

**T. M. Vanessa Chan, Ph.D.**  
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### **Academic appointment**

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2020 – present      **Assistant Teaching Professor, Department of Psychology**  
University of Notre Dame  
Concurrent Faculty, First Year of Studies (2021-2023)  
Academic Advisor, Neuroscience and Behavior (Bachelor of Arts)

### **Education**

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2015-2020      **Doctor of Philosophy (Psychology), University of Toronto**  
Thesis: Dynamics of auditory reflective attention in speech-in-noise perception  
Advisor: Prof. Claude Alain

2014-2015      **Master of Arts (Psychology), University of Toronto**  
Thesis: Auditory Perception and Executive Functions in Simultaneous Interpreters  
Advisor: Prof. Claude Alain

2010-2014      **Bachelor of Science (Major Neuroscience), McGill University**  
Minor Supplementary East Asian Language (Japanese)

### **Teaching-related experience**

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Jan 2023 – May 2023      **Faculty Partner**, Inclusive Pedagogy Partnership, University of Notre Dame  
Participated in Phase 3 pilot of program to facilitate inclusive teaching at the university

June 2022, June 2023      **Course Instructor**, Summer Scholars Pre-College, University of Notre Dame  
Designed and taught 2-week summer experiential learning in cognitive neuroscience.

Jan 2019 – Apr 2020      **Course Instructor**, Department of Psychology, University of Toronto  
Course: Cognitive Neuroscience, Winter 2019 and Winter 2020.

July 2019 – Dec 2019      **Instructional Resource Designer**, Department of Psychology, University of Toronto  
Consultant for design of writing assignments to develop critical reading skills.

Sep 2014 – June 2020      **Teaching Assistant**, Department of Psychology, University of Toronto  
Courses: Introduction to Psychology, Statistics I, Learning & Plasticity, Physiological Psychology, Music Cognition.

Mar 2015 – Feb 2017      **Advanced University Teaching Preparation Certificate Program**  
Teaching Assistant Training Program, University of Toronto

## Publications

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1. Branco, R.C. & **Chan, T.M.V.** Cross-course harmonized assignments for neuroscience. *Journal of Undergraduate Neuroscience Education*, 21(2), A85-A90. <https://doi.org/10.59390/BOTF3129>  
\* both authors contributed equally
2. Saarikivi, K., **Chan, T.M.V.**, Huotilainen, M., Tervaniemi, M., & Putkinen, V. (2023). Enhanced neural mechanisms of set shifting in musically trained adolescents and young adults: converging fMRI, EEG, and behavioral evidence. *Cerebral Cortex*, bhad034. <https://doi.org/10.1093/cercor/bhad034>
3. **Chan, T.M.V.**, Buchsbaum, B. R., & Alain, C. (2022). Effects of temporal order and intentionality on reflective attention to words in noise. *Psychological Research*, 86(2), 544-557. <https://doi.org/10.1007/s00426-021-01494-6>
4. Putkinen, V., Saarikivi, K., **Chan, T.M.V.**, & Tervaniemi, M. (2021). Faster maturation of selective attention in musically trained children and adolescents: converging behavioral and ERP evidence. *European Journal of Neuroscience*, 54(1), 4246-4257. <https://doi.org/10.1111/ejn.15262>
5. Satanove, D.J., Rahman, S., **Chan, T.M.V.**, Ren, S., & Clarke, P.B.S. (2021). Nicotine-induced enhancement of a sensory reinforcer in adult rats: antagonist pretreatment effects. *Psychopharmacology*, 238, 475–486. <https://doi.org/10.1007/s00213-020-05696-5>
6. **Chan, T.M.V.**, & Alain, C. (2020). Brain indices associated with semantic cues prior to and after a word in noise. *Brain Research*, 1751, 147206. <https://doi.org/10.1016/j.brainres.2020.147206>
7. **Chan, T.M.V.**, & Alain, C. (2019). Listening back in time: Does attention to memory facilitate word in noise identification? *Attention, Perception, & Psychophysics*, 81(1), 253-269. <https://doi.org/10.3758/s13414-018-1586-8>
8. Alain, C., Cusimano, M., Garami, L., Backer, K., Habelt, B., **Chan, V.**, & Hasher, L. (2018). Age-related differences in orienting attention to sound object representations. *Neurobiology of Aging*, 66, 1-11. <https://doi.org/10.1016/j.neurobiolaging.2018.01.026>

