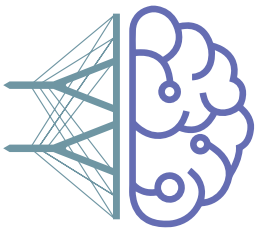
NEUROBOSTON

FALL SYMPOSIUM

NOVEMBER 5, 2020
4:00-6:00PM
VIA ZOOM

Program	
4:00	***Welcome***
4:15	***Lightning Talks*** **Oghomwen E. Igiesuorobo** *The Role of Slow-Wave-Sleep on Hippocampus-Dependent Memory* **Yuqing (Bonnie) Cao** *An Efficient Strategy to Deplete Microglia during Early Brain Development* **Dr. Davide Valeriani** *DystoniaNet: Neural Biomarker-Based Platform for Dystonia Diagnosis using Deep Learning*
5:00	***Keynote*** Dr. Corey Harwell, Harvard Medical School *Development and Diversity of Neural Cell Types in the Septum*
5:45	***Awards, NeuroBoston Bylaws Announcement, & Closing Remarks***
6:00	***Optional Q&A Sessions***



Boston Area
Neuroscience Group
neuroboston.org

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SOCIETY for NEUROSCIENCE

Meet the Lightning Speakers

Oghomwen E. Igiesuorobo is an MD/PhD Candidate in the Department of Neurobiology at the University of Massachusetts Medical School (UMMS). She received her BSc. In Neuroscience in 2012 from the University of California, Los Angeles, CA. Following her graduation, she completed a two-year research fellowship at the National Institutes of Health, Bethesda, MD. She matriculated into UMMS Medical Scientist Training Program in 2014 and currently conducting her thesis work in the lab of Dr. Christelle Anaclet. Her research objective is to understand the role and underlying mechanism of slow-wave-sleep on memory in aging and Alzheimer's disease. Follow the Anaclet Lab on Twitter @anaclet_lab.

Yuqing (Bonnie) Cao is a senior undergraduate student at Northeastern University. She works as a research assistant for the Fishell Lab, part of the Neurobiology Department at Harvard Medical School, under the supervision of Dr. Emilia Favuzzi. Her research objective is to study how perturbing the immune system during early development contributes to neurodevelopmental disorders. Abnormal microglial activities have been associated with several neurological diseases, including Alzheimer's and Parkinson's disease. Thus, an efficient microglia depletion method would facilitate microglial studies. Her research interests include characterizing rodents and human behavior and building cognitive networks. Bonnie is currently the co-president of the Northeastern Researchers of Neuroscience (NEURONS) club. She hopes to continue her passion for research and is currently applying for graduate school. Follow her on Twitter @yuqingcao6, and on Linkedin: linkedin.com/in/yuqing-bonnie-cao-369159172

Davide Valeriani is a postdoctoral research fellow at Massachusetts Eye and Ear and Harvard Medical School, in the laboratory of Dr. Kristina Simonyan. He received his bachelor's and master's degrees in Computer Science Engineering from University of Parma (Italy), and a PhD in Computing and Electronic Systems from the University of Essex (UK). His doctoral work focused on combining EEG signals with machine learning to develop brain-computer interfaces to improve critical decision making. His current research interests focus on translating such neurotechnologies to clinical settings, to better understand the pathophysiology of neurological movement disorders, such as dystonia, and help clinicians with their diagnosis. Follow him on Twitter @DavideValeriani.

Meet the Keynote Speaker

Dr. Corey Harwell is an Assistant Professor in the Department of Neurobiology at Harvard Medical School. Dr. Harwell's lab studies the cellular and molecular mechanisms that underlie the production and assembly of circuits in the developing brain. He conducted his graduate studies in the laboratory of Dr. Elly Nedivi at MIT where he demonstrated that cpg15, a gene normally associated with activity dependent circuit refinement, is also expressed during early embryonic development in a neural activity independent manner. His postdoctoral work with Dr. Arnold Kriegstein at UCSF revealed role of the secreted molecule Sonic Hedgehog in guiding the formation of stereotypical cortical microcircuitry, and examined the lineage and connectivity of cortical interneurons produced in the ventral telencephalon. His current research takes a multi-disciplinary research strategy to identify the developmental mechanisms that regulate neural diversity and circuity assembly in the mammalian forebrain.

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Boston Post Doctoral Association

The Boston Postdoctoral Association is a volunteer 501c(6) nonprofit representing postdocs across the Boston region. We provide career development, advocacy, social, networking, and other events and opportunities for all Boston postdocs. But the real strength in our organization is our network of passionate volunteers, and we're also looking for folks to join us and improve the lives of postdocs in Boston and beyond! You can check out our website (http://bostonpostdocs.org/), join our Slack (https://bostonpostdocs.slack.com/join/shared_invite/zt-emc7455v-i6gfge7KPUx7GariUstGNA#/) to chat with us and our members, and send us an email at bostonpostdoctoralassociation@gmail.com. If you'd like to specifically get involved with our Advocacy, Career Development, Social, or Public Relations committees, let us know!

