



National Center of Neuromodulation for Rehabilitation's Spring Showcase Symposium

March 14 and 15, 2024

10:00 a.m. to 3:30 p.m. (EDT) on March 14 and 15, 2024

Location: Zoom

[Learn more on our website](#) | [Register Here](#)

Join the National Center of Neuromodulation for Rehabilitation for a free, two-day, virtual symposium showcasing the diverse portfolio of research supported by the NC NM4R.

Since 2016, NC NM4R has supported over 50 ideas across the United States through mechanisms such as pilot funding, collaborative opportunities, or joint pilot funding. The goal of the 2024 spring symposium is to showcase a diverse selection of examples that came to fruition through NC NM4R funding and to inspire a lively discussion about the future of neuromodulation and advancing the field further.

In four sessions over two days, this online symposium offers a platform to discuss neuromodulation for rehabilitation with current key topics of the field that reach from cutting-edge approaches to improve the precision of neuromodulation to ethical, legal, and societal impact.

THE NATIONAL CENTER OF NEUROMODULATION FOR REHABILITATION IS SUPPORTED BY THE NATIONAL INSTITUTE OF HEALTH'S EUNICE P. KENNEDY SHRIVER NATIONAL INSTITUTE OF CHILD HEALTH & HUMAN DEVELOPMENT (NICHD), THE NCCIH, THE NIDCD, AND THE NINDS UNDER AWARD P2C HD086844.

Agenda: March 14, 2024 10:00 a.m. to 3:30 p.m. EDT

Session 1: Network Modulation

- 10:00 to 10:10 a.m. **Session Introduction**
Steve Kautz, Ph.D.
National Center of Neuromodulation for Rehabilitation
- 10:10 to 10:40 a.m. **Optimizing Behavioral Responses to Neuromodulation by Understanding the Underlying Mechanisms**
Charlotte Stagg, Ph.D.
University of Oxford, St Hilda's College
- 10:40 to 11:00 a.m. **Neural Operant Conditioning Approaches for the Brain and Peripheral Nerves**
James Sulzer, Ph.D.
MetroHealth System and Case Western Reserve University
- 11:00 to 11:20 a.m. **Identifying Indices of Intermittent Hypoxia-Induced Neuroplasticity: Insights from Motor Learning and Metabolic Efficiency**
Andrew Tan, Ph.D.
University of Colorado, Boulder
- 11:20 to 11:40 a.m. **Cerebellar TMS in Progressive Supranuclear Palsy**
Marian Dale, M.D.
Oregon Health and Science University
- 11:40 a.m. to 12:30 p.m. **Discussion and Q&A**
- 12:30 to 1:00 p.m. **LUNCH**

Session 2: Neuromodulation as a Primer

- 1:00 to 1:10 p.m. **Session Introduction**
National Center of Neuromodulation for Rehabilitation
- 1:10 to 1:40 p.m. **Operant Conditioning of Spinal Reflexes in Neurorehabilitation: Can Targeted Neurobehavioral Training Serve as a Primer for What?**
Aiko Thompson, Ph.D.
Medical University of South Carolina
- 1:40 to 2:00 p.m. **Customized Transcutaneous Auricular Stimulation: Accounting for Individual Differences and Investigating Unknowns**
Mike Urbin, Ph.D.
University of Pittsburgh

- 2:00 to 2:20 p.m. **Combining Neuromodulation and Rehabilitation for Freezing of Gait**
Gonzalo Revuelta, DO
Medical University of South Carolina
- 2:20 to 2:40 p.m. **Pairing CILT with Cerebellar tDCS in Individuals with Aphasia is Feasible
and may Improve Language Performance**
Sharyl Samargia-Grivette, Ph.D., CCC-SLP
University of Minnesota, Duluth
- 2:40 to 3:00 p.m. **Transcranial Direct Current Stimulation for Post-Stroke Upper
Extremity Motor Recovery – Advance from Pre-Clinical Stage, Phase I
to Multi-Center Phase II Study**
Wayne, Feng, M.D.
Duke University
- 3:00 to 3:30 p.m. **Discussion and Q&A**

