Alynda Wood | Curriculum Vitae

Education

Emory University Atlanta, GA

Doctor of Philosophy, Biological and Biomedical Sciences - Neuroscience Defended Oct. 19, 2021; degree to be conferred Dec. 2021

2014-2021

Hampshire College

Bachelor of Arts, Neuroscience Five College Cognitive Neuroscience Certificate Amherst, MA 2009–2012

Research Positions

Postdoctoral Fellow Emory University, Atlanta, GA

Supervisor: Dr. Samuel Sober Nov. 1 2021 - present

Doctoral Student

Supervisor: Dr. Samuel Sober 2015 - 2021

Projects: Neurophysiology and neuroanatomy underlying vocal motor skill learning in the Bengalese

finch.

Postbaccalaurate Fellow National Institutes of Health (NINDS), Bethesda, MD

Supervisor: Dr. Leonardo Belluscio

2012-2014

Projects: Mechanisms of development and plasticity in the mouse olfactory system.

Senior Thesis ("Division III") Student Hampshire College, Amherst, MA

Supervisors: Dr. Charles Ross and Dr. Jane Couperus 2011–2012

Project: Molecular mechanisms of associative learning in Caenorhabditis elegans.

Summer Research Intern University of Virginia, Charlottesville VA

Supervisor: Dr. Brian Wiltgen June-Aug. 2011

Project: NMDA receptor-independent spatial learning; age-related learning deficits in a mouse model

of Alzheimer's disease.

Publications

[1] **A. N. Wood**, "New roles for dopamine in motor skill acquisition: Lessons from primates, rodents, and songbirds," *J. Neurophysiol.*, May 2021.

- [2] K. S. Lehmann, **A. N. Wood**, D. Cummings, L. Bai, B. Stevens, and L. Belluscio, "Complement 3 signaling is necessary for the developmental refinement of olfactory bulb circuitry (preprint)," *bioRxiv*, biorxiv.org/content/10.1101/449454v1, Oct. 2018.
- [3] J. Fan, L. Jia, Y. Li, S. Ebrahim, H. May-Simera, **A. N. Wood**, R. J. Morell, P. Liu, J. Lei, B. Kachar, L. Belluscio, H. Qian, T. Li, W. Li, G. Wistow, and L. Dong, "Maturation arrest in early postnatal sensory receptors by deletion of the mir-183/96/182 cluster in mouse," *Proc. Natl. Acad. Sci. U. S. A.*, vol. 114, no. 21, E4271–E4280, May 2017.
- [4] L. A. Hoffmann, V. Saravanan, **A. N. Wood**, L. He, and S. J. Sober, "Dopaminergic contributions to vocal learning," *J. Neurosci.*, vol. 36, no. 7, pp. 2176–2189, Feb. 2016.
- [5] B. J. Wiltgen, **A. N. Wood**, and B. Levy, "The cellular mechanisms of memory are modified by experience," *Learn. Mem.*, vol. 18, no. 12, pp. 747–750, Dec. 2011.

Conference Presentations

Alynda Wood, Raveena Chhibber, and Samuel Sober. *Sequence-dependent modulation of neural activity in the songbird basal ganglia*. Society for Neuroscience Annual Meeting (virtual). November 10, 2021 (planned).

Alynda Wood, Lukas Hoffmann, Varun Saravanan, Joyce Li, Amanda Jacob, and Samuel Sober. *Effects of dopamine depletion in the songbird basal ganglia*. Society for Neuroscience Annual Meeting, Chicago, IL, Oct. 20, 2019.

Alynda Wood, Lukas Hoffmann, Varun Saravanan, Amanda Jacob, Connor Gallimore, David Hercules, and Samuel Sober. *Dopaminergic contributions to vocal learning*. Gordon Research Conference: Basal Ganglia, Ventura, CA, Mar. 15, 2018 and Gordon Research Seminar: Basal Ganglia, Ventura, CA, Mar. 11, 2018. (Poster prize winner)

Alynda Wood, Amanda Jacob, Connor Gallimore, David Hercules, and Samuel Sober. *Catecholaminergic input to the Bengalese finch song system*. Society for Neuroscience Annual Meeting, Washington, D.C., November 12, 2017.

Alynda Wood and Samuel Sober. *Catecholaminergic projections to song system nucei in Bengalese finch.* Society for Neuroscience Annual Meeting, Chicago, IL. Oct. 19, 2015

Alynda Wood, Diana Cummings, and Leonardo Belluscio. *Refinement of olfactory bulb circuitry requires complement cascade signaling*. Society for Neuroscience Annual Meeting, San Diego, CA. November 10, 2013.

