

Adam R. Fishbein, PhD

B333 McGill Hall • San Diego, CA 92161 • email: afishbein87@gmail.com

EDUCATION

University of Maryland: College Park, MD
Degree: PhD in Neuroscience and Cognitive Science Aug 2015 – May 2021
Thesis: “Auditory Processing of Sequences and Song Syllables in Vocal Learning Birds”
Advisor: Robert Dooling (Psychology)
Committee Members: Greg Ball (Psychology),
Juan Uriagereka (Linguistics), Bill Idsardi (Linguistics), Catherine Carr (Biology)

University of Southern California: Los Angeles, CA
Degree: Master of Professional Writing, concentration in fiction Aug 2010 – Aug 2012
Thesis: Short story collection “Leftover People and Other Stories”

University of Maryland: College Park, MD
Degree: B.A. Philosophy; B.A. Linguistics Aug 2005 – May 2009
Graduated Cum Laude

RESEARCH AND TRAINING

Postdoctoral Researcher
Cortical Systems and Behavior lab, UCSD Aug 2021 – Present

Graduate Research Assistant July 2015 – May 2021
Avian Behavioral Neuroscience lab, UMD

Summer School Course in Acoustic Communication Aug 2017
Terrestrial and Marine Field Stations of the Institute of Biology, University of Southern Denmark

Field Course in Animal Communication July 2016 – Aug 2016
Project title: Duetting in Chestnut-Backed Antbirds
Barro Colorado Island, Panama

Baggett Summer Research Summer 2008
Studied Vocal Mimicry in Satin Bowerbirds, UMD

PUBLICATIONS

Fishbein, A. R.*, Prior, N.H.*, Brown, J.B., Ball, G. F., Dooling, R. J. Discrimination of natural acoustic variation in vocal signals. *Scientific Reports*. 2021.

Fishbein, A. R., Idsardi, W. J., Ball, G. F., Dooling, R. J. Sound sequences in birdsong: how much do birds really care? *Philosophical Transactions of the Royal Society B*. 2020.

Fishbein, A. R., Fritz, J. B., Idsardi, W. J., Wilkinson, G. S. What can animal communication teach us about human language? *Philosophical Transactions of the Royal Society B*. 2020.

Brown, J. B., Brittan-Powell, E. F., Dooling, R. J., **Fishbein, A. R.**, Ball, G. F., Madison, F. N. Strain differences in hearing in song canaries. *Journal of the Acoustical Society of America*. 2019.

Fishbein, A. R., Lawson, S. L., Dooling, R.J., Ball, G.F. How Canaries Listen to Their Song: Species-Specific Shape of Auditory Perception. *Journal of the Acoustical Society of America*. 2019.

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Fishbein, A. R., Löschner, J., Mallon, J. M., Wilkinson, G. S. Dynamic Sex-Specific Responses to Synthetic Songs in a Duetting Suboscine Passerine. PLOS ONE. 2018.

Lawson, S.L., **Fishbein, A. R.**, Prior, N.H., Dooling, R.J., Ball, G.F. Relative Salience of Syllable Structure and Syllable Order in Zebra Finch Song. Animal Cognition. 2018.

In Preparation

Fishbein, A. R. (*in review*) Auditory pattern discrimination in budgerigars (*Melopsittacus undulatus*).

PRESENTATIONS

Fishbein, A. R. How birds perceive auditory sequences and song syllables. (2021) Invited talk at the cognitive and comparative psychology colloquium at the CUNY graduate center.

Fishbein, A. R. Lu, K., Liu, W., Idsardi, W. J., Fritz, J.B., Shamma, S.A., Dooling, R.J. (2021). Sequence processing in the auditory forebrain of the zebra finch (*Taeniopygia guttata*) and the budgerigar (*Melopsittacus undulatus*). Poster presented at SfN Global Connectome: A Virtual Event.

Fishbein, A. R. Prior, N.H., Ball, G.F., Dooling, R.J. (2020). Limitations in Avian Perception of Vocal Sequences: Implications for Language Evolution. Talk accepted for EvoLang 13, Brussels, Belgium. (Cancelled for Covid-19).

Fishbein, A. R. Lu, K., Liu, W., Idsardi, W. J., Fritz, J.B., Shamma, S.A., Dooling, R.J. (2020). Temporal Integration of Sequences in Secondary Auditory Region of the Zebra Finch Forebrain. Poster presented at 43rd Annual Meeting of the Association for Research in Otolaryngology, San Jose, CA.