Agenda: March 15, 2024 10:00 A.M. to 3:30 P.M. EDT

Session 3: Precision Neuromodulation

- 10:00 to 10:05 a.m. **Session Introduction**
National Center of Neuromodulation for Rehabilitation
- 10:05 to 10:35 a.m. **Orchestrated Non-Invasive Neuromodulation to Enhance Motor and Cognitive Functions**
Friedhelm Hummel, M.D.
Swiss Federal Institute of Technology, Lausanne (EPFL)
- 10:35 to 10:55 a.m. **Regenerative and Rehabilitative Strategies for Functional Muscle Recovery Following Trauma**
Koyal Garg, Ph.D.
Saint Louis University
- 10:55 to 11:15 a.m. **Transcutaneous Spinal Cord Stimulation for Phantom Limb Pain**
Ashley Dalrymple, Ph.D.
University of Utah
- 11:15 to 11:35 a.m. **Time Course of Human Corticospinal Excitability during Visually Guided Action Preparation**
Deborah Barany, Ph.D.
University of Georgia
- 11:35 to 11:55 a.m. **Targeting Individual-Specific Neural Biomarkers of Sensorimotor Control in Aging and Post-Stroke**
Michael Borich, DPT, Ph.D.
Emory University
- 11:55 a.m. to 12:30 p.m. **Discussion and Q&A**
- 12:30 to 1:30 p.m. **LUNCH**

Session 4: Neuroethical Perspective

- 1:30 to 1:40 p.m. **Session Introduction**
National Center of Neuromodulation for Rehabilitation
- 1:40 to 2:10 p.m. **Ethical Considerations around Pediatric Neurostimulation**
Jared Smith, Ph.D.
Baylor College of Medicine, Center for Medical Ethics and Health Policy

2:10 to 2:30 p.m.

Improving Diversity in Neuromodulation Research: Creating Big Changes with Small Steps

Marlon Wong, PT, Ph.D.

University of Miami

2:30 to 2:50 p.m.

taVNS in Infants after Perinatal Brain Injury: The Challenge of Inducing Neuroplasticity During Development

Dorothea Jenkins, M.D.

Medical University of South Carolina

2:50 to 3:10 p.m.

Ethical Considerations of the Use of Accelerated TBS for Mild Cognitive Impairment

Andreana Benitez, Ph.D.

Medical University of South Carolina

3:10 to 3:30 p.m.

Discussion and Q&A

Speakers

Charlotte Stagg, Ph.D.

University of Oxford, St. Hilda's College

Optimizing Behavioral Responses to Neuromodulation by Understanding the Underlying Mechanisms

Dr Charlotte (Charlie) Stagg is Professor of Human Neurophysiology at the University of Oxford, and Director of Studies for Preclinical Medicine at St Hilda's College. Charlie trained in Physiology and Medicine at Bristol University in the UK. She did her DPhil (PhD) research at the Oxford Centre for Functional MRI of the Brain (FMRIB), using advanced neuroimaging to study how the brain learns new motor skills. She was then awarded a Junior Research Fellowship at St Edmund Hall in Oxford, continuing to be based at FMRIB for her post-doctoral work, with research periods at University College London and the University of Miami, Florida. Her interdisciplinary group was founded in 2014 and uses multi-modal neuroimaging and brain stimulation approaches in rodents and humans to understand motor plasticity, both in the context of learning new motor skills and regaining function after a stroke. Her work has two overarching themes: to understand the mechanisms underpinning human motor learning, and to use that understanding to develop novel therapeutic approaches for acquired brain injuries. She holds a Senior Research Fellowship from the Wellcome Trust, and her group's work is also funded by awards from the MRC, BBSRC, EPSRC and the Wellcome Trust. Charlie lives in the Buckinghamshire countryside with her husband, their two children and the dogs.

