

# CURRICULUM VITAE

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## MARIEL ROBERTS

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New York, NY 10003

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### EDUCATION

New York University  
Ph.D., Experimental Psychology  
Cognition & Perception Program  
Doctoral Advisor: Marisa Carrasco, Ph.D., M.A.

New York, NY; 2014 - Spring 2020 (Expected graduation)

University of Pennsylvania  
B.A. Biological Basis of Behavior with Honors  
Magna Cum Laude

Philadelphia, PA; 2008-2012

### PUBLICATIONS

**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. PMCID: PMC29181782.

**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.

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.

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.

## 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

NYU GSAS Dean's Dissertation Fellowship	Fall 2019-Spring 2020
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

Reviewer for *Scientific Reports*  
Vision Sciences Society  
New York Academy of Sciences  
Association for Psychological Science  
braiNY: Greater New York City Chapter of Society for Neuroscience  
NOGN: Neuroscience Outreach Group at NYU

## TEACHING

Cognitive Neuroscience, NYU CAS course in Psychology Teaching Assistant, Instructor: Professor Clay Curtis	New York, NY Fall 2018
How We See, NYU Undergraduate Freshman Seminar Guest Lecturer, Instructor: Professor Marisa Carrasco	New York, NY Fall 2018
Perception, NYU CAS course in Psychology Teaching Assistant, Instructor: Professor Jonathan Winawer	New York, NY Fall 2017
Perception, NYU CAS course in Psychology Tutor, Instructor: Jing Yang Zhou	New York, NY Summer 2017
How We See, NYU Undergraduate Freshman Seminar Teaching Assistant, Instructor: Professor Marisa Carrasco	New York, NY Fall 2014

## MENTORSHIP

Allendale Columbia High School Science Research Class Remote Research Advisor to HS student	Spring 2019- Rochester, NY
NYU GSAS Mentorship Program Graduate Student Mentor	New York, NY Spring 2018-

NYU Undergraduate Research Internship	New York, NY
Research Mentor to two DURF recipient undergraduate students	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

## RELEVANT COURSEWORK

Preparing Future Faculty 2: Achieving Success through Communication	Spring 2019
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

Department of Psychology, New York University	New York, NY
<i>Lab Manager</i> , Principal Investigator: Marisa Carrasco, Ph.D., M.A.	Summer 2012-Fall 2014
Department of Radiology, Hospital of University of Pennsylvania	Philadelphia, PA
<i>Research Assistant</i> , Principal Investigator: Abass Alavi, M.D.	Fall 2011-Spring 2012
Department of Psychology, New York University	New York, NY
<i>Research Intern (Funded by NSF)</i> , Principal Investigator: Marisa Carrasco, Ph.D., M.A.	Summer 2011
Center for Visual Science, University of Rochester Medical Center	Rochester, NY
<i>Research Intern</i> , Principal Investigator: Tania Pasternak, Ph.D.	Summer 2010
Center for Conservation & Evolutionary Genetics, Smithsonian Institution	Washington D.C.
<i>Research Intern</i> , Principal Investigator: Jesús E. Maldonado, Ph.D., M.S.	Summer 2009

## OUTREACH

NYU Women in Science mixer Graduate student mentor	Silver Building, NYU November 15th, 2018
World Science Festival Volunteer at BraiNY station	Washington Square Park, NY June 3rd, 2018
Biobus, Brain Awareness Week Volunteer at BraiNY station	Harlem, NY March 17th, 2018
World Science Festival, City of Science Volunteer at BraiNY brain bank table	Lehman College, Bronx, NY March 11th, 2018
World Science Festival, City of Science Volunteer at BraiNY brain bank table	Park Slope Armory, Brooklyn, NY Dec 10th, 2017
World Science Festival Ultimate Science Night Volunteer at BraiNY station	Kimmel Center, New York University, NY June 4th, 2017
NYU Undergraduate Women in Science Initiative Meeting Volunteer panelist	New York, NY March 3rd, 2016
Biobus, Brain Awareness Week Volunteer at BraiNY station	Harlem, NYC March 12th, 2016
Brain Awareness Week, Family Night at New York Hall of Science Student volunteer	Queens, NY March 18th, 2016
World Science Festival, City of Science Volunteer at BraiNY station	Park Slope Armory, Brooklyn, NY October 16th, 2016

## RESEARCH SKILLS

<b>Experimental</b>	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
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<b>Programming</b>	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
<b>Neuroimaging</b>	Certified MRI User Experimental design Data analysis (FSL, Freesurfer, Matlab) Anatomical segmentation of <sup>18</sup> F-FDG-PET scans (ROVER software)
<b>TMS</b>	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
<b>Leadership</b>	Lead co-organizer of Masters' Research Conference in Spring of 2017 and 2018 Business Manager of co-ed collegiate a cappella group +4 years customer service experience in restaurant and catering industry HS Student Council Class Secretary from 2006-2008
<b>Communication</b>	Comfort with public speaking and performing in front of large crowds 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