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# 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., Psychological Sciences  
Cognition & Perception Program  
Doctoral Advisor: Marisa Carrasco, Ph.D., M.A.

New York, NY; 2014-Present

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

Philadelphia, PA; 2008-2012

### PUBLICATIONS

*Under review*

**Roberts, M.**, Ashinoff, B., Castellanos, F. X., & Carrasco, M. When attention is intact in ADHD.

*Published*

**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.

## TEACHING/MENTORSHIP EXPERIENCE

NYU Undergraduate Perception Teaching Assistant	New York, NY Fall 2017
NYU Summer Undergraduate Research Program Research Mentor to SURP student	New York, NY Summer 2017
Undergraduate Freshman Seminar: "How We See," New York University Volunteer Teaching Assistant, Professor: Marisa Carrasco, Ph.D., M.A.	New York, NY Fall 2013 & Fall 2014
Co-supervision of Undergraduate Honors Research Thesis, New York University Research Mentor	New York, NY Fall 2012-Spring 2013

## 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 (planned)	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 <i>Lab Manager</i> , 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 <i>Research Intern (Funded by NSF)</i> , Principal Investigator: Marisa Carrasco, Ph.D., M.A.	New York, NY 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 Institution <i>Research Intern</i> , Principal Investigator: Jesús E. Maldonado, Ph.D., M.S.	Washington D.C. Summer 2009

## OUTREACH

World Science Festival Student volunteer at Brain Bank	New York, NY June 4th, 2017
MA Research Conference Doctoral student co-organizer	New York, NY Spring 2017
NYU Undergraduate Women in Science Initiative Meeting Volunteer panelist	New York, NY March 3rd, 2016
Brain Awareness Week, Biobus Student volunteer	New York, NY March 12th, 2016
Brain Awareness Week, Family Night at New York Hall of Science Student volunteer	New York, NY March 18th, 2016
World Science Festival, City of Science event Student volunteer at Brain Bank/Sheep brain dissection tables	New York, NY October 16th, 2016

## RESEARCH SKILLS

<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
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Basics of HTML for personal website maintenance

**Neuroimaging**

Certified MRI User  
Experimental design  
Data analysis (FSL, Freesurfer, Matlab)  
Anatomical segmentation of  $^{18}\text{F}$ -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 (2017-)  
Many years experience in customer service  
Business Manager of co-ed a cappella group  
HS Class Secretary of Student Council from 2006-2008  
Comfort with public speaking and performance:

- soloist in co-ed a cappella group, "The Penny Loafers" (4 yrs)
- Jazz Choir (3 yrs)
- Performed in 3 musicals
- Private voice lessons and recitals at Eastman School of Music
- 1st chair tenor saxophone player in Pittsford Sutherland Wind Ensemble (4 yrs) and Jazz Ensemble (4 yrs)