

**NSF IUCRC BRAIN Center
Industry Planning Meeting & Workshop Agenda
September 9, 2022**

**National Science Foundation Industry/University Cooperative Research Center (IUCRC)
Building Reliable Advances and Innovations in Neurotechnology (BRAIN)**

A meeting for current and perspective BRAIN Center Members
University of Maryland, Baltimore County, Baltimore, MD
Georgia Tech Campus, Atlanta, GA

Start times for remote participation:
Georgia, Maryland, and West Virginia 10:00 (EDT)
Houston 9 AM (CDT)
Mexico 8 AM (CST)
Phoenix, 7 AM (MST)
Spain 3 PM (CET)



Georgia
Tech.



UMBC



West Virginia
University

Agenda (All times shown below are EASTERN STANDARD U.S. TIME)

9:15-10:00 am <i>ONLY for those attending in-person at one of the 2 sites</i>	Participant Registration; Poster setup Breakfast and Networking Time GT, UMBC
10:00-10:15 am <i>Start HYBRID meeting – ALL SITES</i>	Welcome Remarks: Site PIs and University Administration Michelle LaPlaca (Georgia Tech), Raghupathy (Siva) Sivakumar, VP of Commercialization and Chief Commercialization Officer, Professor, ECE, Georgia Tech Ramana Kumar Vinjamuri (UMBC), Karl Steiner, VP for Research, Professor, Mechanical Engineering, UMBC
10:15-11:00 am	NSF IUCRC Program Presentation: Mohan Kumar IUCRC Program Director, Directorate CISE, NSF
11:00-11:15 am	Vision, Capabilities and Value Proposition of the BRAIN Center: Jose (Pepe) Contreras-Vidal, University of Houston
11:15 -11:30 am	Vision for Prospective Sites Michelle LaPlaca (Georgia Tech); Ramana Kumar Vinjamuri (UMBC); Radhey Sharma (WVU)
11:30-11:45 am	Industry Partner Experience Sridhar Madala, Chair, IAB BRAIN
11:45-12:00 pm	INTRO to LifeForm Project Feedback Process Craig Scott (NSF Consultant)
12:00-1:00 pm	LUNCH / POSTERS
1:00-1:40 pm	Project Presentations – Session 1: UMBC, Chair, Ramana Vinjamuri
1:00-1:08	Patient-Specific Robotic Hand Exoskeleton for Individuals with Hand Impairment; Jaydev Desai, Professor (Georgia Tech / Emory)

1:08-1:16	Microcortical arousal prediction through leg movement characterization; Nilanjan Banerjee, Professor (UMBC)
1:16-1:24	Identifying and treating disorders using energy landscape analysis and high performance multisite TMS coils; Fow-sen Choa, Professor (UMBC)
1:24-1:32	Automated multimodal sensing and analysis for personalized Parkinson's disease monitoring; Seung-Jun Kim, Associate Professor (UMBC)
1:32-1:40	Cognition difference in immersive and nonimmersive data visualization; Don Engel, Assistant Professor (UMBC)
1:40-1:50 pm	BREAK
1:50-2:30 pm	Project Presentations – Session 2: Georgia Tech, Chair, Michelle LaPlaca
1:50-1:58	Dexterous human hand exoskeletons to reanimate paralyzed hands Ramana Vinjamuri, Assistant Professor (UMBC)
1:58-2:06	Engineering and Validation of High Fidelity Brain Testbeds; Levi Wood, Associate Professor (Georgia Tech)
2:06-2:14	Multimodal Minimally Invasive Assessment of Neurological Assessment Michelle LaPlaca, Professor (Georgia Tech / Emory)
2:14-2:22	Fully Implantable Wireless Batteryless Vascular Bioelectronics; Woonhong (Hong) Yeo, Assistant Professor (Georgia Tech)
2:22-2:30	Brain Imaging @ GT – Modeling, Improving, and Advancing Our Understanding of Neural Dynamics, Thackery Brown, Assistant Professor (Georgia Tech)
2:30-2:45 pm <i>Meeting concludes for academic attendees</i>	NSF and Site Directors Closing Remarks Mohan Kumar, NSF; BRAIN IAB; Pepe Contreras-Vidal (BRAIN PI, UHouston); Michelle LaPlaca (GT PI); Ramana Vinjamuri (UMBC PI); Radhey Sharma (WVU PI)
2:45-3:00 pm	BREAK
3:00-3:30 pm <i>Industry ONLY</i>	Industry Voting and Discussion Sridhar Madala, Chair, BRAIN IAB <i>IAB/Prospective Industry Partners</i>
3:30-4:00 pm <i>NSF and Industry ONLY</i>	NSF Closed Session with Industry Mohan Kumar, NSF; Sridhar Madala, Chair, BRAIN IAB <i>IAB/Prospective Industry Partners</i>
4:00-4:30 pm <i>NSF, PIs, Industry ONLY</i>	Debrief with BRAIN PIs Mohan Kumar, NSF; Sridhar Madala, Chair, BRAIN IAB Industry feedback to site PIs
<i>IUCRC Planning Meeting adjourns</i>	
4:30 -5:30 pm	Transitions
5:30-7:00 pm	(optional) Faculty – Industry dinner
8:00-10:00 pm <i>GT ONLY</i>	(optional) GT Neuro & Arts collaborative performance: Terminus Modern Ballet Theatre <i>Step the Brain Along a Path; details here</i> Ferst Center for the Arts, Georgia Tech campus,