# CURRICULUM VITAE

# MARIEL ROBERTS

6 Washington Place, Room 970 mariel.roberts@nyu.edu 585-489-8740 New York, NY 10003

#### **EDUCATION**

New York University New York, NY; 2014-Present

Ph.D., Psychological Sciences 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/MENTORSHIP EXPERIENCE

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 Spring 2018-NYU Undergraduate Perception New York, NY **Teaching Assistant** Fall 2017 NYU Summer Undergraduate Research Program New York, NY Research Mentor to SURP student Summer 2017 Undergraduate Freshman Seminar: "How We See," New York University New York, NY Volunteer Teaching Assistant, Professor: Marisa Carrasco, Ph.D., M.A. Fall 2013 & Fall 2014

Co-supervision of Undergraduate Honors Research Thesis, New York University Research Mentor

New York, NY 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 Neurose	cience 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		
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 Research Assistant, 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 Carrasco, Ph.D.,	New York, NY M.A. Summer 2011	
Center for Visual Science, University of Rochester Medical Center Research Intern, Principal Investigator: Tania Pasternak, Ph.D	Rochester, NY Summer 2010	
Center for Conservation & Evolutionary Genetics, Smithsonian Institution Research Intern, Principal Investigator: Jesús E. Maldonado, Ph.D., M.S.	Washington D.C. Summer 2009	

# OUTREACH

World Science Festival, City of Science Festival Volunteer at BrainNY table	Park Slope Armory, Brooklyn, NY Dec 10th, 2017
World Science Festival	New York, NY
Student volunteer at Brain Bank	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	New York, NY
Student volunteer	March 12th, 2016
Brain Awareness Week, Family Night at New York Hall of Science	New York, NY
Student volunteer	March 18th, 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 <sup>18</sup>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)