



- Under supervision of **Dr Jared Schwartz**
- Investigated mice models of autism spectrum disorder with neuroimmunological and behavioral neuroscience techniques with a focus on maternal immune asthma using social approach tasks in BTBR and C57 mice.

**University of Pennsylvania,**

Summer 2015

*Undergraduate Research Fellow*, Center for Cognitive Neuroscience

- Under supervision of **Dr Anjan Chatterjee**
  - In collaboration with **Children's Hospital of Pennsylvania** and **Center for Human Appearance**, conducted an independent research project on the social responses to facial appearance, specifically focusing on craniofacial disfigurement.
  - Constructed corpus of images of patients who underwent reconstructive surgeries, experimental design via Qualtrics, data collection via Amazon Mechanical Turk and data visualization
- Recipient of Harap Fund Grant for Independent Research

#### JOURNAL PUBLICATIONS

- [1] Jamrozik, A.; **Oraa Ali, M.**; Sarwer, D. & Chatterjee, A.(2017). More than skin deep: Judgments of individuals with facial disfigurement. *Journal of Psychology of Aesthetics, Creativity and the Arts*.
- [2] Rubio-Fernandez, P.; Mollica, F.; **Oraa Ali, M.** & Gibson, E.A.(2018) How do you know that? Automatic belief inferences in passing conversation. *Submitted; in review*.

#### PUBLICATIONS IN PREPARATION

- [3] **Oraa Ali, M.**; Fitzroy, A.B. & Breen, M.(2018) Prosody, Poetry and Processing: ERP Evidence for Rhythmic Structure in Silent Reading. *Manuscript in preparation*.

#### AWARDS

- [1] **Diversity Enhancement Award**, 43rd Boston University Conference on Language Development. 2018
- [2] **Student Travel Award**, 31st CUNY Sentence Processing Conference. 2018
- [3] **Finalist, Hacking Arts Hackathon**, MIT Media Lab 2016
- [4] **Robert Frances Award (Outstanding Student Research Contribution)** International Association of Empirical Aesthetics, Vienna, Austria 2016
- [5] **NIDCR Building Bridges Travel Award**, National Institute of Health 2016
- [6] **Student Caucus Travel Award**, Association of Psychological Science 2016
- [7] **Most Interdisciplinary Project: MuSyC**, Hampshire Hackathon 2016
  - Across themes of Brain & Development, Artificial Intelligence, Life Hacks and Environment.

**Mount Holyoke College:**

- [8] **Sue Barry Award**, 2017
  - Awarded to one graduating senior every year for demonstrating "*vision, joy and curiosity*" in the pursuit of research in science.
- [9] **Phi Beta Kappa** 2017
- [10] **Mary Lyon Scholar** 2017
- [11] **Academic Excellence Award**, Neuroscience & Behavior 2017, 2016
- [12] **President and Dean of College Fund** 2016

GRANTS AND  
FELLOWSHIPS

- Five College Digital Humanities**, Five College Consortium & The Andrew W. Mellon Foundation
- [13] **Five College Digital Humanities Student Fellowship** 2016-17
- [14] **Five College Digital Humanities Summer Student Fellowship** 2016
- [15] **Five College Digital Humanities Microgrant** 2016
- Mount Holyoke College**
- [16] **Harap Fund Grant for Independent Research** 2016, 2017, (2018 x 2)  
• For pursuit of independent research and travel (*four time recipient*).
- [17] **21<sup>st</sup> Century Scholarship for Academic Excellence** 2013-17
- [18] **MakerSpace Grant** 2016 x 2  
• For the development of MuSyC (*two time recipient*).
- [19] **Laurel Fellowship** 2015-16  
• For pursuit of study in *Cognitive Neuroscience and Evolutionary Biopoetics* at the **University of Maastricht, The Netherlands** [*Declined due to pursuit of on-campus research opportunities*]
- [20] **LYNK-UAF Grant - Pursuit of Scientific Research** 2015  
• For pursuit of independent research anywhere of one's choosing.

CONFERENCE  
TALKS

Presenting Author Indicated with \*

- [1] **Oraa Ali, M.**, Fitzroy, A.B., & \*Breen, M. Prosody, Poetry and Processing: ERP Evidence for Hierarchical Metrical Structure in Silent Reading. *15<sup>th</sup> International Conference on Music Perception and Cognition and 10<sup>th</sup> triennial conference of the European Society for the Cognitive Sciences of Music*. Montreal, Canada. 23-28 July 2018.
- [2] **Oraa Ali, M.**, Fitzroy, A.B., & \*Breen, M. Prosody, Poetry and Processing: ERP Evidence for Rhythmic Structure in Silent Reading. *31<sup>st</sup> CUNY Conference on Human Sentence Processing*, University of California, Davis, CA. 15-17 March 2018.
- [3] \***Oraa Ali, M.**; McCune, C.; Sano, K. MuSyC: Music, Synaesthesia, Colour. *Art and Science symposium at the 24<sup>th</sup> Conference of the International Association of Empirical Aesthetics*. Universitat Wien, Vienna, Austria. 29 August - 1 September 2016.

