CURRICULUM VITAE

MARIEL ROBERTS

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585-489-8740

EDUCATION

New York University New York, NY; 2014-Spring 2019 (Expected graduation)

Ph.D., Experimental Psychology Cognition & Perception Program

Doctoral Advisor: Marisa Carrasco, Ph.D., M.A.

University of Pennsylvania Philadelphia, PA; 2008-2012

B.A. Biological Basis of Behavior with Honors

Magna Cum Laude

TEACHING

NYU Undergraduate Perception New York, NY
Teaching Assistant Fall 2017

Undergraduate Freshman Seminar: "How We See," New **York** University

Teaching Assistant

New York, NY
Fall 2013 & Fall 2014

MENTORSHIP

NYAS 1000 Girls 1000 Futures Program New York, NY Female STEM Mentor Spring 2018-NYU GSAS Mentorship Program New York, NY Graduate Student Mentor Spring 2018-NYU Undergraduate Research Internship New York, NY Research Mentor to two undergraduates Spring 2018-NYU Summer Undergraduate Research Program New York, NY Research Mentor to SURP student Summer 2017 Co-supervision of NYU Undergraduate Honors Research Thesis New York, NY Research Mentor Fall 2012-Spring 2013

PUBLICATIONS

- **Roberts, M.**, Ashinoff, B., Castellanos, F. X., & Carrasco, M. (2017). When attention is intact in ADHD. *Psychonomic Bulletin & Review*, *24*(6), 1-12. 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. PMCID: PMC5215291.
- Dugué, L., **Roberts, M**., & Carrasco, M. (2016). Attention reorients periodically. *Current Biology*, 26(12), 1595-1601. doi: 10.1016/j.cub.2016.04.046. PMCID: PMC4935543.
- 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. PMCID: PMC4619083.
- 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. PMCID: PMC4585331.

TALKS

"Attention reorients periodically"
NYU Cognition & Perception Mini-Convention

September 2016

"Covert spatial attention is functionally intact in amblyopic human adults" NYU Cognition & Perception Mini-Convention

September 2015

"Use of 18F-FDG-PET for quantitative assessment of temporal lobe epilepsy on brain metabolism"

University of Pennsylvania Honors Research Symposium

May 2012

"The effect of attention on visual perceptual learning: defying location specificity?" NYU Center for Neural Science SURP Research Symposium

July 2011

CONFERENCE ABSTRACTS & POSTERS

- **Roberts, M.**, Brandon K. Ashinoff, F. Xavier Castellanos, & 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, 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.

HONORS, AWARDS & FELLOWSHIPS

National Science Foundation Graduate Research Fellow Fall 2015-Summer 2017; Fall 2018-Spr 2019
NYU Vision Training Grant Fall 2017-Summer 2018
NYU Dean's Student Travel Grant Spring 2015
Recipient of NYU MacCracken Program Award Fall 2014-Summer 2015
Member of Nu Rho Psi, National Honor Society in Neuroscience 2012
Dean's List 2009-2012
Kodak Young Leaders Award and Scholarship 2008

PROFESSIONAL MEMBERSHIPS

Vision Sciences Society
New York Academy of Sciences
Association for Psychological Science
Society for Neuroscience: New York Chapter

RELEVANT COURSEWORK

Learning & Memory Spring 2018
Individual Development Plan Fall 2017

Psychophysics (audited)	Fall 2017
Seminar in Attention & Perception	Spring 2017
Math Tools II: Simulation & Data Analysis	Spring 2016
Perception	Fall 2015
Functional Magnetic Resonance Imaging Lab	Fall 2015
Responsible Conduct in Research Training	Spring 2015
Sensory and Motor Neural Science	Spring 2015
Cognitive Neuroscience	Spring 2015
Neuroanatomy	January 2015
Math Tools I for Cognitive Science and Neuroscience	Fall 2014

RESEARCH EXPERIENCE

RESEARCH EXPERIENCE		
Department of Psychology, New York University Lab Manager, Principal Investigator: Marisa Carrasco, Ph.D., M.A	New York, NY Summer 2012-Fall 2014	
Department of Radiology, Hospital of University of Pennsylvania <i>Research Assistant</i> , Principal Investigator: Abass Alavi, M.D.	Philadelphia, PA Fall 2011-Spring 2012	
Department of Psychology, New York University Research Intern (Funded by NSF), Principal Investigator: Marisa Ca	New York, NY arrasco, Ph.D., M.A. Summer 2011	
Center for Visual Science, University of Rochester Medical Center <i>Research Intern</i> , Principal Investigator: Tania Pasternak, Ph.D	Rochester, NY Summer 2010	
Center for Conservation & Evolutionary Genetics, Smithsonian Ins Research Intern, Principal Investigator: Jesús E. Maldonado, Ph.D.	•	

Research Intern, Principal Investigator: Jesus E. Maidonado, P	n.D., M.S. Summer 2009
OUTREACH	
Biobus, Brain Awareness Week	Harlem, NY
Volunteer at BraiNY station	March 17th, 2018
World Science Festival, City of Science	Lehman College, Bronx, NY
Volunteer at BraiNY brain bank table	March 11th, 2018
World Science Festival, City of Science	Park Slope Armory, Brooklyn, NY
Volunteer at BraiNY brain bank table	Dec 10th, 2017
World Science Festival Ultimate Science Night	Kimmel Center, New York University, NY
Volunteer at BraiNY station	June 4th, 2017
NYU Undergraduate Women in Science Initiative Meeting	New York, NY

March 3rd, 2016

Volunteer panelist

Biobus, Brain Awareness Week

Volunteer at BraiNY table

Harlem, NYC

March 12th, 2016

Brain Awareness Week, Family Night at New York Hall of Science

Queens, NY
Student volunteer

March 18th, 2016

World Science Festival, City of Science Volunteer at BraiNY station Park Slope Armory, Brooklyn, NY October 16th, 2016

RESEARCH SKILLS

Programming Matlab: experimental programming (MGL toolbox), data analysis, figure creation

R: experimental programming

GitHub: comfort with uploading, revising, and sharing code

Command-line operation in UNIX Terminal

Basics of HTML for personal website maintenance

Neuroimaging Certified MRI User

Experimental design

Data analysis (FSL, Freesurfer, Matlab)

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

Experimental Skills SPSS statistics software

Experimental design, data collection, and analysis of visual psychophysics studies

Eye movement recording (Eyelink 1000, ISCAN)

Writing and submission of IRB approvals

Grant submissions (NIH, NSF) Figure editing using Inkscape

Maintenance of Endnote reference library

Maintenance of websites (HTML)

Proficient in Word, Pages, Excel, Numbers, PowerPoint, Keynote

Administration Co-organizer of Masters' Research Conference in Spring of 2017 and 2018

Business Manager of co-ed collegiate a cappella group Several years customer service experience in restaurant industry HS Class Secretary of Student Council from 2006-2008 Comfort with public speaking and performance:

- active member of Grace Church Choral Society in NYC (2017-present)
- soloist in co-ed collegiate a cappella group, "The Penny Loafers" (4 yrs)
- HS Jazz Choir (3 yrs) and ensemble member in 3 musicals
- 1st chair tenor saxophone player in Pittsford Sutherland HS Wind Ensemble (4 yrs) and Jazz Ensemble (4 yrs)
- Private voice lessons and recitals at Eastman School of Music, Rochester, NY