

Michelle (Tianyi) Tong, Ph.D.

CONTACT INFORMATION	Olin-Rice 217 1600 Grand Ave Macalester College St. Paul, MN, 55105 USA	Voice: +001 607 379 4349 Email: mtong@macalester.edu URL: www.michelletong.com Twitter: @Professor.Tong
EDUCATION	Cornell University , Ithaca, New York, USA Ph.D. in Psychology (Behavioral and Evolutionary Neuroscience) <ul style="list-style-type: none">Dissertation titled “A spatiotemporal examination of the molecular mechanisms involved in long-term memory for incrementally acquired information” Queen’s University , Kingston, Ontario, CA B.S. in Psychology; Biology <ul style="list-style-type: none">Thesis titled “Culture, attention to mood, and the informative value of mood in judgement”	2010-2016 2006-2010
RESEARCH INTERESTS	learning and memory, olfactory memory, perineuronal nets, extracellular matrix, long-term memory, sensation and perception, cellular and molecular neuroscience, behavioural neuroscience	
ACADEMIC EXPERIENCE	Macalester College , St. Paul, MN, USA <i>Assistant Professor of Neurobiology</i> University of St. Thomas , St. Paul, MN, USA <i>Assistant Professor of Neuroscience & Biology</i> Boston University , Boston, MA, USA <i>Visiting Researcher</i> at BU Center for Systems Neuroscience Earlham College , Richmond, Indiana, USA <i>Assistant Professor of Psychology & Neuroscience</i> Cornell Prison Education Program , Ithaca, New York, USA <i>Instructor</i> <ul style="list-style-type: none">Courses: Introduction to Psychology. Cornell University , Ithaca, New York, USA <i>Instructor</i> <ul style="list-style-type: none">Courses: Introduction to Behavioral Neuroscience, Scientific Writing for Learning and Memory Researchers. <i>Graduate Research and Teaching Fellow</i> <ul style="list-style-type: none">Cornell Center for Teaching Excellence. Conducted an educational research project that focused on characterizing misalignment of expectations between international graduate students in engineering and their advisors. <i>Teaching Assistantships</i> <ul style="list-style-type: none">Courses: Introduction to Cognitive Science, Psychology of Language, Human Perception: Applied Computational Graphics, Evolution of (Human) Behavior, Memoir and Memory.	Current 2020-2022 Spring 2020 2016-2020 2015-2016 2014-2015 2013-2014 2011-2014

Weill Cornell Medical College, New York, New York, USA

Research Fellow

2011-2013

- Dept of Psychiatry. Advisor: Francis S. Lee. NIH-supported Ithaca-Manhattan Graduate Initiative in Neuroscience. Translational research fellowship.

Universität Bielefeld, Bielefeld, DE

Undergraduate Research Intern

Summer 2009

- Dept of Biology. Advisor: Martin Egelhaaf. Spatial navigation by optic flow in honeybees.

Queen's University, Kingston, Ontario, CA

Undergraduate Research Associate

2009-2010

- Dept of Psychology. Advisor: Li-Jun Ji. Use of mood as information in judgments of life satisfaction. Human-subjects research.

Undergraduate Researcher

2007-2009

- Dept of Psychology. Advisor: Nikolaus Troje. Inversion effect in biological motion; walking direction detection in pigeons.

GRANTS,
FELLOWSHIPS, &
AWARDS

- 2019, Outstanding Faculty or Staff Award (Earlham College Office of Diversity and Inclusion)
- 2019, EPIC Advantage Research Project Development Fund for project titled "Conference Climate and Interrogating the Diversity Bargain"
- 2018, Earlham College Faculty-Student Collaborative Research for "Perineuronal nets are selectively expressed around learning-related neurons"
- 2018, Psi Chi Undergraduate Research Faculty Sponsor Award for "Making Good Choices: The Effect of Social Interaction on Chronic Stress-Induced Aberrant Decision-Making in Mice" (with Arish Mudra Rakshasa, Class of 2019)
- 2018, Indiana Academy of Sciences Senior Research Grant for "The Role of Perineuronal Nets in the Reduction of Interference between Long-term Olfactory Memories"
- 2017, Earlham College Faculty-Student Collaborative Research for "The Molecular Mechanisms of Olfactory Representation Specificity, and Other Untold Stories"
- 2017, Lilly Endowment - Faculty mini-grant for student-led trade fair showcasing research-inspired products
- 2015-2016, "Reading Sensibly: Ranciere and the Politics of the Sensible," Institute for Comparative Modernities Graduate Reading Group, Cornell University
- 2014, Teagle Grant, Cornell University Center for Teaching Excellence
- 2010-2013, Weill-Cornell Medical College and Cornell University Ithaca Seed Grant
- 2010, Cornell University SAGE Fellowship
- 2009, Research scholarship from the DAAD (German Academic Exchange Service)
- 2009, Pearl E. Williams & Llewellyn Hillis Fund for Women in Science