CONFERENCE  
POSTERS

- [4] \*Rubio-Fernandez, P.; \***Oraa Ali, M.**, & Gibson, E.A. Epistemic inferences in passing conversation: Pragmatics as a test of Theory of Mind accounts. *31<sup>st</sup> CUNY Sentence Processing Conference*. University of California, Davis, USA. 15-17 March 2018.
- [5] \***Oraa Ali, M.**; Fitzroy, A.B. & Breen, M. Prosody, Poetry and Processing: ERP Evidence for Rhythmic Structure in Silent Reading. *11<sup>th</sup> Cornell Undergraduate Linguistics Colloquium*. Cornell University, Ithaca, NY. 29-30 April 2017. [*absent due to illness*]
- [6] \***Oraa Ali, M.**; Jamrozik, A.; Sarwer, D. & Chatterjee, A. Interpersonal judgments of individuals with facial disfigurement before & after treatment. *24<sup>th</sup> Conference of the International Association of Empirical Aesthetics*. Universitat Wien, Austria. 29 August - 1 September 2016.  
– Recipient, **Robert Frances Award** and **Third Best Poster prize**.

[7] **\*Oraa Ali, M.** & Huston, S.J. Behavioral Effects of Single Visual Neuron Stimulation. *Janelia Research Symposium, Janelia Research Center*, Ashburn, VA. 3 August 2016.

[8] **\*Oraa Ali, M.**; Jamrozik, A.; Sarwer, D. & Chatterjee, A. Interpersonal judgments of individuals with facial disfigurement before and after treatment. *28<sup>th</sup> Annual Convention of the Association for Psychological Science*. Chicago, IL. 26-29 May 2016.  
 – Winner, **Building Bridges Poster Award**, National Institute of Dental & Craniofacial Research, National Institute of Health, USA.

[9] **\*Oraa Ali, M.**; Jamrozik, A.; Sarwer, D. & Chatterjee, A. Interpersonal judgments of individuals with facial disfigurement before and after treatment. *North-east Undergraduate Research on Neuroscience (NEURON)*. Quinnipiac University, CT, UAA. 28 February 2016.

[10] **\*Nanda, P.**;Emerson, F.;Schwartz, A.;**Oraa Ali, M.**; Steffens, E. & Schwartz J.J. Maternal Immune Activation & Social Cognition: A model for environment effects on the development of social behavioral deficits in autism spectrum disorders.*Northeast Undergraduate Research on Neuroscience (NEURON)*. Quinnipiac University, CT, USA. 22 February 2015.

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DEMOS

[11] **\*Oraa Ali, M.** MuSyC: Music, Synaesthesia and Art. *4<sup>th</sup> Digital Humanities Symposium and Fellows Showcase*, Five College Digital Humanities, Amherst College, MA, USA. 6 May 2017.

[12] **\*Oraa Ali, M.** MuSyC: Music, Synaesthesia, Color. *Remixing Senses, Tech Expo, Hacking Arts Conference*, MIT Media Lab, Cambridge, MA, USA. 19 November 2016.

[13] **\*Oraa Ali, M.** MuSyC: Integrating Art and Science. *3<sup>rd</sup> Digital Humanities Symposium and Fellows Showcase*, Five College Digital Humanities, Amherst College, MA, USA. 30 April 2017.

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TEACHING

**Mount Holyoke College**, South Hadley, MA

[1] **Teaching Assistant, Visual Culture of Protest** Spring 2017  
**English, Africana Studies and Critical Social Thought**

- Provided technical and research support for advanced seminar of 27 students.
- Facilitated discussion about visual archives of protest and revolution from second half of the 20<sup>th</sup> century.
- Responsible for curating content for course related social media and outreach.

[2] **Laboratory Teaching Assistant, Cell Biology** Spring 2016  
**Biological Sciences**

- Taught scientific techniques such as epifluorescence microscopy, protein purification and polymer chain reaction to group of 50 students.

[3] **Teaching Assistant, Statistics for Psychology** 2014-15  
**Psychology & Education**

- Taught fundamental statistical concepts and SPSS, and provided academic support to a class of 72 students.

[4] **Tutor, Introduction to Neuroscience & Behavior** 2014-15  
**Neuroscience & Behavior**

- Provided one on one tutoring for students in introductory neuroscience course.