Research Grants and Fellowships

National Science Foundation Graduate Research Fellowship	2015–2019
Hampshire College Justine Salton Memorial Fund Student Research Grant	2011–2012
Hampshire College Ray and Lorna Coppinger Fund Student Research Grant	2011–2012
Hampshire College Culture, Brain, and Development Program Internship Grant	2011

Honors and Awards

AAAS Catalyzing Advocacy in Science and Engineering Fellow	2019
Emory Neuroscience Director's Award for Extraordinary Leadership	2018
Emory Neuroscience Outreach Award	2018
Emory Grad. Division of Biological & Biomedical Sciences Career Teaching Awa	ord <i>2018</i>
Gordon Research Conference: Basal Ganglia Poster Prize	2018
ARCS Scholar Award	2017–2019
Emory University Division Scholar Award	2014–2019
Hampshire College Ingenuity Award for Student Leadership	2012
Who's Who Among Students in American Community Colleges	2009
Piedmont Virginia Community College President's List	2007 & 2009

Teaching and Outreach

Co-Instructor Emory University, Atlanta, GA
NBB 190 Freshman Seminar Spring 2022

Topic: Motor learning and motor control. Planned for Spring 2022.

Writing Mentor Emory University, Atlanta, GA
Undergraduate Grant Writing Workshop Oct. 2016, 2017, 2018 & 2019

Topic: Writing competitive applications for the National Science Foundation Graduate Research

Fellowship

Guest Lecturer Emory University, Atlanta, GA
IBS 706 Ethical Conduct in Research
Mar. 23, 2018

Topic: Discrimination and harassment in academia

Guest Lecturer Emory University, Atlanta, GA NS 570R Professional Development Jan. 20, 2016 & Jan. 18, 2017

Topic: Science outreach

Guest Lecturer Emory University, Atlanta, GA
HLTH 385 Motor Physiology Oct. 2 & 4, 2017

Topic: Sensorimotor adaptation

Guest Lecturer Hampshire College, Amherst, MA
CS 350 Analysis of Neural Data Apr. 10, 2017

Topic: Using songbirds to study motor control and motor learning

Graduate Teaching Assistant Emory University, Atlanta, GA

IBS 514: Cellular and Molecular Neuroscience Spring 2016

Undergraduate Teaching Assistant

CS 148: Other Minds

Hampshire College, Amherst, MA

Fall 2010

Curriculum Development

Internship Mentor

Emory University, Atlanta, GA

Georgia Intern Fellowships for Teachers Program

Summer 2016

Hosted two local middle school teachers in the lab for a neuroscience research internship and collaboratively develop a week-long neuroscience module for 7th grade biology.

Course Development

Hampshire College, Amherst, MA

Supervisor: Dr. Laura Sizer

Jan. 2011

Re-designed CS 148: Other Minds using faculty and student feedback (independent study project).

PreK-12 Outreach Visits (selected)

Guest Instructor 11th & 12th Grade

North Paulding High School, Dallas, GA

Feb. 27, 2020

Topic: Using songbirds to understand the neural control of skill learning; careers in science

Guest Instructor

Level Creek Elementary School, Suwanee, GA

3rd Grade Class Oct. 27, 2015; Oct. 11, 2016; Nov. 1, 2017, Oct. 17, 2018

Topic: Q&A about brains; touching brain specimens.

Guest Instructor

Atlanta Children's Shelter, Atlanta, GA

Summer Preschool Program

June 17, 2016; July 19, 2017

Topic: Hands-on activities including coloring brain headbands and touching brain specimens.

Talks and Panels

Research Presentations

Speaker (Invited) Emory University, Atlanta, GA

Dopaminergic contributions to learning in songbirds

Feb. 22, 2020

Presented at the American Parkinson's Disease Association Center for Advanced Research at Emory University Workshop

Emory University, Atlanta, GA Speaker

Neural mechanisms of bird song

Feb. 21, 2020

Presented at the Frontiers in Neuroscience Seminar Series

Speaker

Emory University, Atlanta, GA

Neural mechanisms of motor sequencing in songbirds

Jan. 28, 2020

Presented at the Graduate Division of Biological and Biomedical Sciences Student Research Symposium

Speaker (Invited)

Hampshire College, Amherst, MA

Neural mechanisms of skill learning

Apr. 1, 2017

Presented at Neil Fest: Celebrating and Honoring Neil Stillings

Navigating Graduate School......

Discussion Group Leader (Invited) Emory University, Atlanta, GA

Jones Program in Ethics: What Makes a Mentor

Aug. 11, 2020

Panelist (Invited) University of North Georgia, Oconee, GA

Mythbusters: Graduate School Edition

Feb. 20, 2019

Panelist (Invited) **Emory University, Atlanta, GA**

Jones Program in Ethics: Wisdom from Current Students

Aug. 20, 2018

2015-2018

Service

Peer Liaison **Emory University, Atlanta, GA** 2018-2019

Graduates in Neuroscience

Student Representative Emory University, Atlanta, GA

Atlanta Chapter of the Society for Neuroscience

Brain Awareness Co-Coordinator

Volunteer Docent Smithsonian Museum of Natural History, Washington, D.C.

Genome Exhibit 2013-2014

Seminar Series Co-Chair National Institutes of Health, Bethesda, MD

Postbac Committee 2013-2014

Student Representative (appointed) Hampshire College, Amherst, MA

Educational Policy Committee

2011-2012

Student Representative (elected) Hampshire College, Amherst, MA

Board of Trustees Academic Affairs Committee

2010-2011

Student Group Organizer Hampshire College, Amherst, MA

Culture, Brain, and Development Program

2009-2011

Professional Memberships

National Science Policy Network 2020-present

American Association for the Advancement of Science 2014-present

Society for Neuroscience 2014-present