Fishbein, A. R., Prior, N. H., Idsardi, W. J., Ball, G. F., Dooling, R. J. (2019). Perception of Variation in Song Motifs by Birds and Humans. Poster presented at 26th International Conference on Comparative Cognition, Melbourne Beach, FL.

Fishbein, A. R. Messages in some of the details: How birds listen to auditory sequences. (2019) Advances in the Study of Bird Perception and Cognition. University of Tokyo, Komaba, Japan.

Fishbein, A.R. Invited talk at the Neuroscience and Cognitive Science program recruitment event. (Feb. 2019).

Fishbein, A. R., Lu, K., Idsardi, W. J., Shamma, S. A., Fritz, J. B., Dooling, R. J. (2019). Neurophysiological Coding of Temporal Fine Structure and Sequence in the Auditory Forebrain of the Zebra Finch. Poster presented at 42nd Annual Meeting of the Association for Research in Otolaryngology, Baltimore, MD.

Fishbein, A. R., Prior, N. H., Ball, G. F., Dooling, R.J. (2018). Perception of Sequences and Syllables in Vocal Learning Birds. Presentation at Birdsong and Animal Communication Annual Meeting, Millbrook, NY.

Fishbein, A. R., Prior, N. H., Lawson, S. L., Ball, G. F., Dooling, R. J. (2018). Variation in How Birds Listen to Their Songs. Presentation at 55th Annual Conference of the Animal Behavior Society, Milwaukee, WI.

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Fishbein, A. R., Ball, G. F., Dooling, R. J. (2018). Use of Transition and Abstract Rules by Budgerigars in Auditory Pattern Processing. Presentation at 175th Meeting of the Acoustical Society of America, Minneapolis, MN.

Fishbein, A. R., Ball, G. F., Dooling, R. J. (2017). Use of Transition and Abstract Rules by Budgerigars in Auditory Pattern Processing. Poster presented at Birdsong 7, College Park, MD.

Fishbein, A. R. and Dooling, R. J. (2017). An Efficient Behavioral Assay for Measuring Auditory Pattern Processing in Budgerigars. Poster presented BBI Research Workshop: New Perspectives on Animal Models of Language and Cognition, College Park, MD.

Fishbein, A. R., Löschner, J., Mallon, J. M, Wilkinson, G. S. (2017). Sex-Specific Responses to Synthetic Songs in a Duetting Suboscine Passerine. Presentation at 4th International Symposium on Acoustic Communication by Animals, Omaha, NE.

Fishbein, A. R. and Dooling, R. J. (2017). An Efficient Behavioral Assay for Measuring Auditory Pattern Processing in Budgerigars. Poster presented at 4th International Symposium on Acoustic Communication by Animals, Omaha, NE.

Lawson, S.L., **Fishbein, A. R.,** Prior, N.H., Dooling, R.J., Ball, G.F. (2017) Perception of Structural Changes in Song Motifs by Zebra Finches. Poster presented at 4th International Symposium on Acoustic Communication by Animals, Omaha, NE.

Fishbein, A. R., Lawson, S. L., Dooling, R.J., Ball, G.F. (2017). How Canaries Listen to Their Song. Presentation at 173rd Meeting of the Acoustical Society of America, Boston, MA.

Lawson, S.L., **Fishbein, A. R.,** Prior, N.H., Lohr, B., Dooling, R.J., Ball, G.F. (2017). Relative Salience of Syllable Order versus Syllable Fine Structure in Zebra Finch Song. Work presented at 173rd Meeting of the Acoustical Society of America, Boston, MA.

Fishbein, A. R., Lawson, S. L., Ball, G.F., Dooling, R. J. (2016). Using Operant Conditioning Methods to Measure Song Perception in Birds. Poster presented at 6th Meeting of the North American Ornithological Conference, Washington, D.C.