## Publications in progress

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1. Bongiovanni, N.R., **Chan, T.M.V.**, Van Hedger, S.C., Findley, C., & Hoeckner, B. (revise and resubmit). Pitch height and mode have asymmetrical effects on the perception of mixed emotions in music. <https://osf.io/preprints/psyarxiv/jmq3w/>

## Invited book chapters

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1. **Chan, T.M.V.**, & Alain, C. (2020). Theories of cognitive aging: A look at potential benefits of music training on the aging brain. In L. Cuddy, S. Belleville, & A. Moussard (Eds.) *Music and the Aging Brain*. Elsevier.

## Teaching resources

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1. Wood, S., & Chan, V. (2020). Sequential assignments to critically evaluate psychological journal articles. *Society for the Teaching of Psychology website*. <https://teachpsych.org/resources/Documents/otrp/resources/wood20.pdf>

## Conference presentations

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1. Chan, T.M.V., & Michael, N. (2023) Leveraging neuroscience communication skills for the community. Neuroscience Teaching Conference, Winston-Salem, USA.
2. Chan, T.M.V., & Branco, R. C. (2022). Implementation and assessment of cross-course harmonized assignments. Neuroscience Teaching Conference, Winston-Salem, USA.
3. Alain, C., & Chan, T.M.V. (2018). Orienting attention to speech representation improves word in noise identification. Society for Psychophysiological Research Annual Meeting, Quebec City, Canada.

## Conference posters

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1. Chan, T.M.V. (2019, June). Reawakening desire: student-centered educational practice as fostering humanity. Society of Catholic Scientists Annual Meeting, Notre Dame, USA.
2. Chan, T.M.V., & Alain, C. (2018, November). Neural indices of auditory reflective attention in word-in-noise identification. Society for Neuroscience Annual Meeting, San Diego, USA.
3. Chan, T.M.V., Saarikivi, K., Tervaniemi, M., & Putkinen, V. (2017, June). Cortical mechanisms of auditory change detection in musically trained and untrained adolescents. Neurosciences and Music VI – Music, Sound and Health, Boston, USA.
4. Chan, T.M.V., & Alain, C. (2017, April). Listening back in time: Does attention to memory facilitate word in noise identification? Erasmus Mundus Auditory Cognitive Neuroscience Symposium, Leipzig, Germany.
5. Chan, V.T.M., & Alain, C. (2016, March). Auditory perception and executive functions in simultaneous interpreters: re-examining the music-language relationship. Cognitive Neuroscience Society Annual Meeting, New York, USA.
6. Chan, V.T.M., & Alain, C. (2015, October). Auditory perception and executive functions in simultaneous interpreters. BRAMS: The next ten years – symposium, Montreal, Canada.

## Research experience

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- Sep 2014 – Jul 2020 **Graduate Researcher**, Rotman Research Institute, Baycrest, Canada  
Supervisor: Prof. Claude Alain. Independently conducted line of research, regularly assisted with lab maintenance and troubleshooting of experimental code (Presentation, MATLAB) and EEG equipment (Biosemi ActiveTwo).
- May 2016 – Dec 2016 **Visiting Graduate Student**, Cognitive Brain Research Unit, University of Helsinki, Finland  
Supervisor: Prof. Mari Tervaniemi. Assisted with data collection and preliminary analyses on ongoing longitudinal project.

May 2012 – May 2014 **Undergraduate Researcher**, Neuropsychopharmacology Lab, McGill University, Canada  
Supervisor: Prof. Paul Clarke. Independent Research Project conducted Fall 2013.

### **Funded Grants**

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2024 – 2026 RSP – Regular Grant, Notre Dame Research, Co-PI (PI: Berthold Hoeckner), “The Bittersweet Spot: How Musical Emotions Affect the Understanding of Life Events” (\$100,000 USD)  
2023 Instructional Resource Grant, Society for the Teaching of Psychology, PI, “Psychology for the Public: A Project to Foster Good Science Communication” (\$1500 USD)

### **Awards and Honors**

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#### *External*

2016 Erasmus Mundus Auditory Cognitive Neuroscience Mobility Fellowship  
2015 – 2016 NSERC Canada Graduate Scholarship – Master’s  
2013 NSERC Undergraduate Student Research Award  
2012 FRSQ Undergraduate Student Research Award