<https://www.ndcn.ox.ac.uk/research/physiological-neuroimaging-group>

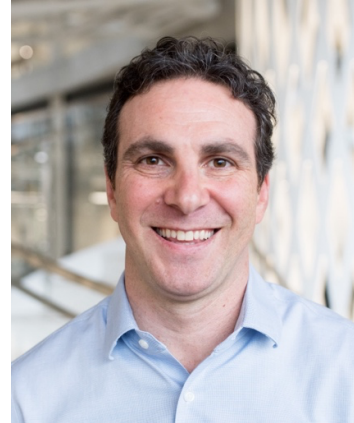
Twitter: @cjstagg



James Sulzer, Ph.D.

MetroHealth System and Case Western Reserve University
Neural Operant Conditioning Approaches for the Brain and Peripheral Nerves

James Sulzer is Staff Scientist at MetroHealth System and Associate Professor of Physical Medicine and Rehabilitation at Case Western Reserve University in Cleveland, OH. In his postdoc at ETH Zurich, Dr. Sulzer pioneered operant conditioning of the [dopaminergic midbrain](#) using fMRI-based neurofeedback, in parallel with launching the international fMRI neurofeedback community and [conference](#), now in its 13th year as well as leading [two of the most influential reviews](#) on the topic. He continued operant conditioning research as faculty at the University of Texas at Austin, using a NM4R seed grant that led to advances in [multivariate fMRI neurofeedback](#) for fine motor control. Through regular attendance at NM4R events, Dr. Sulzer and his team turned towards operant conditioning of quadriceps H-reflexes to reduce post-stroke spasticity, with NM4R pilot funds leading to studies showing [successful control of quadriceps H-reflexes](#) and [its theoretical basis](#).

**Andrew Tan, Ph.D.**

University of Colorado, Boulder
Identifying Indices of Intermittent Hypoxia-Induced Neuroplasticity: Insights from Motor Learning and Metabolic Efficiency

Andrew is an Assistant Professor at the University of Colorado, Boulder in the Dept. of Integrative Physiology. He directs the Sensorimotor Recovery and Neuroplasticity Lab and teaches courses in biomechanics and neurophysiology. He received his BS in Mechanical Engineering from the Univ. of Michigan, Ann Arbor and a PhD in Neuroscience from Northwestern University, Chicago. He completed postdoctoral work at Emory University with Dr. Trisha Kesar and Dr. Michael Borich, as well as with Dr. Randy Trumbower at Harvard Medical School Dept. Physical Medicine & Rehabilitation. His lab team investigates the biomechanical constraints and the neurophysiological mechanisms underlying sensorimotor recovery following nervous system injury. His current research focus is examining neurorehabilitation paradigms that induce adaptive plasticity, leading to gains in motor function and improved quality of life in people with motor incomplete spinal cord injury. He loves to climb and ski with his family and read books on social psychology.



Marian Dale, M.D.(Oregon Health and Science University)
Cerebellar TMS in Progressive Supranuclear Palsy

Dr. Dale, MD MCR, is a movement disorders neurologist with a focus on atypical parkinsonism and progressive supranuclear palsy (PSP). Her research seeks to understand the causes of balance dysfunction in PSP and to use non-invasive neuromodulation techniques for symptom control in movement disorders. She is an Assistant Professor of Neurology at Oregon Health & Science University, where she completed her movement disorders fellowship. Her current work on cerebellar transcranial magnetic stimulation (TMS) and objective balance assessment in PSP is funded by NINDS (K23). Dr. Dale is also Associate Director of Research at the Portland VA Medical Center PADRECC, directs Oregon Health and Science University's CurePSP Center of Care, and serves as Chair for CurePSP's Access to Care Working Group and Co-Chair for the Parkinson Study Group's Atypical Parkinsonism Working Group.



