

BENJAMIN PAUL GOLD

benjamin.gold@mail.mcgill.ca • 1-514-224-6207

2890 Van Horne Avenue
Apartment #3
Montreal, QC, H3S 1R1
Canada

Montreal Neurological Institute
3801 University Street, Room 276
Montreal, QC, H3A 2B4
Canada

EDUCATION

McGill University Ph.D., Integrated Program in Neuroscience	Montreal, QC, Canada September 2014 – 2020 (expected)
Aalto University M.Sc. in Technology with Distinction, Brain and Mind	Espoo, Uusimaa, Finland September 2013 – June 2014
Brown University B.Sc. with Honors, Cognitive Neuroscience	Providence, RI, U.S.A. September 2007 – May 2011

AWARDS AND HONORS

Jeanne Timmins Costello Fellowship McGill University Integrated Program in Neuroscience	September 2017 – August 2018
Graduate Excellence Award BrainReach High Schools	August 2017
Outstanding Poster Award The Neurosciences and Music VI Conference: Music, Sound and Health	June 2017
Fulbright STEM Award for Graduate Students Fulbright Canada	September 2014 – May 2017
Graduate Fellowship (declined) National Science and Engineering Research Council, Auditory Cognitive Neuroscience Network	September 2014 – August 2015
Partial Attendance Scholarship The Neurosciences and Music V Conference: Cognitive Stimulation and Rehabilitation	May 2014 – June 2014
Free Enrollment Scholarship EBRAMUS – Europe, Brain and Music Conference: New Perspectives for Cognitive and Sensory Processes	September 2013

RESEARCH EXPERIENCE

McGill University Montreal, QC, Canada
Graduate Researcher September 2014 – Present
Supervisors: Dr. Robert Zatorre, Dr. Alain Dagher

University of Helsinki/Aalto University Helsinki/ Espoo, Finland
Research Assistant August 2011 – July 2014
Supervisors: Dr. Risto Näätänen, Dr. Sari Ylinen,
Dr. Elvira Brattico

Georgetown University Washington, D.C., U.S.A.
Research Assistant, Program in Cognitive, January 2014 – July 2014
Computational and Systems Neuroscience
Supervisors: Dr. Josef Rauschecker, Dr. Elvira Brattico

Brown University Providence, R.I., U.S.A.
Undergraduate Researcher, Laboratory for September 2010 – May 2011
Neural Computation and Cognition
Supervisor: Dr. Michael Frank

Concordia University Montreal, QC, Canada
Summer Intern, Laboratory for Motor Learning May 2010 – August 2010
and Neural Plasticity
Supervisor: Dr. Virginia Penhune

PROFESSIONAL EXPERIENCE

Teaching Assistant: Applied Statistics for Nursing September 2017 – December 2017,
Grading and providing feedback on assignments, September 2016 – December 2016
leading and assisting SPSS workshops, reviewing
material, and creating and delivering lectures

Co-Coordinator and Teacher, I Speak Science July 2017 – Present
Designing and teaching science lessons for an
organization that provides an after-school program of
hands-on science lessons for young students

English School Coordinator, BrainReach May 2017 – Present
Recruiting teachers, co-organizing volunteer
placements, and collecting feedback for an organization
that brings neuroscience lessons to under-served schools

Research Mentor, McGill University October 2015 – Present
Supervising undergraduate- and Master's-level research
assistants in experimental design, data processing,
analysis, and scientific writing

Volunteer Teacher, BrainReach Delivering regular neuroscience lessons for 4 th - or 9 th - grade students in local under-served schools	November 2014 – Present
Interviewer, Brown University Alumni Interviewing Conducting and reporting applicant interviews	August 2011 – Present
Community Organizations Coordinator, HANY Establishing and maintaining community relationships and recruiting students, workshop facilitators, and volunteers for an organization that provides French and English tutoring for refugees in Montreal	November 2016 – September 2017
Co-Founder and Volunteer Co-Coordinator, Say Ça! Co-managing tutor and mentor recruitment and training, lesson planning, feedback systems, and administration for an organization that tutors and mentors Syrian refugee teenagers in Montreal	December 2015 – July 2016
International Student Buddy, McGill University Assisting and advising new international students through their transitions to McGill and Montreal	July 2015 – May 2016
Peer Support Mentor, McGill University Mentoring struggling undergraduate students	March 2015 – May 2016
Volunteer Tutor and Mentor, Homework Zone Weekly tutoring and mentoring for a struggling 5 th - grade student in an under-served neighborhood	October 2015 – December 2015

PROFESSIONAL DEVELOPMENT

Teaching Assistant Training One-day workshop on teaching assistant skills through the Association of Graduate Students Employed at McGill	September 2016
Science Graduate Teaching Workshop Two-day intensive workshops on science teaching through the Tomlinson Project in University-Level Science Education	September 2015
Active Listening & Interpersonal Communication Training One-day intensive workshop on mentorship skill through the McGill Staff-Student Mentoring Program	March 2015
Learning to Teach Day One-day intensive workshop on teaching skills through McGill Skillsets	November 2014

PEER-REVIEWED PUBLICATIONS

Gold, B. P., Mas-Herrero, E., Zeighami, Y., Benovoy, M., Dagher, A., & Zatorre, R. J. (in preparation). Music as neural reward: Musical reward prediction errors engage the nucleus accumbens and predict learning behavior.

