

Avi Moed Aizenman

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EDUCATION

University of California Berkeley, Berkeley CA 2016 - present
 Graduate Student, Vision Science
 3.99 GPA

Brandeis University, Waltham MA 2010-2013
 B.A. Degree in Psychology, Summa Cum Laude with Highest Honors
 3.97 GPA
 Honors Thesis: Multisensory Integration in Visual Pattern Recognition: Music Training Matters

Bard College at Simon's Rock, Great Barrington MA 2009-2010
 3.81 GPA

HONORS/ AWARDS

Berkeley Center for Innovation in Vision and Optics Fellow 2019 - present
 UC Berkeley Outstanding Graduate Student Instructor Award 2019
 Graduate Student Instructor of the year - Berkeley Vision Science 2019
 Berkeley Fellowship for Graduate Study 2016 - 2018
 Elliot Aronson '54 Prize for Excellence in Psychological Research 2013
 Phi Beta Kappa 2013
 Peter I.B. Lavan Merit Scholarship 2009-2010
 Acceleration to Excellence Program Merit Scholarship 2008-2010

RESEARCH SKILLS

- Experienced with MATLAB, Python, Unity and software packages including SPSS, Microsoft Office Suite, Photoshop, R, Dreamweaver, Prism, LaTeX
- Design, implement and analyze behavioral and eye-tracking studies using an Eyelink 1000 and Eyelink II eye-tracker
- Analyze behavioral data and perform quality control on fMRI data; assist with first-level subsequent memory analysis using SPM8

RESEARCH EXPERIENCE

University of California, Berkeley, CA 9/2016 - present
Graduate student, Levi Lab

- Research includes design and implementation of psychophysical studies as well as the collecting and analyzing of behavioral and eye tracking data using Psychtoolbox, Eyelink, Matlab, Python, and R

Brigham and Women's Hospital, Boston MA 8/2013-7/2016
Research Assistant/ Lab Manager, Wolfe Visual Attention Lab

- Conduct psychophysical research on visual attention (visual search in medical images and visual foraging)
- Program stimuli in Matlab, collect and analyze behavioral and eye tracking data using Matlab, R and Excel

- Write and update IRB protocols through Brigham and Women's Hospital
- Manage lab (e.g. Coordinate visiting students' visas, run subjects and administrative duties such as updating the Wolfe Lab website)
- Supervise high school and college students (from programs such as Project Success and RSI) design, implement and write up research experiments

Brandeis University, Waltham MA 4/2014-4/2015
Visiting Research Associate in Neuroscience, Sekuler Vision Lab

Brandeis University, Waltham MA 9/2011-8/2013
Student Research Assistant, Sekuler Vision Lab

- Design and implement vision experiments
- Collect and analyze behavioral data using Matlab, Excel and SPSS
- Maintain and organize data collected for easy access by collaborators
- Write and present findings at lab meeting and Vision Sciences Society Conference
- Prepare subjects for participation in EEG experiments

Brandeis University, Waltham MA 1/2011-8/2012
Student Research Assistant, Gutches Aging Culture and Cognition Lab

- Collect and analyze both behavioral and fMRI data
- Certified at Mass General Hospital to collect neuroimaging data
- Write and present findings at the Social and Affective Neuroscience Conference

Bard College at Simon's Rock, Great Barrington MA 9/2009-5/2010
Student Research Assistant to Eden Renee-Pruitt

- Collect and organize survey data from *Mechanical Turk*
- Participate in writing and presenting findings at the APS conference

University of California, Santa Cruz, Santa Cruz CA 6/2010-8/2010
Lab Assistant, Tamkun Genetics lab

- Maintain and breed fruit flies
- Dissect and stain fruit fly larvae salivary glands with protein in order to analyze gene expression

TEACHING EXPERIENCE

Teaching Assistant 1/2017-4/2019
 Physiology and Anatomy of the Eye and Visual System T.A. for Richard Van Sluyters, UC Berkeley's Optometry School

Teaching Assistant 9/2010
 Introduction to Psychology T.A. for Eden-Renee Pruitt, Bard College at Simon's Rock

MEDIA

[Musicians Rock at Audiovisual Integration](#)

PUBLICATIONS

Wolfe, J.M., Cain, M.S., **Aizenman, A.** (2019). Guidance and selection history in hybrid foraging visual search. *Attention, Perception and Psychophysics*.

Aizenman, A., Drew, T., Ehinger, K.A., Georgian-Smith, D., Wolfe, J.M. (2017). Comparing search patterns in digital breast tomosynthesis and full-field digital mammography: An eye tracking study. *Journal of Medical Imaging*.