Aiko Thompson, Ph.D.

Medical University of South Carolina

Operant Conditioning of Spinal Reflexes in Neurorehabilitation: Can Targeted Neurobehavioral Training Serve as a Primer for What?

Aiko Thompson, Ph.D. is a neuroscientist and an associate professor in the College of Health Professions, Medical University of South Carolina, Charleston, SC. She did her Ph.D. with Dr. Richard Stein at the University of Alberta, Canada, and then did a postdoc training with Dr. Jonathan Wolpaw at the Wadsworth Center in Albany, NY. During her Ph.D., she was engaged in non-invasive human neurophysiology/plasticity research related to the use of FES (functional electrical stimulation) foot drop simulator; she also started investigating normal and abnormal spinal reflex modulation during walking and other dynamic movements in people with and without chronic CNS disorders. Then, during her postdoc, she developed the human H-reflex operant conditioning protocol. In 2007, she established her own lab; since then, she has been working on understanding CNS plasticity in human sensorimotor control and how to guide the plasticity to help restore useful function in people after CNS damage. Her current research focuses on



investigating functional roles of spinal reflexes and evaluating the CNS plasticity associated with operant conditioning of EMG evoked responses (e.g., spinal reflexes and motor evoked potential to transcranial magnetic stimulation) in people with SCI and other neuromuscular disorders. Her ongoing research is funded by NIH, DoD, South Carolina funds, and private endorsements.

Mike Urbin, Ph.D.

University of Pittsburgh

Customized Transcutaneous Auricular Stimulation: Accounting for Individual Differences and Investigating Unknowns

Mike Urbin, PhD, is a Scientist with the U.S. Department of Veterans Affairs. He is jointly affiliated with the Rehabilitation Neural Engineering Laboratories at the University of Pittsburgh and the Human Engineering Research Laboratories within the VA Pittsburgh Healthcare System. Dr. Urbin's primary research interest is in human motor control and learning. He uses a variety of noninvasive stimulation and structural imaging methods to study pathophysiology of stroke and spinal cord injury. A broad goal of his current research agenda is to understand mechanisms of motor dysfunction and how neuromodulation can be used to retrain distal limb muscles weakened by neurological injury.



Gonzalo Revuelta, DO

Medical University of South Carolina

Combining Neuromodulation and Rehabilitation for Freezing of Gait

Dr. Revuelta is Associate Professor of Neurology, and SmartState Endowed Chair in Neurodegenerative Disorders at the Medical University of South Carolina. Dr. Revuelta also directs the Murray Center for Research in Parkinson's Disease and Related Disorders and is the Medical Director of the Deep Brain Stimulation Program. His NIH funded research program focuses on the development of invasive and non-invasive neuromodulation interventions for Parkinson's disease and related disorders.



Sharyl Samargia-Grivette, Ph.D., CCC-SLP

University of Minnesota, Duluth

Pairing CILT with Cerebellar tDCS in Individuals with Aphasia is Feasible and May Improve Language Performance

I am an Associate Professor of Speech-Language Pathology with experience as a translational neuroscientist and clinician. As a faculty member at a Carnegie M2 institution, my role is divided between teaching, service and research. My research agenda targets investigating the physiologic mechanisms of neurological recovery in children and adults after acquired brain injury or stroke and creating novel interventions to optimize functional recovery. To date, I have primarily targeted the measurement of maladaptive plasticity within the motor cortex using non-invasive neuromodulation which has served me well as I shift my research focus to interrogating the neuroplastic potential of the cerebello-cortical networks in health and disease.

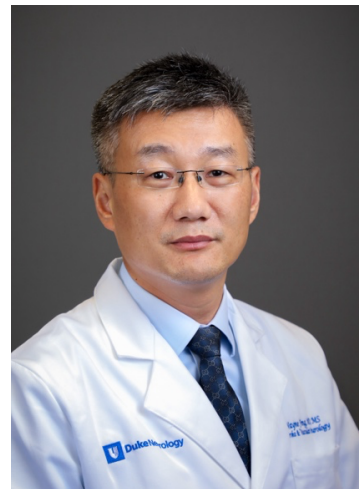


Wayne, Feng, M.D.