PUBLICATIONS

* denotes undergraduate authors

Awol, AK* & Tong MT. (2020). A Low-Cost, Odor-Reward Association Task for Tests of Learning and Memory. *Journal of Visual Experiments*. (159), e59756, doi:10.3791/59756

Mudra Rakshasa A* & Tong MT. (2020). Making "Good" Choices: Social Isolation in Mice Exacerbates the Effects of Chronic Stress on Decision Making. *Frontiers in Behavioral Neuroscience*, 14, 81. <https://doi.org/10.3389/fnbeh.2020.00081>

Schroeder MK*, *Tong MT*, & Rosenberg RL. (2019). The effects of Curcumin on glial morphology following spinal cord injury in lampreys. *IMPULSE*. Published online: <https://impulse.appstate.edu/articles/2019/effects-curcumin-glial-morphology-following-spinal-cord-injury-lampreys>

Tong MT, Kim PT-Y*, & Cleland TA. (2018). Kinase activity in the olfactory bulb is required for odor memory consolidation. *Learning and Memory*, 25, 198-205.

Tong MT, Peace ST, & Cleland TA (2014). Properties and mechanisms of olfactory learning and memory. *Frontiers in Behavioral Neuroscience*, 8, 238. PMC 4083347. DC012249.

MANUSCRIPTS IN
PREPARATION

*denotes undergraduate authors

Gacy T*, Werth J, Lee P*, Richardson T*, Maclin J*, Davis S*, Cleland TA, & *Tong MT*. Perineuronal nets are necessary for activity-induced gamma oscillations in the olfactory bulb.

Tong MT, Knudson C, Hartnett L*. ANOVA and beyond: a case for broadening behavioral neuroscience's statistical tools

Tong MT, Raghavan M, Pleiss JA, & Cleland TA. Spatiotemporal gene expression profiles induced by olfactory discrimination learning.

CONFERENCES &
PRESENTATIONS

Gacy T*, Maclin J*, Lee P*, Richardson T*, Kelly M*, Davis S*, Cleland TA, & *Tong MT*. Significance of Perineuronal Nets in Odor Discrimination and Long-Term Memory Consolidation in Mice. Faculty for Undergraduate Neuroscience (FUN) poster session at the Society for Neuroscience. Chicago, IL, USA. October 20, 2019.

Mudra Rakshasa, A* & *Tong MT*. Making good choices: Social interaction in mice mitigates chronic stress-induced erraticism in decision-making. West Coast Biological Sciences Undergraduate Research Conference (WCBSUR). San Diego, CA, USA. April 6-9, 2019.

Tong MT. "#STEMatSLAC: What's special about STEM at Small Liberal Arts Colleges?" Annual Biochemical Research Conference for Minority Students. Indianapolis, IN, USA. November 14-17, 2018.

Chaudhary A*, Crosby M*, Gillenwater J*, Martin VM*, & *Tong MT*. Perineuronal nets are necessary for olfactory perceptual learning. Midwest/Great Lakes Undergraduate Research Symposium in Neuroscience. Delaware, OH, USA. September 29, 2018. [Won second place for poster presentation.]

Chaudhary A*, Crosby M*, Gillenwater J*, Martin VM*, & *Tong MT*. Role of perineuronal nets in reducing memory interference in mice. A Distributed Network of Neuroscience Scholars Research Symposium. Wooster, OH, USA. July 9-10, 2018.

Wallace OP*, Awol AK*, & *Tong MT*. Odor similarity decreases learning and memory of olfactory discrimination. Midwest/Great Lakes Undergraduate Research Symposium in Neuroscience Conference. Delaware, OH, USA. September 30, 2017.

Wallace OP*, Awol AK*, & *Tong MT*. Effects of odor similarity on the learning and memory of olfactory discrimination. A Distributed Network of Neuroscience Scholars Research Symposium. Wooster, OH, USA. July 11, 2017.

Tong MT. Inclusive course design for (large) introductory classes. The Teaching Professor Conference. St. Louis, MO, USA. June 2-4, 2017.