Kok, E.M., **Aizenman, A.M.**, Vo, M., Wolfe, J.M. (2017). Even if I showed you where you looked, remembering where you just looked is hard. *Journal of Vision*.

Aizenman, A., Gold, J.M. Sekuler, R. (2017). Multisensory integration in short-term memory: Musicians do rock. *Neuroscience*.

Vo, M.L.H., **Aizenman, A.**, Wolfe, J.M. (2016). You think you know where you looked? You better look again. *Journal of Experimental Psychology: Human Perception and Performance*. 42(10).

Wolfe, J.M., **Aizenman, A.**, Sage E.P. Boettcher, Cain, M.S. (2016). Hybrid foraging search: Searching for multiple instances of multiple types of target. *Vision Research*. 119.

Wen, G., **Aizenman, A.**, Drew, T., Wolfe, J.M., Markey, M.M., Haygood, T.M. (2016). Computational assessments of visual search strategies in volumetric medical images. *Journal of Medical Imaging*, 3(1).

Wolfe, J.M., Evans, K.K., Drew, T., **Aizenman, A.**, Josephs, E. (2016). How do radiologists use the human search engine? *Radiation Protection Dosimetry*. First published online December 8, 2015, doi: 10.1093/rpd/ncv501.

Drew, T., **Aizenman, A.**, Thompson, M., Kovacs, M.D., Trambert, M., Reicher, M., Wolfe, J.M. (2016). Image toggling saves time in mammography. *Journal of Medical Imaging*, 3(1), doi:10.1117/1.JMI.3.1.011003.

Gold, J.M., **Aizenman, A.**, Bond, S., Sekuler, R. (2013), Memory and incidental learning for visual frozen noise sequences. *Vision Research*, 99, 19–36.

Cassidy, B.S., Leshikar, E.D., Shih, J.Y., **Aizenman, A.**, Gutchess, A.H. (2013). Valence-based age differences in medial prefrontal activity during impression formation. *Social Neuroscience*. 8(5), 462-473.

MANUSCRIPTS IN REVIEW

Aizenman, A., Ehinger, K.A., Wick, F.A., Wolfe, J.M. (*in review*) Hiding the rabbit: Using a genetic algorithm to investigate shape guidance in visual search

Aizenman, A., Koulieris, G., Gibaldi, A., Sehgal, V., Levi, D.M., Banks, M.S. (*in review*) The (un)natural statistics of eye movements and binocular disparities in VR gaming headsets.

TALKS

Aizenman, A., Kok, E.M., Vo, M.L.H. Wolfe, J.M. If I showed you where you looked, you still wouldn't remember. Talk presented at the Vision Sciences Society meeting in St. Pete Beach, FL in May 2017.

Wolfe, J. M., **Aizenman, A.**, Park, J., Jurgensen, L., Ehinger, K. A. (2016, May). How did you hide my bunny? Using a genetic algorithm to investigate the preattentive processing of shape in visual search. Talk presented at Vision Sciences Society in Naples, FL. <http://jov.arvojournals.org/article.aspx?articleid=2550729&resultClick=1>

Aizenman, A., Thompson, M.B., Ehinger, K.A., Wolfe, J.M. (2015, May). Visual Search Through a 3D Volume: Studying Novices in Order to Help Radiologists. Talk presented at the Vision Sciences Society in Naples, FL. <http://jov.arvojournals.org/article.aspx?articleid=2434217&resultClick=1>

Mullins, R., Ehinger, K., **Aizenman, A.**, Weiss, C.A., Wolfe, J.M., Fouse, A. (2015, October) Geographic Analysis in Context: A Visual Search Task Comparing Zooming Metaphors. Poster presented at the NACIS meeting in Minneapolis, MN.

Aizenman, A., Gold, J., Keller, A., Sekuler, R. (2014, May), Individual Differences in Short-Term Memory and Multisensory Integration: *Musicianship Matters*. Talk presented at the Individual Differences Satellite Symposium at the Vision Sciences Society in Naples, FL.

POSTERS

Aizenman, A., Levi, D.M. (2020, June) Eye on the prize: Fixational stability as a metric for the recovery of visual function in amblyopia. Poster presented at the Virtual Vision Sciences Society meeting.

Gibaldi, A., **Aizenman, A.**, Levi, D.M., Banks, M.S. (2020, June) Binocular coordination and interocular balance in Amblyopia. Poster presented at the Virtual Vision Sciences Society meeting.

Aizenman, A., Levi, D.M., Verghese, P., Agaoglu, S. (2018, May) Optimal integration of retinal and extra-retinal information is contingent upon trans-saccadic discontinuity. Poster presented at the Vision Sciences Society in St. Pete Beach, FL.