AWARDS AND HONORS:

Ann G. Wylie Semester Dissertation Fellowship , UMD	2020
Jakob K. Goldhaber Travel Grant , UMD	2020
NRSA Predoctoral F31 Fellowship , NIDCD	2019
NIH Predoctoral Traineeship Fellowship , T32 Grant, CCEBH, UMD	2017
Graduate Student Travel Award , BSOS, UMD	2017
Research Training Award , NACS Program, UMD	2017
Travel Award , NACS Program for First-Year Project, UMD	2016
NSF Research Traineeship Fellowship , Language Science Center, UMD	2016
Assistant Lectureship , USC	2010
Baggett Summer Research Scholarship , UMD	2008
Honors Program Certificate , UMD	2008

TEACHING EXPERIENCE

Teaching Assistant , LING272 The Biophysics of Language	Fall 2019
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University of Maryland: College Park, MD

- Teaching Assistant**, LING272 The Biophysics of Language
University of Maryland: College Park, MD Fall 2018
- Graduate Fellow**, Pulsar Language Science Research Seminar
University of Maryland: College Park, MD Spring 2017 – Fall 2017
- Lecturer**, ENGL101 (Academic Writing)
University of Maryland: College Park, MD Fall 2014 – Spring 2015
- Lecturer**, LIT/WRTG100, LIT/WRTG101 (College Writing I and II)
American University: Washington, DC Fall 2013 – Spring 2015
- Graduate Lecturer**, WRIT140 (Writing and Critical Reasoning)
University of Southern California: Los Angeles, CA Fall 2010 – Spring 2012

ADDITIONAL TRAINING

- Statistics with R Specialization**, Coursera Spring 2020
- Practical Data Science with MATLAB Specialization**,
Mathworks on Coursera Spring 2020
- Independent Study with Lab Research Engineer, Ed Smith**
Matlab, Sound Recording, Signal Analysis June 2016 – Dec 2016
- Introduction to Bayesian Statistical Modeling**, UMD June 2016
- Training in Teaching**, UMD Fall 2014
- Training in Teaching**, USC Fall 2010

PROFESSIONAL SERVICE

- Chair**, Language Science Professional Development Committee 2017 – 2018
- Co-Chair**, Language Science Lunch Talks Committee 2017
- Member**, Language Science Winter Storm Planning Committee 2017, 2018
- Member**, Language Science Professional Development Committee 2016 – Present
- Member**, Language Science Day Planning Committee 2016

MENTORSHIP EXPERIENCE

- Mentor for Undergraduate Student**, Delphine Gardiner Sept 2018 – May 2020
- Mentor for Undergraduate Student**, Mahler Revsine May 2018 – Aug 2018
- Graduate Fellow for PULSAR Undergraduate Research Program** Jan 2017 – Dec 2017
- Mentor for Undergraduate Student**, Eli Kane Sept 2017 – Dec 2017
- Mentor for Undergraduate Student**, Janeila Benjamin Mar 2017 – Aug 2017
- Tutor for Study Point:** Washington, DC Aug 2014 – Jan 2015
- Volunteer Tutor at School on Wheels:** Los Angeles, CA Mar 2012 – Sept 2012
- Volunteer Tutor at Los Angeles Mission:** Los Angeles, CA Apr 2012 – Sept 2012

OUTREACH EXPERIENCE

- Lab Tour for Terp Discovery Students** July 2017
- Maryland Day Table Volunteer**, UMD Apr 2017
- Lunch with Montgomery Blair High School Linguistics Club** Feb 2017

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LAY SCIENCE PUBLICATIONS

Seeds for Thought: Is there Structure in Birdsong? Umdlanguagescience.org, Mar. 27, 2018.

Birds Can Tell Us a Lot About Human Language. Scientificamerican.com, Feb 2., 2018.

How Canaries Listen to Their Song. Popular version of presentation at 173rd meeting of the Acoustical Society of America. Acoustics.org. 2017.

SKILLS

MATLAB: proficient

Excel: proficient

Adobe Audition: proficient

Raven Pro: proficient

R: proficient

SPSS: intermediate

Avisoft: intermediate

SAP: intermediate

FICTION PUBLICATIONS AND OTHER ACTIVITIES

DreamLand, Amazon Direct Publishing (2015); "Uncle Camus," *Cactus Heart* (2015); "The Untapped," *The Offbeat* (2015); "Igloo," *Connu* (2013); "Moving In," *Necessary Fiction* (2012); "As A Child," *Stylus* (2009)

Co-Founder and Member, Improv Comedy Group "The Female Accent," Jan 2015 – Present

Member, Washington Improv Theater ensemble "Thank You for Sharing," Apr 2015 – Sept 2016