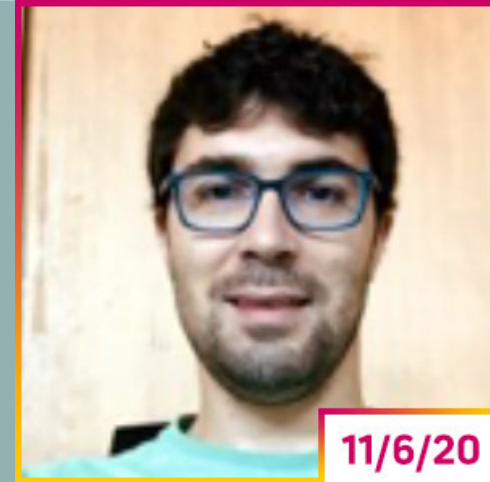


DR. ANDREA CANESSA is an assistant professor at the University of Genova in Italy. He received his PhD in Bioengineering in 2011 from the University of Genova. His PhD focused on the Computational Neuroscience of Early Vision and it ended with a thesis on Visuomotor interactions in 3D spatial sensing and influences of eye movements for depth perception. As a PostDoc, he worked on different research topics dealing with eye movements modelling and kinematics, RGBD devices and virtual reality for visuomotor rehabilitation, serious games for subjects with cognitive disability and EEG analysis in visuomotor tasks with subjects affected by Parkinson's disease. Dr. Canessa's interests are in the fields of clinical neuroscience and neurorehabilitation, focusing on the study of the electrophysiological and biomechanical alterations in movement disorder syndromes, with a special focus on Parkinson's syndrome and on the largely unknown pathophysiology of gait disorders. In his research, he adopts a multimodal approach including cortical and subcortical electrophysiological recordings (hdEEG and DBS LFP), electromyographical recordings, techniques for neuromodulation (e.g. TMS and TMSEEG) and stimulation based on virtual reality.



11/6/20

DR. ANDREA CANESSA

Assistant Professor of the Biomedical Engineering Department
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DEEP BRAIN STIMULATION IN MOVEMENT DISORDERS: CLINICAL EFFECTS AND PATHOPHYSIOLOGICAL MECHANISMS

ABSTRACT: This seminar will give an introduction to the clinical use of deep brain stimulation in patients with movement disorders like Parkinson's disease, dystonia, and tremor. Moreover, he will discuss new concepts of the pathophysiology of movement disorders as brain network disorders

based on the electrophysiological recordings using deep brain electrodes. Finally, he will cover the new development of the closed-loop deep brain stimulation using neuronal activity as a feedback signal for stimulation.

FRIDAY, NOVEMBER 6 / 9:00 AM / VIA ZOOM

Zoom Registration ► <https://bme.fiu.edu/seminars>



Through the generous support of the Wallace H. Coulter Foundation the Department of Biomedical Engineering facilitates weekly lectures each year during academic terms. Experts in all areas of Biomedical Engineering are invited to campus to provide a research seminar and to meet with faculty and students and to tour our academic and research facilities.