
MARIEL ROBERTS

6 Washington Place
New York, NY 10003

mariel.roberts@nyu.edu
585-489-8740

EDUCATION

- Ph.D., Experimental Psychology** 2020 (expected graduation)
New York University, New York, NY
Doctoral Advisor: Marisa Carrasco, Ph.D.
Dissertation: *Attention and perceptual learning in special populations*
- M. Phil., Experimental Psychology** 2019
New York University, New York, NY
- M.A., Experimental Psychology** 2017
New York University, New York, NY
- B.A., Biological Basis of Behavior, with Honors** 2012
University of Pennsylvania, Philadelphia, PA
Magna Cum Laude; Dean's List; Nu Rho Psi (national neuroscience honor society)

RESEARCH EXPERIENCE

- New York University, Doctoral student** 2014 – present
Principal Investigator: Professor Marisa Carrasco
Department of Psychology
New York, NY
- New York University, Lab manager** 2012 – 2014
Principal Investigator: Professor Marisa Carrasco
Department of Psychology
New York, NY
- University of Pennsylvania, Honors thesis student** 2011 – 2012
Principal Investigator: Abass Alavi, M.D.
Department of Radiology, Hospital of the University of Pennsylvania
Philadelphia, PA
- New York University, NSF-funded Summer Undergraduate Research Program (SURP)** 2011
Principal Investigator: Professor Marisa Carrasco
Department of Psychology
New York, NY
- University of Rochester Medical Center, Research intern** 2010
Principal Investigator: Professor Tania Pasternak
Center for Visual Science
Rochester, NY

Principal Investigator: Jesús E. Maldonado, Ph.D.

Center for Conservation Genomics

Washington D.C.

PEER-REVIEWED PUBLICATIONS

Roberts, M. & Carrasco, M. Attention affects visual perception in the absence of microsaccades. In Prep.

Roberts, M. & Carrasco, M. The role of exogenous attention during visual perceptual learning in adults with amblyopia. In Prep.

Purokayastha, S., **Roberts, M.**, & Carrasco, M. (2019). Does endogenous attention compensate for performance fields? In Prep.

Roberts, M., Ashinoff, B., Castellanos, F. X., & Carrasco, M. (2017). When attention is intact in ADHD. *Psychonomic Bulletin & Review*, 25(4), 1423-1434. doi: 10.3758/s13423-017-1407-4.

Roberts, M., Cymerman, R., Smith, R. T., Kiorpes, L., & Carrasco, M. (2016). Covert spatial attention is functionally intact in amblyopic human adults. *Journal of Vision*, 16(15), 1-19. doi: 10.1167/16.15.30.

Dugué, L., **Roberts, M.**, & Carrasco, M. (2016). Attention reorients periodically. *Current Biology*, 26(12), 1595-1601. doi: 10.1016/j.cub.2016.04.046.

Cavanaugh, M. R., Zhang, R., Melnick, M. D., Das, A., **Roberts, M.**, Tadin, D., Carrasco, M., & Huxlin, K. R. (2015). Visual recovery in cortical blindness is limited by high internal noise. *Journal of Vision*, 15(10): 9, 1-18. doi: 10.1167/15.10.9.

He, K., Woodman, N., Boaglio, S., **Roberts, M.**, Supekar, S., & Maldonado, J. (2015). Molecular phylogeny supports repeated adaptation to burrowing within small-eared shrews of the genus of *Cryptotis* (Eulipotyphla, Soricidae). *PloS ONE*, 10(10), e0140280. doi: 10.1371/journal.pone.0140280

TALKS

Invited talk, University of Washington, host Dr. Yeatman
Visual attention in amblyopia 2019

Cognition & Perception 4th year talk, New York University
Attention and perceptual learning in amblyopia 2018

Cognition & Perception Mini-Convention, New York University
Attention reorients periodically 2016

Cognition & Perception Mini-Convention, New York University
Covert spatial attention is functionally intact in amblyopic human adults 2015

Honors Research Symposium, University of Pennsylvania 2012
Use of 18F-FDG-PET for quantitative assessment of temporal lobe epilepsy on brain metabolism

Center for Neural Science SURP Research Symposium, New York University 2011
The effect of attention on visual perceptual learning: defying location specificity?

PEER-REVIEWED CONFERENCE ABSTRACTS & POSTER PRESENTATIONS

Roberts, M. & Carrasco, M. (2019). *Exogenous attention and anticipatory fixation stability*. Poster presented at the Vision Sciences Society Conference, St. Pete Beach, FL.

Purokayastha, S., **Roberts, M.**, & Carrasco, M. (2019). *Does endogenous attention compensate for spatial performance fields?* Poster presented at the Vision Sciences Society Conference, St. Pete Beach, FL.

Roberts, M., Ashinoff, B. K., Castellanos, F. X., & Carrasco, M. (2017). Endogenous and exogenous attention are functionally intact in adults with ADHD. *Journal of Vision*, 17(10): 699-699.

Dugué, L., **Roberts, M.**, & Carrasco, M. (2016). *Attention reorients periodically*. Center for Visual Science 30th Annual Symposium: The Future of Attention, University of Rochester, Rochester, NY.

Ashinoff, B., **Roberts, M.**, Castellanos, F. X., & Carrasco, M. (2015). Exogenous spatial attention in adults with ADHD is intact. *Perception*, 44:110-111.

Dugué, L., **Roberts, M.**, & Carrasco, M. (2015). Occipital TMS modulates the effect of attention on contrast sensitivity. *Perception*, 44:110-111.

Roberts, M. & Carrasco, M. (2015). Amblyopic adults demonstrate intact endogenous spatial attention. *Journal of Vision*, 15(12): 1339-1339.