Duke University

Transcranial Direct Current Stimulation for Post-Stroke Upper Extremity Motor Recovery—Advance from Pre-Clinical Stage, Phase I to Multi-Center Phase II Study

Dr. Wayne Feng is the Chief of Division of Stroke & Vascular Neurology, Medical Director of Duke Comprehensive Stroke Center, and Tenured Professor of Neurology and Biomedical Engineering at Duke University School of Medicine. Dr. Feng is a board-certified vascular neurologist as well as a physician scientist. His research portfolios include developing imaging biomarker for post-stroke motor outcomes prediction, and use of non-invasive brain stimulation tools, such as transcranial direct current stimulation (tDCS), vagus nerve stimulation, low intensity focused ultrasound, and transcranial light stimulation to enhance post-stroke recovery. His research has been actively funded by the National Institute of Health, the American Heart Association/American Stroke Association, and other various sources. He is currently leading an NIH funded 8.9 million U01 12-center, phase II study called **TRANSPORT 2** (TRANScranial direct current stimulation for POst-stroke motor Recovery—a phase II sTudy) on the NINDS funded stroke trial network. Dr. Feng has published 150+ peer reviewed manuscripts (H index of 39), including two manuscripts featured on the cover page of Brain Stimulation journal, numerous book chapters, and one featured in Journal of Neuroscience. He co-edited the book *Cerebral Venous System in Acute and Chronic Brain Injuries*. He



served as the associate editor for Translational Stroke Research from 2019 to 2021 (IF=7.0). Dr. Feng received several prestigious awards for his research work in stroke and stroke recovery including the FIRST “Rehabilitation Award” from the American Heart Association/American Stroke Association in 2015; “Franz Gerstenbrand Award” from World Federation of Neurorehabilitation in 2016; Arthur Guyton New Investigator Award, Consortium for Southeastern Hypertension Control (COSEHC) in 2016; and “Clinical Investigator Award” from the Society of Chinese American Physician Entrepreneur. Currently, he is the Section Chair of Neural Repair & Rehabilitation, American Academy of Neurology. He leads the global mentoring program for the World Federation for Neurorehabilitation.

Friedhelm Hummel, M.D.

Ecole Polytechnique Federale de Lausanne (EPFL)
Orchestrated Non-Invasive Neuromodulation to Enhance Motor and Cognitive Functions

Prof. Friedhelm Hummel, M.D., is a trained neurologist and a systems and translational neuroscientist focused on neuroengineering. Since September 2016, he is appointed Full-Professor at the EPFL, Director of the Defitech Chair of Clinical Neuroengineering in the Neuro-X institute, and Adjunct Professor at the University Hospital Geneva. Before joining EPFL, he was Vice-Director of the Dept. of Neurology and Head of BINS laboratory, University Medical Center Hamburg, Germany, and did a postdoc at the NINDS at the US National Institutes of Health. His scientific interests are in the development of neurotechnology based on non-invasive brain stimulation to enhance human behavior with a strong clinical translational focus. He pioneered the application of transcranial electric current stimulation to enhance stroke recovery. His current focus is on pioneering brain stimulation methods for non-invasive deep brain stimulation in humans and on developing brain network analyses to predict outcome and treatment response in neurological disorders towards personalization.



Koyal Garg, Ph.D.