Agaoglu, S., **Aizenman, A.**, Verghese, P., Levi, D.M. (2018, April) Similar multiplicative improvements in fixation stability in normal vision and amblyopia. Poster presented at the Association for Research in Vision and Ophthalmology in Honolulu, HI.

Aizenman, A., Drew, T., Georgian-Smith, D., Wolfe, J.M. (2016, November) Patterns of eye movements in breast tomosynthesis and full field digital mammography: an eye tracking study. Poster presented at the Radiological Society of North America conference in Chicago, IL.

Aizenman, A., L.H., Vo, Wolfe, J.M. (2016, May) Losing Track of Your Eyes While Trying to Find Waldo. Poster presented at the Vision Sciences Society in St. Pete Beach, FL. <http://jov.arvojournals.org/article.aspx?articleid=2551140&resultClick=1>

Aizenman, A., Drew, T., Georgian-Smith, D., Wolfe, J.M. (2014, May). Comparing Search strategy in breast tomosynthesis and 2D mammogram: an eye tracking study. Poster presented at the Vision Sciences Society in St. Pete Beach, FL. <http://www.journalofvision.org/content/14/10/1192.abstract>

Aizenman, A., Jason, G., Sekuler, R. (2013, May). Multisensory Integration in Visual Pattern Recognition: Music Training Matters. Poster presented at the Vision Sciences Society in Naples, FL. <http://www.journalofvision.org/content/13/9/1082.short>

Aizenman, A., Bond, S., Jason, G., Sekuler, R. (2012, May). Implicit Learning and Memory for Random Visual Noise. Poster presented at the Vision Sciences Society in Naples, FL. <http://www.journalofvision.org/content/12/9/1134.abstract?sid=980a6aca-d197-4c43-8344-ebb4681b5d55>

Cassidy, B., **Aizenman, A.,** Gutchess, A. (2012, April). Amygdala and Ventromedial Prefrontal Cortex Integrity Predict Memory for Impressions in Older Adults. Poster presented at the Social and Affective Neuroscience Conference in New York, NY.

Aizenman, A., Pruitt, E.R. (2011, May). Intersectional Invisibility: Societal Perceptions of Individuals with Two Subordinate Identities. Poster presented at the Association for Psychological Sciences Conference, Washington, D.C.

COMMUNITY INVOLVEMENT

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| National Student Leadership Conference | 2017- present |
| <ul style="list-style-type: none"> • Present information about the Vision Science program at UC Berkeley as well as the visual system to high school students visiting from around the country | |
| Bay Area Scientists in School (BASIS) | 2016 –present |
| <ul style="list-style-type: none"> • Visit first grade high schools in the Bay Area and teach first grade students by engaging in hands on activities to understand the human visual system | |
| Explorations, Harvard Medical School, Boston, MA | 10/2014 and 10/2015 |
| <ul style="list-style-type: none"> • Present information about vision sciences to underrepresented and minority middle school students in the Boston area who are interested in the biomedical sciences | |
| Project Success, Harvard Medical School, Boston, MA | 6-7/2014 and 6-7/2015 |
| <ul style="list-style-type: none"> • Visual Attention Lab mentor for one to two high school students from underrepresented minority groups • Help students in experiment development and implementation, formal presentations and academic writing | |
| Research Science Institute (RSI), MIT, Boston, MA | 6/2015-7/2015 |
| <ul style="list-style-type: none"> • Mentor for a high achieving high school student interested in the sciences. Help student in programming experiments, analyzing results and presenting findings | |

CLUBS AND ACTIVITIES

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| Psychology Undergraduate Departmental Representative (UDR) | 8/2012-5/2013 |
| <ul style="list-style-type: none"> • Represent students for the psychology department • Mentor peers interested in psychology, organize department events (such as 'meet the majors night') • Provide feedback to the psychology department about resources the psychology department provides and can improve upon | |
| Secretary, Psi Chi Honor Society, Brandeis Chapter | 8/2012-5/2013 |
| <ul style="list-style-type: none"> • Keep accurate records of meetings, and plan/advertise events | |
| Vice President, Neuroscience Club | 8/2012-5/2013 |
| <ul style="list-style-type: none"> • Coordinate club meetings with the president | |

- Correspond interdepartmentally to create examples of how neuroscience can apply to many different careers
- Organize panel on traumatic brain injury and policy

Secretary, Neuroscience Club

9/2011-8/2012

Publicity, Poverty Action Coalition

9/2011-5/2013

- Liaison between the club and the Brandeis student body/department heads to advertise events

WORKSHOPS

York Vision Science Summer Program, York University, Toronto

6/2015