#### *Internal*

2017 School of Graduate Studies Conference Grant, University of Toronto  
2017 Faculty of Arts & Science Graduate Student Conference Travel Grant, University of Toronto  
2010 – 2013 McGill University J.W. McConnell Scholarship

### **Mentorship**

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#### *Committee membership*

Rachelle Pichot (Cognition, Brain and Behavior)

#### *Senior thesis and capstone projects*

Claire Mahoney (2023, Glynn Family Honors / Compassionate Care in Medicine) – *Musical Healing: Exploration of Music Therapy among Healthcare Professionals*

Kaela Reisch (2023, Sustainability) – *Irish eating green: student sentiment and motivations towards sustainable dining at the University of Notre Dame*

### **Professional and community service**

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#### *At the University of Notre Dame*

Jan 2023 – present **Co-chair**, Neuroscience and Behavior Curriculum Sub-committee, University of Notre Dame  
Spring 2023 **Search Committee Member**, Psychology Teaching Faculty Search, University of Notre Dame

Aug 2021 – May 2023 **Faculty Mentor**, Building Bridges Mentorship Program, University of Notre Dame

Jan 2021 – present **Faculty Advisor**, Mending Minds, University of Notre Dame

Jan 2021 – present **Planning Committee**, Young Singles Community for Faculty and Staff, University of Notre Dame

Aug 2020 – present **Committee Member**, Neuroscience and Behavior Steering Committee, University of Notre Dame

Fall 2021 **Search Committee Member**, Neuroscience and Behavior Hiring Search, University of Notre Dame

*Outside the University of Notre Dame*

Nov – April 2023, **Mentor**, University of Toronto Psychology Mentorship Program

Jan – April 2022

Jul 2018 – Aug 2019 **Academic Rounds Coordinator**, Rotman Research Institute, Baycrest

**Professional activities and community engagement**

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*At the University of Notre Dame*

Sept 2022 – May 2023 **Participant**, 2022-2023 SEED Seminar series, University of Notre Dame  
Invited to yearlong discussion series on issues of equity and inclusion in higher education and at Notre Dame

January 2022 **Invited Presenter**, Mending Minds, University of Notre Dame  
Presentation: Music and its use in rehabilitation

September 2021 **Contributing Presenter**, Provost’s Learning Lightning Talks, University of Notre Dame  
Presentation: Implementing a one-time grace period policy

Apr 2021 – May 2021 **Workshop Participant**, Civic Hope workshop series, University of Notre Dame  
Conversation series around dialogue between the arts and sciences in the community

October 2020 **Invited Presenter**, Mending Minds, University of Notre Dame  
Presentation: Music and its relationships with memory

*Outside the University of Notre Dame*

December 2021 **Panelist**, Psychology Graduate Teaching Network Job Session, University of Toronto  
Presentation and Q&A on teaching faculty job market and experience

March 2021 **Presenter**, Crush Imposter Syndrome Initiative, University of Toronto  
Presentation: Experience of imposter syndrome and strategies for mitigation

August 2020 **Panelist**, U of T Psych Jobs Group  
Panel on post-PhD trajectory, entering the academic job market

Apr 2018 – Feb 2020 **NeuroBRITE Mentor & Coordinator**, Rotman Research Institute, Baycrest

2018-2020 Designing curriculum for high school neuroscience outreach  
**Volunteer**, Let's Talk Science, University of Toronto  
Classroom visits to elementary schools with science kits

February 2019 **Workshop Presenter**, Rotman Research Institute, Baycrest  
Topic: Introduction to Electroencephalography (EEG)

May 2018 **Lecturer**, Brain & Cognition Lecture Series, Rotman Research Institute,  
Baycrest  
Topic: Music & Speech Cognition

March 2018 **Scientific Communication Officer**, Rotman Research Institute, Baycrest  
Lay abstract translation and live-tweet of the annual RRI Conference

2015-2018 **Logistics Coordinator**, University of Toronto Science Rendezvous

### **Ad hoc reviewer**

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Attention, Perception, and Psychophysics  
PLOS ONE

### **Professional membership**

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Faculty for Undergraduate Neuroscience  
Society for Teaching of Psychology (APA Div. 2)  
Society for Neuroscience  
Society for Catholic Scientists