Saint Louis University

Regenerative and Rehabilitative Strategies for Functional Muscle Recovery Following Trauma

Dr. Koyal Garg is an Associate Professor in the Department of Biomedical Engineering and holds a secondary appointment in the Department of Pharmacology and Physiology at Saint Louis University (St. Louis, MO). She completed her graduate work at Virginia Commonwealth University (Richmond, VA), followed by post-doctoral fellowships at the US Army Institute of Surgical Research (San Antonio, TX) and the University of Illinois at Urbana-Champaign. Dr. Garg's Musculoskeletal Tissue Engineering Lab is focused on developing novel regenerative and rehabilitative therapies for functional tissue regeneration following musculoskeletal injuries. Her research work is funded by the National Institutes of Health, the Department of Defense, and the Alliance for Regenerative Rehabilitation Research and Training, and the BioSTL's Center for Defense Medicine. Dr. Garg's research has resulted in a patent, 3 book chapters, 49 peer-reviewed journal articles, and 88 poster/podium presentations at various scientific conferences. Her students have launched a startup company, GenAssist, that is committed to commercializing and clinically translating biosponge technology for VML repair. Dr. Garg has been recognized as an outstanding graduate faculty by the School of Engineering at SLU both in 2019 and 2022. Additionally, the Missouri Cures Education Foundation honored her as a WISER (Woman in Science, Entrepreneurship, & Research) woman in February 2022, showcasing her commitment to STEM leadership, innovation, and advancement of women in these fields.



Ashley Dalrymple, Ph.D.

University of Utah

Transcutaneous Spinal Cord Stimulation for Phantom Limb Pain

Dr. Ashley Dalrymple is currently an Assistant Professor in the Departments of Biomedical Engineering and Physical Medicine and Rehabilitation at the University of Utah. She completed her BSc in Electrical and Biomedical Engineering and her Ph.D. in Neuroscience at the University of Alberta. She then went on to complete a postdoc at the Bionics Institute in Melbourne, Australia. Dr. Dalrymple moved to Pittsburgh to complete additional postdoc training, first at the University of Pittsburgh and then at Carnegie Mellon University. During that time, she obtained a pilot grant from the National Center of



Neuromodulation for Rehabilitation (PI: Lee Fisher) and was awarded a prestigious fellowship from the Canadian Institutes of Health Research. The focus of Dr. Dalrymple's work involves the use of implanted and non-invasive neural interfaces to restore function, particularly the rehabilitation of walking, restoring sensation, and reducing pain. Her research spans basic science, proof-of-concept, pre-clinical, and clinical studies.

Deborah Barany, Ph.D.

University of Georgia

Time Course of Human Corticospinal Excitability during Visually Guided Action Preparation

Deborah Barany, Ph.D., is an assistant professor in the Department of Kinesiology at the University of Georgia. Her research focuses on the neural mechanisms of goal-directed action, using a combination of behavioral (motion- and eye-tracking), neuroimaging (fMRI and magnetic resonance spectroscopy), and non-invasive brain stimulation (transcranial magnetic stimulation) methods.



Michael Borich, DPT, Ph.D.

Emory University)

Targeting Individual-Specific Neural Biomarkers of Sensorimotor Control in Aging and Post-Stroke

Dr. Michael Borich, DPT, Ph.D. is an Associate Professor in the Division of Physical Therapy, Department of Rehabilitation Medicine in the Emory University School of Medicine. He is also the Vice-Chair of Research for the department. He has a secondary appointment in the Wallace H. Coulter Department of Biomedical Engineering, a joint Emory/Georgia Tech department, and is a faculty member Neuroscience Graduate Program at Emory. He received his bachelor's degree in physiology and doctor of physical therapy along with a PhD in rehabilitation science and neuroscience from the University of Minnesota. He then completed his postdoctoral training at the University of British Columbia with Dr. Lara Boyd prior to his arrival at Emory and Georgia Tech.

