Stephanie Cheung

Research Interests

o paediatric rehabilitation; music-based rehabilitation; interactive computer play; auditory neuroscience, motor learning.

Education

Doctoral Candidate (Biomedical Engineering & Collaborative Program in Neuroscience) Toronto, ON

Sept. 2015 - present University of Toronto

Dissertation: Movement through Music: Video Games for Music-Supported Motor Rehabilitation.

Supervisors: Dr. Elaine A. Biddiss.

Master's of Applied Science (Electrical & Computer Engineering)

Hamilton, ON

McMaster University

Sept. 2012 - Sept. 2014

Thesis: Modelling the Neural Representation of Interaural Level Differences for Linked and Unlinked Bilateral Hearing Aids.

Supervisor: Dr. Ian C. Bruce.

Bachelor of Engineering (Electrical & Biomedical Engineering)

Hamilton, ON

Sept, 2008 - Apr, 2012 McMaster University

Capstone: "MACBot": A Robotic Toy for Children with Autism Spectrum Disorders.

Thesis: A Comparison of Wavelet and Short-Time Fourier Transform Techniques for Analysis of Auditory Cortex Beta-Band Activity.

Supervisors: Dr. Hubert de Bruin; Dr. Laurel Trainor; Dr. Takako Fujioka

Associate of The Royal Conservatory of Music (Piano Performance), First Class Honours Toronto, ON

The Royal Conservatory of Music

Conferred Jan. 2009

Toronto, ON

Studied with Tanya Tkachenko and Boris Zarankin.

Awards & Scholarships

Sept, 2016 - present: Wildcat Graduate Scholarship

Sept, 2016 – **present**: Eleanor Cate Allen Fellowship

Apr, 2016: Holland Bloorview Spotlight Award

Sept, 2015 - Aug, 2016: Wildcat Graduate Scholarship

Sept, 2014: Certificate of Excellence for Outstanding Thesis

Aug, 2014: International Hearing Aid Research Conference Student Scholarship

May, 2011 - Aug, 2011: Ward Family Summer Student Scholarship

Research Experience

Research Assistant Toronto, ON

PEARL Lab. Bloorview Research Institute Nov, 2014 - Aug, 2015

Ward Family Research Summer Student

May, 2011 - Aug, 2011

PEARL Lab, Bloorview Research Institute

Hamilton, ON Research Assistant

Auditory Development Lab. McMaster Institute for Music and the Mind May, 2010 - Jan, 2011

Teaching & Supervision

Supervisor, Research Volunteers and Summer Student

PEARL Lab. Bloorview Research Institute

Toronto, ON

Dec. 2015 - present

Teaching Assistant, "Cellular Bioelectricity"

Dept. of Electrical & Computer Engineering, McMaster University

Hamilton, ON

Winter, 2013 & 2014

Teaching Assistant, "Structure of Biological Materials"

Dept. of Electrical & Computer Engineering, McMaster University

Hamilton, ON

Fall, 2012 & 2013

Peer-Reviewed Journal Articles

Cheung, S.*, Han, E.*, Kushki, A., Anagnostou, E., & Biddiss, E. (2016) "Biomusic: An auditory interface for detecting physiological indicators of anxiety in children." *Front Neurosci.* 10:401. doi: 10.3389/fnins.2016.00401 (*equal contribution)

Invited Talks

Cheung, S.T. (Feb, 2016). "Merging music and technology for paediatric rehabilitation." at *Science of Music Seminar Series, Vanderbilt University*, Nashville, TN.

Contributed Conference Presentations

Cheung, S.T. (Mar, 2016). "MusicMaster: Movement through Music." at CP-NET Workshop 2016, Toronto, ON.

Cheung, S.T. & Bruce, I.C. (May, 2015). "Can auditory brainstem and midbrain processing of interaural level difference cues really explain perceptual performance?" at 169th Meeting of the Acoustical Society of America, Pittsburgh, PA.

Cheung, S.T. & Bruce, I.C. (Aug, 2014). "Modeling the neural representation of interaural level differences for linked and unlinked bilateral hearing aids." at *International Hearing Aid Research Conference*, Lake Tahoe, CA.

Service & Outreach

Co-Chair Toronto, ON

Bloorview Research Institute Trainee Executive Sept, 2016 – present

Program Co-Director Toronto, ON

Collaborative Program in Neuroscience Undergraduate Mentorship Program Feb, 2016 – present

Co-FounderAll About Kids Research (http://www.allaboutkidsresearch.ca)

Jan, 2016 – present

Events Chair Toronto, ON

Bloorview Research Institute Trainee Executive Oct, 2015 – Aug, 2016

Memberships

- Society for Music Perception and Cognition (student member)
- Canadian Partnership for Stroke Recovery National Trainee Association
- NeuroDevNet (associate trainee)

Last updated Sept 1st, 2016.