Julia T. Choi, Ph.D.

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Education

B.S.	Physiology, McGill University, Canada 2002
Ph.D.	Biomedical Engineering, Johns Hopkins School of Medicine, 2009
Postdoc	Biomedical Engineering, Emory University & Georgia Tech, 2009-2011
Postdoc	Neuroscience, University of Copenhagen, Denmark 2011-2013

Academic Appointments

2019-present	Assistant Professor, University of Florida Primary Appointment: Department of Applied Physiology & Kinesiology
2014-2019	Assistant Professor, University of Massachusetts Amherst Primary Appointment: Department of Kinesiology Faculty Member, Neuroscience and Behavior Program Adjunct Faculty, Department of Mechanical and Industrial Engineering Faculty Member, Center for Personalized Health Monitoring

Selected Honors & Awards

1999	J.W. McConnell Award, McGill University
2001	Undergraduate Research Award, NSERC
2002	Dr. Kathleen Terroux Prize, McGill University
2002-2004	Postgraduate Scholarship, NSERC
2011-2013	Whitaker International Scholar
2018	NSF CAREER Award

Selected Publications

Sato S, Cui A, and **Choi JT**. (2022) Visuomotor errors drive step length and step time adaptation during 'virtual' split-belt walking: the effects of reinforcement feedback. *Exp Brain Res* 240: 511-523.

Sato S, and **Choi JT**. (2021) Neural Control of Human Locomotor Adaptation: Lessons about Changes with Aging. *The Neuroscientist* 10738584211013723.

Stenum J, **Choi JT**. (2020) Step time asymmetry but not step length asymmetry is adapted to optimize energy cost of split-belt treadmill walking. *J Physiology*, 598(18): 4063-4078.

Wang DD, **Choi JT**. (2020) Brain network oscillations during gait in Parkinson's disease. *Frontiers Human Neuroscience.* doi: 10.3389/fnhum.2020.568703

Choi JT, Bouyer LJ, Nielsen JB. (2015) Disruption of locomotor adaptation with repetitive transcranial magnetic stimulation of the motor cortex. *Cerebral Cortex*, 25 (7): 1981-1986.

Choi JT, Reisman DS, Vining, EP, Bastian AJ. (2009) Walking flexibility after hemispherectomy: split-belt treadmill adaptation and feedback control. *Brain*, 32(3):722-733.

Choi JT, Bastian AJ. (2007) Adaptation reveals independent control networks for human walking. *Nature Neuroscience*, 10(8):1055-62.

Complete List of Published Work in MyBibliography:

http://www.ncbi.nlm.nih.gov/sites/myncbi/1XsKq6llTqfAj/bibliography/47514446/public/?sort=date&direction=ascending

Research Support

NSF CAREER Award Choi (PI) 04/2018-03/2023
Adaptation and learning processes in human locomotion

Michael J Fox Foundation Wang (PI) 04/2020-03/2023
Using adaptive deep brain stimulation for gait re-training in Parkinson's Disease

Danish Council for Independent Research Choi (PI) 09/2011-12/2013
Functional organization of neural networks for human locomotion

Whitaker International Scholarship Choi (PI) 07/2011-06/2013
Understanding human locomotor adaptation using non-invasive brain stimulation

Teaching

Courses taught at UF:
APK 4144: *Movement Neuroscience*
PET 5936: *Locomotion Neuromechanics*

Graduate students:
2014-2019, Gabriela Borin, Kinesiology PhD student
2014-2019, Jan Stenum, Kinesiology PhD student
2015-2022, Daniel Gregory, Kinesiology PhD student
2016-2021, Sumire Sato, Neuroscience PhD student
2020-current, Marisa Mulvey, Applied Physiology and Kinesiology PhD student
2020-current, R. Brandon Robert, Applied Physiology and Kinesiology PhD student

Undergraduate students:
Brian Young ('15 BS), Kendra Lastowka ('16 BS), Rose Arsianian, Lazar Jankovic ('18 BS), Brian Kim ('18 BS), Lia Gizzi ('18 BS), Aiden Chehade, Kyle Takach ('20 BS), Austin Tang ('19 BS), Ashley Cui ('20 BS), Taylor DeRubeis, Peter Murphy ('20 BS), Isabella Izidoro, Samantha Kirkham ('20 BS), Chris Lamprecht ('22 BS), Joanne Qin Yi Lee, Alexandra Chertok

Professional Activities

Manuscript review for: Journal of Neurophysiology, Neuroscience, European Journal of Physical and Rehabilitation Medicine, Gait and Posture, Experimental Brain Research, Sensory and Motor Research, PLOS One, Transaction on Neural Systems and Rehabilitation Engineering, Journal of Biomechanics, Clinical Neurophysiology, European Journal of Neuroscience, Scientific Reports, Journal of Experimental Biology, Journal of Visualized Experiment, Biology OPEN, Neurobiology of Learning and Memory, Communications Biology, PeerJ, Human Movement Science, Movement Disorders

Professional Affiliations: Society for Neuroscience (SfN), Society for the Neural Control of Movement (NCM), International Society for Posture and Gait Research (ISPGR), American Biomechanics Society (ASB), International Society for Electrophysiological Kinesiology (ISEK)

Outreach Activities

Science Communication Fellow, Discovery Museums, 2014

Workshop organizer, Eureka! at UMass Amherst, 2017, 2018, 2019

Ace in Motion, 2020