Tong MT, Raghavan M, Pleiss JA, & Cleland TA. Olfactory learning-induced plasticity-related protein activity varies across brain regions. Canadian Association for Neuroscience 2017. Montreal, QB, CA. May 28-30, 2017.

Zagha K* & *Tong MT*. Effect of disaster type on self-reported desire to provide financial support. Mid-America Undergraduate Psychology Research Conference (MAUPRC). Evansville, IN, USA. April 8, 2017.

Tong MT. The goals and motivations of international students: implications for research mentorship practices. American Society for Engineering Education Spring Conference. Ithaca, NY, USA. April 8-9, 2016.

Tong MT, Kim T-YP*, Gibson EL, Singh R, & Cleland TA. The role of BDNF-TrkB signaling in olfactory bulb-dependent olfactory memory. Society for Neuroscience. Washington, D.C., USA. November 15-19, 2014.

Tong MT & Cleland TA. TrkB receptor activity in the olfactory bulb is needed for long-term memory of odour-reward learning. Canadian Association for Neuroscience 2014. Montreal, QB, CA. May 25-28, 2014.

Tong MT. Long-term goals of international students in the American university: implications for faculty mentorship. Center for Teaching Excellence: Teaching as Research Conference. Ithaca, NY, USA. May 16, 2014.

Tong MT & Cleland TA. Olfactory bulb as model system for the cellular and molecular dissection of memory. Society for Neuroscience. San Diego, CA, USA. November 9-13, 2013.

Tong MT & Cleland TA. Role of brain-derived neurotrophic factor (BDNF) in the olfactory long-term memory persistence. *Frontiers in Life Science*. Ithaca, NY, USA. April 2-3, 2012.

Cleland TA, *Tong MT*, Wie BJ*, & Zimering JH*. Mechanisms of intrinsic learning within olfactory bulb. XVI International Symposium on Olfaction and Taste. Stockholm, SE. June 23-27, 2012.

Tong MT & Cleland TA. Role of brain-derived neurotrophic factor (BDNF) secretion in neurogenesis-dependent olfactory consolidation. Society for Neuroscience. Washington, D.C., USA, November 12-16, 2011.

Tong MT. Cross-cultural examination of the use of affect as information in evaluative judgments. Inquiry@Queen's Research Conference. Kingston, ON, CA, March 7-9, 2010.

Troje N, *Tong MT*, & Mensinkai P. Dichotomy in biological motion perception: pigeons use feet local motion to determine direction. Inquiry@Queen's Research Conference. Kingston, ON, CA, March 2-4, 2009.

INVITED SEMINARS & LECTURES Panelist. "Yale Neuro Career Panel Series Part 7: Neuroscience Teaching and Research at Liberal Arts Colleges." Department of Neuroscience. Yale University, New Haven, CT, USA. April 15, 2022.

Seminar speaker. "Beyond the Neuron Doctrine: Extracellular mechanisms of long-term memory." Hamline University, St. Paul, MN, USA. Apr 11, 2022.

Panelist. Spring Diversity Colloquium. Virtual for Middle Tennessee State University. March 2, 2021.

Seminar speaker. "Beyond the Neuron Doctrine: Extracellular mechanisms of long-term memory."

Virtual for CSU Neuroscience Colloquium. December 11, 2020.

Seminar speaker. “Why extracellular mechanisms matter in long-term memory.” Virtual for CSU East Bay Biology Department Colloquium. October 27, 2020.

Workshop leader. “From Deficit to Belonging: Creating Inclusive Classrooms and Program.” Faculty for Undergraduate Neuroscience Summer Virtual Meeting. July 31, 2020.

Panelist at the Future Professors Institute: Advancing Diversity in the Academy. Cornell University, Ithaca, NY, USA. June 20, 2019.

Seminar speaker. “Life at a teaching university.” Department of Psychology, Cornell University, Ithaca, NY, USA. January 8, 2019.

Seminar speaker. “Early mechanisms, later effects in long-term memory.” Department of Physiology, Northwestern University School of Medicine, Chicago, IL, USA. March 2015.

Seminar speaker. “Early mechanisms, later effects: the role of brain-derived neurotrophic factor in olfactory long-term memory.” Department of Biology, Boston University, Boston, MA, USA. November 2015.

Guest lecturer. “Olfactory social communication and role in mate selection.” Department of Psychology, Cornell University, Ithaca, NY, USA. October 2014.

Graduate Research Seminar speaker. “A spatiotemporal examination of memory consolidation.” Department of Psychology, Cornell University, Ithaca, NY, USA. March 2014.

Seminar speaker at the Shea Lab. “Understanding the activity-dependent plasticity of long-term memory persistence.” Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, USA. May 2012.

