

# Stephanie Cheung

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## Research Interests

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○ auditory neuroscience, speech science, hearing science, motor control, signal processing, electrophysiology

## Training

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**Doctoral Candidate (Biomedical Engineering & Collaborative Program in Neuroscience)** **Toronto, ON**  
*University of Toronto* *Sept, 2015 - present*

**Project:** Development of auditory-motor integration for speech-motor control.

**Supervisor:** Dr. Deryk Beal.

**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.

*Conferred November 21, 2014*

**Bachelor of Engineering (Electrical & Biomedical Engineering)** **Hamilton, ON**  
*McMaster University* *Sept, 2008 – Apr, 2012*

**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

*Conferred June 15, 2012*

## Awards & Scholarships

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**May, 2017:** Holland Bloorview Spotlight Award - Caring and Innovation

**Nov, 2016:** Holland Bloorview Spotlight Award - Partnership

**Sept, 2016 – present:** Wildcat Graduate Scholarship

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

**Apr, 2016:** Holland Bloorview Spotlight Award - Excellence, Innovation, Partnership, and Respect

**Sept, 2015 – Aug, 2016:** Wildcat Graduate Scholarship

**Sept, 2014:** Certificate of Excellence for Outstanding Thesis

**Aug, 2014:** International Hearing Aid Research Conference Student Scholarship

## Research Employment

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**Research Assistant** **Toronto, ON**  
*PEARL Lab, Bloorview Research Institute* *Nov, 2014 – Aug, 2015*

**Ward Family Research Summer Student** **Toronto, ON**  
*PEARL Lab, Bloorview Research Institute* *May, 2011 – Aug, 2011*

**Research Assistant (Volunteer)** **Hamilton, ON**  
*Auditory Development Lab, McMaster Institute for Music and the Mind* *May, 2010 – Jan, 2011*

## Teaching & Supervision

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<b>Co-Supervisor, Undergraduate Summer Student</b> <i>CONNECT Lab, Bloorview Research Institute</i>	<b>Toronto, ON</b> <i>May, 2017 – present</i>
<b>Co-Supervisor, Co-op Student</b> <i>CONNECT Lab, Bloorview Research Institute</i>	<b>Toronto, ON</b> <i>Jan, 2017 – May, 2017</i>
<b>Co-Supervisor, Undergraduate Summer Student</b> <i>PEARL Lab, Bloorview Research Institute</i>	<b>Toronto, ON</b> <i>May, 2016 – Aug, 2016</i>
<b>Teaching Assistant, “Cellular Bioelectricity”</b> <i>Dept. of Electrical &amp; Computer Engineering, McMaster University</i>	<b>Hamilton, ON</b> <i>Winter, 2013 &amp; 2014</i>
<b>Teaching Assistant, “Structure of Biological Materials”</b> <i>Dept. of Electrical &amp; Computer Engineering, McMaster University</i>	<b>Hamilton, ON</b> <i>Fall, 2012 &amp; 2013</i>

## Peer-Reviewed Journal Articles

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**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](https://doi.org/10.3389/fnins.2016.00401) (\*equal contribution)

## Invited Talks

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**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

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**Cheung, S.**, Hodge, A., Khan, A., Chen, J., Biddiss, E. (Nov, 2016). “Development of music-based video games for upper limb rehabilitation therapy in children with cerebral palsy.” at *12th Annual NeuroMusic Conference, Hamilton, ON.*

**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?” Presented by I.C. Bruce 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.*

## Other Academic Presentations

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**Cheung, S.T.** (April, 2016). “Music-making technology for arm and hand rehabilitation.” at *Cerebral Palsy Awareness Day, Rehabilitation Sciences Institute (University of Toronto), Toronto, ON.*

## Service & Outreach

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<b>Judge</b> <i>Pursuit Awards in Childhood Disability Research</i>	<b>Toronto, ON</b> <i>May, 2017</i>
<b>Co-Chair</b> <i>Bloorview Research Institute Trainee Executive Committee</i>	<b>Toronto, ON</b> <i>Sept, 2016 – present</i>
<b>Judge</b> <i>Ward Summer Student Research Day Awards</i>	<b>Toronto, ON</b> <i>July, 2016</i>

**Program Co-Director**

*Collaborative Program in Neuroscience Undergraduate Mentorship Program*

**Toronto, ON**

*Feb, 2016 – May, 2017*

**Co-Founder**

*All About Kids Research (<http://www.allaboutkidsresearch.ca>)*

**Toronto, ON**

*Jan, 2016 – present*

**Events Chair**

*Bloorview Research Institute Trainee Executive Committee*

**Toronto, ON**

*Oct, 2015 – Aug, 2016*

## **Media Coverage**

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**June, 2017:** hEr Volution. “#CanWomenSTEM150: Our Women in STEM.” Available from:  
<http://www.hervolution.org/canwomenstem150/>.