly to our understanding of early brain development, there is much yet to be done and a dire need for technical innovations tailored to the unique size and physiology of the infant brain. In this talk, I will present non-invasive imaging tools developed for neonates and young infants and discuss some applications in healthy and clinical populations. The talk is organized in three sections: 1. hardware and software tools for bedside diffuse optical tomography, 2. diffuse optical spectroscopy techniques for quantifying cerebral metabolism, and 3. multimodal magnetic resonance imaging for studying functional and structural brain connectivity in the infant brain. In each section I will discuss the strengths and technical limitations of each imaging modality in order to emphasize the complementary roles of multimodal approaches for early brain development. Bio: Silvina Ferradal received her BS in Electrical Engineering from Universidad Nacional de Rosario, Argentina. After receiving a Fulbright Science and Technology PhD Award, she completed her PhD in Biomedical Engineering at Washington University in St. Louis, with a focus in pediatric neuroimaging. She is currently a postdoctoral research fellow at the Fetal-Neonatal Neuroimaging and Developmental Science Center, Boston Children’s Hospital, Harvard Medical School. Her research focuses on the development and applications of non-invasive neuroimaging techniques to study early brain development in healthy infants and clinical populations. She has published 16 peer-reviewed articles in top-tier journals such as Cerebral Cortex, Nature Photonics and NeuroImage and holds a patent on a portable diffuse optics system for functional neuroimaging. Poster</p>
Description:	
Reminder:	The reminder for this event will be sent by email 1 week before it occurs.
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