Carrasco, M., **Roberts, M.**, & Kiorpes, L. (2014). Exogenous spatial attention in amblyopic adults is intact. *Perception*, 43, S8.

Carrasco, M., **Roberts, M.**, Cymerman, R., Smith, R. T., & Kiorpes, L. (2014). Intact functioning of exogenous spatial attention in amblyopic adults. *Journal of Vision*, 14(10): 539-539.

Cavanaugh, M., Melnick, M., Zhang, R., **Roberts, M.**, Das, A., Tadin, D., Carrasco, M., & Huxlin, K. (2014). Residual inefficiencies of recovered vision in cortically blind fields—insights from the equivalent noise analysis. *Journal of Vision*, 14(10): 659-659.

TEACHING EXPERIENCE

Perception, Class instructor

Intensive 6-week course, equivalent to regular term course
Department of Psychology, College of Arts & Sciences
New York University, New York

Summer 2019

Cognitive Neuroscience, Teaching assistant Fall 2018
Department of Psychology, College of Arts & Sciences
New York University, New York

Perception, Teaching assistant Fall 2017
Department of Psychology, College of Arts & Sciences
New York University, New York

Perception, Tutor Summer 2017
Department of Psychology, College of Arts & Sciences
New York University, New York

MENTORSHIP

Master's students (NYU's Graduate School of Arts & Science Mentorship Program)

Ayijiuli Abudukadeer (2019)

Natalie Nagpal (2018)

Undergraduate students (Carrasco lab)

Julia Payne (2018-present): awarded New York University's DURF* grant 3 times

Sanjana Manjunath (2018-2019): awarded New York University's DURF* grant 2 times

Elizabeth Eberts (2017): participant in NYU's NSF-funded Summer Undergraduate Research Program

Imaad Sidiqqi (2012-2013): co-supervision of honors research thesis

HIGHER EDUCATION TRAINING: COURSES COMPLETED

NYU Graduate School of Arts and Sciences Teaching Certificate Program

8-week non-credit courses that explore the theory and practice of university teaching

Preparing Future Faculty 1: The Art & Craft of Teaching 2019

Preparing Future Faculty 2: Achieving Success through Communication 2019

HIGHER EDUCATION TRAINING: WORKSHOPS ATTENDED

NYU Center for the Advancement of Teaching Workshops

Motivating Student Learning 2019

How We Learn 2019

How To Be a Researcher & Teacher 2019

Discussion-Based Teaching 2019

Making Learning Stick 2019

* Dean's Undergraduate Research Fund, a competitive grant dedicated to undergraduate research

FELLOWSHIPS & AWARDS

NYU Graduate School of Arts and Sciences Dean's Dissertation Fellowship	2019 – 2020
Psych. Dept. Nominee: GSAS Dean's Outstanding Graduate Student Teaching Award	2019
National Science Foundation Graduate Research Fellow	2015 – 2017; 2018 – 2019
NYU Student Government Assembly Conference Fund Travel Grant	2019
NYU Vision Training Grant	2017 – 2018
NYU Dean's Student Travel Grant	2015
NYU MacCracken Program Award	2014 – 2015

OUTREACH & UNIVERSITY SERVICE

Volunteer with Neuroscience Outreach Group at NYU (NOGN) World Science Festivals, Biobus, Family Night at New York Hall of Science	2016 – present
NYU Women in Science, graduate student mentor & panelist	2016 – present
Volunteer co-organizer for annual prospective Ph.D. student weekends	2014 – present
Lead doctoral student organizer for NYU MA research conference Led workshops for MA students on how to make effective poster presentations	2017 & 2018
Doctoral student judge for NYU MA research conference	2015

PROFESSIONAL MEMBERSHIPS & SERVICE

Vision Sciences Society
Association for Psychological Science
New York Academy of Sciences
braiNY: Greater New York City Chapter of Society for Neuroscience
NOGN: Neuroscience Outreach Group at NYU
Ad-hoc reviewer for Scientific Reports
Ad-hoc reviewer for Journal of Vision

SKILLS

Experimental	Design, data collection, and analysis of perceptual psychophysical studies Eye movement recording (Eyelink 1000, ISCAN) and analysis Figure editing using Inkscape
Programming	Matlab: experimental programming (MGL toolbox), data analysis, figure creation SPSS Statistics R: data processing, statistical analysis and visualization GitHub: uploading, revising, and sharing code Command-line operation in UNIX terminal Basics of HTML for personal website maintenance
Neuroimaging	Certified user of the magnetic resonance image (MRI) facility Experimental design of fMRI studies Data analysis (FSL, Freesurfer, SPM Toolbox) Anatomical segmentation of 18F-FDG-PET scans (ROVER software)

- TMS** Certified transcranial magnetic stimulation (TMS) operator
Magstim Rapid2 Plus1 stimulator (3.5T), 70mm figure-of-eight coil
Brainsight Neuronavigation system (Rogue Research)
FASTSCAN digital laser scanner
Experimental design of TMS studies, phosphene thresholding, data collection
- Administrative** Successful initial submission and maintenance of institutional review board protocols
Assistance with successful grant submissions (NIH R01, NSF)
Maintenance of Endnote reference library
Creation and maintenance of lab website and internal wiki

REFERENCES

Marisa Carrasco, Ph.D.

Julius Silver Professor of Psychology and Neural Science
New York University
6 Washington Place
New York, NY 10003
(212) 998-8328
marisa.carrasco@nyu.edu

Jonathan Winawer, Ph.D.

Associate Professor of Psychology
New York University
6 Washington Place
New York, NY 10003
(212) 998-7922
jonathan.winawer@nyu.edu

Michael S. Landy, Ph.D.

Professor of Psychology and Neural Science
New York University
6 Washington Place
New York, NY 10003
(212) 998-7857
landy@nyu.edu