Shany, O., Singer, N., **Gold, B. P.**, Jacoby, N., Hendler, T., & Granot, R. (in preparation). Surprise-related activity in the nucleus accumbens associates with music-induced pleasantness.

Fasano, M.C., Glerean, E., **Gold, B. P.**, Sams, M., Rauschecker, J., Sheng, D., & Brattico, E. (in preparation). Inter-subject synchronization of brain responses after multimodal learning: a behavioral and neuroimaging study following the process of learning to play a sonata by pianists.

Bogert, B., Numminen-Kontti, T., **Gold, B.**, Sams, M., Numminen, J., Burunat, I., Lampinen, J., & Brattico, E. (2016). Hidden sources of joy, fear, and sadness: Explicit versus implicit neural processing of musical emotions. *Neuropsychologia*, 89, 393-402. 10.1016/j.neuropsychologia.2016.07.005.

Kliuchko, M., Heinonen-Guzejev, M., Monacis, L., **Gold, B. P.**, Heikkilä, K. V., Spinoza, V., Tervaniemi, M., & Brattico, E. (2015). The association of noise sensitivity with music listening, training, and aptitude. *Noise and Health*, 17(78), 350-357. 10.4103/1463-1741.165065.

Gold, B. P., Frank, M. J., Bogert, B., & Brattico, E. (2013). Pleasurable music affects reinforcement learning according to the listener. *Frontiers in Auditory Cognitive Neuroscience*, 4, 541. 10.3389.2Ffpsyg.2013.00541.

CONFERENCE PRESENTATIONS

Gold, B. P., Mas-Herrero, E., Zeighami, Y., Benovoy, M., Dagher, A., & Zatorre, R. J. (2017, June). *Can music convey reward prediction errors? A formal test of the effects of musical expectations in reward-related brain structures*. Poster and oral presentation at the sixth triennial meeting of the Neurosciences and Music: Music, Sound and Health, Boston, Massachusetts, U.S.A.

Gold, B. P., Mas-Herrero, E., Zeighami, Y., Benovoy, M., Dagher, A., & Zatorre, R. J. (2017, June). *Can music convey reward prediction errors?* Poster at Neuropsychology Day, Montreal, Quebec, Canada.

Gold, B. P., Bogert, B., Frank, M. J., & Brattico, E. (2014, June). *Individual differences in reward-related activity during music and learning*. Poster at the Neurodynamics of Language and Music Symposium, Helsinki, Finland.

Gold, B. P., Bogert, B., Frank, M. J., & Brattico, E. (2014, May-June). *Pleasurable music enhances reinforcement learning through the reward system and related structures*. Poster at the fifth triennial meeting of the Neurosciences and Music: Cognitive Stimulation and Rehabilitation, Dijon, France.

Gold, B. P., Frank, M. J., Bogert, B., & Brattico, E. (2013, November). *Pleasurable music affects reinforcement learning according to the listener*. Poster at the second annual Brain Research at Aalto University and University of Helsinki (BRAHE) symposium, Helsinki, Finland.

Gold, B., Frank, M., Bogert, B., & Brattico, E. (2013, October). *The power of music can help us learn*. Poster at the 40th anniversary meeting for the Brain Research Society of Finland, Helsinki, Finland.

Gold, B. P., Frank, M., Bogert, B., & Brattico, E. (2013, September). *Pleasurable music affects reinforcement learning according to the listener*. Poster at the final conference of the initial training network for Europe, Brain and Music (EBRAMUS): New Perspectives for Stimulating Cognitive and Sensory Processes, Pavia, Italy.

Gold, B., Frank, M., Bogert, B., & Brattico, E. (2013, June). *Pleasurable music affects reinforcement learning according to the listener*. Poster and oral presentation at the Third International Conference on Music and Emotion, Jyväskylä, Finland.

Gold, B., Frank, M., & Brattico, E. (2012, July). *Experiential effects of musical pleasure on dopaminergic learning*. Poster at the 12th International Conference on Music Perception and Cognition/8th Triennial Conference of the European Society for the Cognitive Sciences of Music, Thessaloniki, Greece.

Gold, B., & Brattico, E. (2012, March). *The effects of musical pleasure on dopaminergic learning*. Poster at the Monte Verità Workshop on Music in Neuroscience, Ascona, Switzerland.

Gold, B. P., Frank, M. J., & Brattico, E. (2012, March). *The effects of musical pleasure on dopaminergic learning*. Poster at the first annual Brain Research at Aalto University and University of Helsinki (BRAHE) symposium, Helsinki, Finland.

Gold, B. P., Frank, M. J., & Brattico, E. (2012, March). *The effects of musical pleasure on dopaminergic learning*. Poster at the first annual Brain Research at Aalto University and University of Helsinki (BRAHE) symposium, Helsinki, Finland.

Gold, B., Spilka, M., Steele, C. J., & Penhune, V. B. (2010, August). *From Bandleader to follower: Are musicians expert imitators?* Poster at the Auditory Cognitive Neuroscience Summer Workshop, Hamilton, Ontario, Canada

SKILLS AND INTERESTS

Programming languages/software: Matlab, FSL, SPSS, SPM, Linux OS, Windows OS

Languages: English (native), Italian (intermediate), Finnish (intermediate)

Interests: Semi-professional musician (trombone, bass guitar), University Squash Club, travel