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## SERVICE

- [1] **Judge, Massachusetts State Science & Engineering Fair, MIT** 2018
  - Evaluated projects of high school students in the theme of Behavioral Science.
- [2] **Student Liaison, Neuroscience & Behavior, Mount Holyoke College** 2016-17
  - Provided mentorship to peers about pursuing research in neuroscience, course planning and academic strategies.
- [3] **Student Resource, AccessAbility Services, Mount Holyoke College** 2014-17
  - Provided peer academic support for students in AccessAbility Services for several courses: **Organic Chemistry, Research Methods in Psychology, Cognitive Psychology, Evolution and Neurobiology.**
- [4] **Mentor, Mount Holyoke Girls in Technology Conference** 2017
  - Volunteer. MHCGIT invites high school girls from all over Massachusetts to a one-day immersive experience, as they learn more about technology and its pervasiveness in almost every field. Through hands-on workshops, talks, bonding, and mentorship, it aims to break stereotypes, and highlight the importance of women in tech-related fields. (*absent due to illness*)
- [5] **Zine Coordinator, OUTreach, Mount Holyoke College** 2015-16
  - Curated the 3<sup>rd</sup> annual Gender & Sexuality Zine "*What is Pride?*" [\[PDF\]](#)
  - Facilitated panel about experiences of queer international students at the first Mount Holyoke Queer Alum conference.
  - Helped organize events about intersectional feminism, activism and inter-group solidarity and provide support for LGBT students on campus.
- [6] **Co-President, Neuroscience Student Forum, Mount Holyoke College** 2015-16
  - Helped student-led journal club to discuss different topics in neuroscience.
  - Curated a collaborative neuroscience related art exhibition for Brain Awareness week entitled: "*Synapse: Bridging the Gap Between Art and Science*".
- [7] **Volunteer Presenter, The Franklin Institute, Philadelphia, PA** 2015
  - Showcased eye tracker technology in the perception of visual art at *Science After Hours* event in "ART + SCIENCE".

NON-ACADEMIC  
POSITIONS

- [1] **Archives & Special Collections, Mount Holyoke College, USA** 2015-17  
*Student Archivist*
  - Curated an exhibition for the 40<sup>th</sup> anniversary of LGBTQ college organizations and in honor of the "The Astronomer".
  - Catalogued the feminist zine collection followed by digital data visualization.
- [2] **Science & Technology, Deccan Chronicle, India** 2011-13  
*Journalist*
  - Wrote articles about the representation of women, LGBTQ and disabled individuals for a weekly segment for a national newspaper.
- [3] **Freelance Illustrator** 2006-Present
  - Illustrated literary journals, designed covers for programs & magazines, created logos for organizations and fundraising events.

OTHER  
INDEPENDENT  
PROJECTS

- [1] **Radio DJ and Sound Engineer** 2014-Present
  - DJ and Engineer for "Colourless Green Ideas Sleep Furiously" for 4 seasons on WMBR 88.1 FM, Cambridge, MA
  - DJ for 7 seasons on WMHC 91.5 FM, South Hadley, MA
- [2] **MuSyC: Music, Synaesthesia, Color** 2016-Present

	<ul style="list-style-type: none"> <li>• Used electrical engineering, signal processing, fabrication, data visualization, rapid prototyping and design to create a device which simulates chromesthetic synaesthesia.</li> <li>• Currently developing a real-time music visualizer for the WMBR website. <a href="#">[Link to Current Beta version]</a></li> </ul>																																								
SKILLS	<hr/> <p>Programming:</p> <ul style="list-style-type: none"> <li>• Most Experience with <b>R, JavaScript, HTML, CSS</b></li> <li>• Basic Experience with <b>Python, UNIX, EPrime, Arduino, MATLAB, L<sup>A</sup>T<sub>E</sub>X</b></li> </ul> <p>Software and Platforms:</p> <ul style="list-style-type: none"> <li>• <b>Amazon Mechanical Turk, PsiTurk</b>, IbexFarms, GEPHI, <b>Praat</b>, SPSS, Adobe Photoshop and Illustrator, StoryMap<sup>JS</sup>, Qualtrics, Mesquite, ImageJ<sup>++</sup>, FIJI, Ethovision, AutoCAD</li> </ul> <p>Neuroscience:</p> <ul style="list-style-type: none"> <li>• 3 years of experience with Event-related potential(<i>ERP</i>) -BioSemi ActiView system</li> <li>• Basic experience with <i>eye-tracking</i>, functional magnetic resonance imaging (<i>fMRI</i>) corpus construction, rodent behavioral testing and stereotaxic surgery, optogenetics.</li> </ul> <p>Other:</p> <ul style="list-style-type: none"> <li>• Proficient at Drone piloting, surveillance</li> <li>• Proficient at illustration and graphic design (digital and traditional media)</li> <li>• Basic experience with sound engineering and radio broadcast engineering</li> <li>• Basic experience with fabrication (3D printing and laser cutting)</li> </ul> <hr/>																																								
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