AWIS
ASSOCIATION FOR WOMEN IN SCIENCE
Massachusetts

MASS AWIS is the Massachusetts chapter of the Association for Women in Science (AWIS), a nationwide advocacy organization founded in 1971 that champions the interests of women in STEM. MASS AWIS strives to provide their members with resources and opportunities aimed at fostering networks, assisting in career pathway choices, providing mentorship, building leadership skills and more. A MASS AWIS membership offers women in STEM a national and local platform to tap into the power of an already established community of women across all STEM disciplines and employment sectors. We help women develop and advance their careers in STEM through workshops on career options and development, resume-building activities, networking events, mentoring circles, science advocacy activities, and leadership programs. To learn more about us, please visit http://www.massawis.org/ (chapter website) and https://www.awis.org/ (national website). For any questions: outreach@massawis.org

Poster Presenters

A downloadable PDF of all posters is available on our website at neuroboston.org

Poster	Presenter	Affiliation	Title
1	Robert A Brown	RABrown Technologies	How excitation/inhibitory criticality is dealt with using symmetrical pulse width modulation
2	Annalise D'Souza	Rotman Research Institute, Baycrest Health Sciences, University of Toronto	When I'm 64: Statistical modelling of age-related variability in over 40,000 online cognitive test participants
3	Leena Ali Ibrahim	Harvard Medical School	Developmental dynamics of bottom-up and top-down input integration onto L1 interneurons in the visual cortex
4	Ian Mahar	Boston University	Pathological correlates of depressive and suicidal phenotypes across brain regions in chronic traumatic encephalopathy
5	Ikbal Sencan	Martinos Center for Biomedical Imaging, MGH and Harvard Medical School	Two-photon microscopy imaging of partial pressure of oxygen (pO2) in awake mouse during breathing challenges
6	Davide Valeriani	Massachusetts Eye and Ear	DystoniaNet: Neural Biomarker-Based Platform for Dystonia Diagnosis using Deep Learning
7	Ashley Collimore	Boston University	Complexity of neuromuscular control is impaired with aging and associated with reduce central drive to the paretic plantarflexor muscles after stroke: A preliminary study
8	Anthony Djerdjaj	Boston College	Basolateral amygdala projections to the insular cortex mediate approach to stressed rats
9	Kelsea Gildawie	Northeastern University	Multiple hits of adversity: Sex-specific neuroimmune and neurostructural effects throughout development
10	Lauren Granata	Northeastern University	Impacts of early life adversity on the dam-pup relationship: modeling ultrasonic vocalization development in altered caretaking environments
11	Cecilia Hinojosa	Tufts University	Behavioral and brain responses to ambiguous stimuli in twin pairs discordant for PTSD
12	Oghomwen E. Igiesuorobo	University of Massachusetts, Medical School	The Role of Slow-Wave-Sleep on Hippocampus Dependent Memory
13	Rachel McLaughlin	Brown University	Exploring the effects of oxygen-glucose deprivation in a 3D cortical microtissue model
14	Maurice Petroccione	SUNY Albany	Neuronal glutamate transporters control striatal excitation and inhibition in a pathway-specific manner.
15	Lauren Thompson	University of Rhode Island	Treating Major Depression and Comorbid Disorders with Transcranial Magnetic Stimulation
16	Yuqing (Bonnie) Cao	Northeastern University; Harvard Medical School; Broad Institute	An Efficient Strategy to Deplete Microglia during Early Brain Development
17	Jadine Daley	UMass Boston	Effect of Father-infant Interactions on SNS Activity Assessed by Salivary Alpha-Amylase Reactivity and Recovery
18	Ismael Maganga-Bakita	University of Massachusetts Boston	Studying the effects of maternal immune stress and environmental enrichment on metabolic liver enzymes CYP450 expression in developing rodents
19	Aashna Sahni	Emory University	Characterizing Melanotan II, a Novel Pharmaceutical Drug with the Potential to Enhance the Efficacy of Autism Therapy
20	Alyssa Thomas	Biotechnology High School	The Effects of Caffeine and Whey Protein on Alcohol- Induced Impairment in C. elegans
21	Hieu Tran	MCPHS University	Environmental Enrichment Increases Resilience Against Social and HPA-Axis Disruptions Induced By a Poly (I:C) Model Of Maternal Immune Activation
22	Paula Lara Mejia	Massachusetts General Hospital/ Harvard Medical School	Increased caudate nucleus neuroinflammation following symptom provocation in myalgic encephalomyelitis/ chronic fatigue syndrome (ME/ CFS) using MRS: Preliminary findings
23	Alexandra Ng	Boston College	Cellular distribution of crhr1 & cb1r mRNA in the insular cortex
24	Lena C. O'Flynn	Massachusetts Eye and Ear	Persistent Abnormal Activation in the Parietal Cortex after Botulinum Toxin Injections in Laryngeal Dystonia