CURRICULUM VITAE

MARIEL ROBERTS

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

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 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.

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	Spring 2018
Psychophysics	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

Lab Manager, Principal Investigator: Marisa Carrasco, Ph.D., M.A

Summer 2012-Fall 2014

Department of Radiology, Hospital of University of Pennsylvania

Philadelphia, PA

Research Assistant, Principal Investigator: Abass Alavi, M.D.

Fall 2011-Spring 2012

Department of Psychology, New York University

*Research Intern (Funded by NSF), Principal Investigator: Marisa Carrasco, Ph.D., M.A.

Summer 2011

Center for Visual Science, University of Rochester Medical Center

Research Intern, Principal Investigator: Tania Pasternak, Ph.D

Summer 2010

Center for Conservation & Evolutionary Genetics, Smithsonian Institution Washington D.C. *Research Intern*, Principal Investigator: Jesús E. Maldonado, Ph.D., M.S. Summer 2009

OUTREACH

World Science Festival

Student volunteer at Brain Bank

New York, NY

June 4th, 2017

MA Research Conference New York, NY
Doctoral student co-organizer Spring 2017

NYU Undergraduate Women in Science Initiative Meeting

New York, NY

Volunteer panelist

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

World Science Festival, City of Science event

Student volunteer at Brain Bank/Sheep brain dissection tables

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

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 (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)