Graduate Research Seminar speaker. “The prophetic brain: the neurobiology of long-term memory persistence.” Department of Psychology, Cornell University, Ithaca, NY, USA. April 2012

PUBLIC WRITING

Tong MT. (2017, January 31). “Make Room for the Dean’s List Subversives.” [Editorial.] *Diverse Issues in Higher Education*. <http://diverseeducation.com/article/92001/>

Tong MT. (2015, October 19). “The Conversation We Should Be Having.” [Editorial.] *Cornell Daily Sun*. <http://cornellsun.com/2015/10/19/guest-room-the-conversation-we-should-be-having/>

SELECTED COMMUNITY ENGAGEMENT & OUTREACH

- *Secretary.* Faculty for Undergraduate Neuroscience. 2022-present.
- *Councilor.* Faculty for Undergraduate Neuroscience. 2019-2022.
- *Advisor.* St. Thomas HHMI Inclusive Excellence in STEM. 2021-Present.
- *Board member.* Seward Longfellow Restorative Justice. 2020-present.
- *Discussion facilitator* for “Improving Introductory STEM Course Sequences to Provide Cohesive, Cross-Disciplinary Experiences Improving Introductory STEM Course Sequences to Provide Cohesive, Cross-Disciplinary Experiences”. American Association for the Advancement of Science IUSE workshop. August 5, 2021.
- *NSF review panel.* 2020; 2021.
- *Panelist.* Talking Amongst Ourselves - Conference for Students of Color. Earlham College

- *Admissions board member* for the McNair Scholars Program (federal TRIO program designed to prepare first-generation and/or underrepresented minority undergraduate students for doctoral studies). 2018-2020.
- *Science faculty mentor* for the McNair Scholars Program. 2018-2020.
- *Faculty advisor* for Earlham College Chapter of Psi Chi International honor society in psychology. 2017-present.
- *Advisory board member* for the Earlham Graduate Programs in Education. 2019-2020.
- *Presenter* at Earlham Faculty Forum. Presentation titled “From Deficit to Belonging: Creating an Inclusive Classroom.” May 3, 2019.
- *Participant* of the Earlham Teaching Circle investigating textbook affordability. Spring 2019.
- *Panelist*. Talking Amongst Ourselves - Conference for Students of Color. Earlham College, Richmond, IN, USA. March 22-23, 2019.
- *Panelist*. Asian and Asian American, Pacific Islander, and Desi-American Identities. Earlham College, Richmond, IN, USA. February 22, 2019.
- *Research mentor*. National Science Foundation Research Experience for Undergraduates at Earlham College, Kenyon College, and the College of Wooster. Summers of 2017 and 2018.
- *NSF ad hoc reviewer*. 2017.
- *Founder* of a monthly faculty-student gathering for women of color in STEM at Earlham. 2017-present.
- *Featured* “Woman Crush Wednesdays in STEM” by VanguardSTEM. Online community for women of color in STEM. March 28, 2017.
- *Featured scientist* by Colors of STEM. Online community for scientists of color. January 5, 2017. <http://colorsofstem.org/mtong/>
- *Facilitator* for faculty-student book club for *Hidden Figures: The American Dream and the Untold Story of the Black Women Mathematicians Who Helped Win the Space Race*. December 2016.
- *Faculty Judge*. Midwest/Great Lakes Undergraduate Research Symposium in Neuroscience Conference. The Ohio State University, Columbus, OH, USA. October 22, 2016.
- *Organizer*. Cayuga Correctional Facility - Guest Lecturer Series. Cornell Prison Education Program, Moravia, NY, USA. May 6, 2016.

SELECTED
PROFESSIONAL
DEVELOPMENT

- *Attendee*. “CrawFly 2019 Workshop.” Teaches undergraduate electrophysiology and optogenetic labs with invertebrates. Cornell University, Ithaca, NY, USA. January 9-13, 2019.
- *Organizer & Attendee*. Software Carpentry workshop for R, git, shell scripting. Earlham College, Richmond, IN, USA. February 15-16, 2018.
- *Attendee*. “The OpEd Project.” Earlham College. Richmond, IN, USA. June 17, 2017.
- *Attendee*. “Active Shooter Training Workshop.” Cornell Police Crime Prevention Unit, Ithaca, NY, USA. February 18, 2016.

PROFESSIONAL
MEMBERSHIPS &
AFFILIATIONS

Faculty for Undergraduate Neuroscience
Society for Neuroscience
Canadian Association for Neuroscience
Psi Chi