Dr. Borich is keenly interested in understanding and exploiting the plastic capacity of the human nervous system in health and disease to improve rehabilitation outcomes for individuals with neurologic injury and disease. The Neural Plasticity Research Lab at Emory, directed by Dr. Borich, is a transdisciplinary research and training environment



generously supported by multiple funding agencies. He also co-directs of the Precision Neural Engineering Laboratory at Emory aiming to understand neural mechanisms of sensorimotor control. His labs emphasize collaborative research in an inclusive training environment. His team utilizes multimodal neuroimaging and neurostimulation techniques to characterize and modulate the structural and functional neuroplastic correlates of learning and experience. The mission of his work is to understand and harness the adaptive capacity of human nervous system to develop effective treatment strategies to improve rehabilitation outcomes and maximize healthy years in the lifespan.

Jared Smith, Ph.D.

Baylor College of Medicine, Center for Medical Ethics and Health Policy

Ethical Considerations around Pediatric Neurostimulation

Jared N. Smith is a clinical ethics fellow at Baylor College of Medicine through Baylor St. Luke's Medical Center. His primary areas of research in philosophy and bioethics include neuroethics, clinical ethics, agency, and medical decision making. He earned his Ph.D. in Philosophy from the University of California, Riverside, in 2022, and his dissertation, *The Moral Psychology of Obsessive-Compulsive Disorder*, was supported in part by the Andrew Vincent White and Florence Wales White dissertation scholarship in the medical humanities.



Marlon Wong, PT, Ph.D.

University of Miami

Improving Diversity in Neuromodulation Research: Creating Big Changes with Small Steps

Dr. Wong is a clinician-scientist focused on using neuromodulation techniques to develop equitable and personalized pain management approaches. Dr. Wong is an Associate Professor in the University of Miami Department of Physical Therapy, where he teaches pain science and serves as a clinical administrator for multiple settings including a pain clinic, outpatient orthopaedic clinics, and oncology rehabilitation services. He has over 20 years of experience as a physical therapist treating pain in a variety of patient populations. Through this clinical lens, Dr. Wong employs both quantitative and qualitative research methods in his pain research.



Dorothea Jenkins, M.D.

Medical University of South Carolina

taVNS in Infants after Perinatal Brain Injury: The Challenge of Inducing Neuroplasticity During Development

I am academic neonatologist at the Medical University of South Carolina and have a primary research interest in infants with perinatal brain injuries. I have worked to bring neuroprotective and neural recovery enhancing strategies to the bedside in the neonatal intensive care unit, using both animal models and innovative human studies in infants. In addition to a multicenter, randomized controlled trial of therapeutic hypothermia in neonatal hypoxic ischemic encephalopathy, I have conducted innovative trials of N-Acetylcysteine and Vitamin D with hypothermia in HIE and NAC in maternal chorioamnionitis to improve CNS oxidative stress and outcomes. I worked with the Brain Stimulation lab in designing the first therapeutic neuromodulation study in neonates to address the lack of developmental plasticity in infants with feeding delays. Transcutaneous auricular vagal nerve stimulation (taVNS) timed with bottle feeding in infants failing oral feeds and slated for G-tube placement resulted in significantly enhanced feeding skills. Collaborating with OTs and PTs, we have expanded neuromodulation in infants to older NICU graduates with hemiplegia and paired taVNS with constraint-induced movement therapy to show significant improvement in one month. We have conducted detailed studies with SLP, OT, and neuroimaging experts to demonstrate safety and mechanisms of action with these neuromodulation therapies. We believe these therapies have great translational potential in these vulnerable infants who have significant perinatal brain injuries, but also the benefit of enhanced neuroplasticity in recovery.



Andreana Benitez, Ph.D.

Medical University of South Carolina

Ethical Considerations of the Use of Accelerated TBS for Mild Cognitive Impairment

Dr. Andreana (Anya) Benitez is a clinical neuropsychologist and Associate Professor of Neurology at MUSC. She uses advanced diffusion MRI to study cognitive aging and preclinical Alzheimer's disease. She is also the PI of a phase II dose-finding trial of TMS for Mild Cognitive Impairment—a project that was made possible by a phase I trial that was funded by the NC NM4R pilot grant program.

