Andrew H. Bahle

abahle@mit.edu
231.631.2158

Massachusetts Institute of Technology
Department of Brain and Cognitive Sciences
43 Vassar Street, Cambridge, MA 02139, USA

EDUCATION

Massachusetts Institute of Technology **2016-present**
PhD Student, Department of Brain and Cognitive Sciences; Supervisor Dr. Michale Fee;
NSF Graduate Research Fellow, MathWorks Science Fellow
Center for Neurobiological Engineering

University College London/Sainsbury Welcome Institute **2019**
Neuropixels Silicon Probe Training Course

Woods Hole Marine Biological Institute **2017**
Methods in Computational Neuroscience

University of Michigan, Ann Arbor **2010-15**
BS, Neuroscience; BMA, Music Performance, Percussion
Thesis: "A Functional Analysis of Circadian Light Input in the Larval Brain of *Drosophila"*

RESEARCH EXPERIENCE

Graduate Student **2016-present**
Massachusetts Institute of Technology; Supervisor: Dr. Michale Fee
In vivo neural recordings and causal manipulations in songbirds, development of unsupervised learning techniques

Fulbright Fellow **2015-16**
Norwegian University of Science and Technology; Supervisors: Dr. Edvard I. Moser and Dr. May-Britt Moser
Extra-cellular recordings of grid cells in rats exploring flat and undulating floors

Research Associate **2013-15**
University of Michigan, Ann Arbor; Supervisor: Dr. Orie T. Shafer
Functional investigation of temperature and light inputs to the circadian clock neural network of *D. melanogaster*

UROP Biomedical Research Fellow **2013**
University of Michigan, Ann Arbor; Supervisor: Dr. Orie T. Shafer
Morphological and pharmacological properties of putative targets of the circadian clock of *Drosophila*

HONORS/AWARDS

MathWorks Science Fellowship **2021**
MathWorks Software Company

Rising Star in Neuroscience **2020**
McGovern Institute for Brain Research

Graduate Research Fellowship **2018**
National Science Foundation

Scholarship for Methods in Computational Neuroscience Course **2017**
Marine Biology Lab, Woods Hole, MA

Presidential Singleton Fellowship **2016**
Massachusetts Institute of Technology

Fulbright Grant **2015**
U.S. Department of State

High Honors in Neuroscience **2015**
University of Michigan Honors Program

Summer Undergraduate Research Fellowship **2014, 15**
Department of Molecular and Cellular and Developmental Biology, University of Michigan

UROP Fellowship in Biomedical and Life Sciences **2013**
University of Michigan

Presidential Scholar in the Arts Finalist **2010**
U.S. Department of Education

TEACHING

Teaching Assistant **2017, 2018, 2019**
Massachusetts Institute of Technology,
9.40 Introduction to Neural Computation

SKILLS

Programming and Software: MATLAB, Python, LaTeX, Adobe Illustrator, OnShape/Fusion360
Languages: Norwegian (C1 proficiency)

PUBLICATIONS

Mackevicius, E.L.,* **Bahle, A.H.**, * Williams, A.H., Gu, S., Denissenko, N.I., Goldman, M.S., Fee, M.S., (2018) Unsupervised discovery of temporal sequences in high-dimensional datasets, with applications to neuroscience. Elife

Yadlapalli, S., Chang, J., **Bahle, A.H**., Reddy, P.S., Meyhofer, E., Shafer, O.T. (2018) The Circadian Clock Constantly monitors Environmental Temperature to Set Sleep Timing. Nature 555, 98-102

Schlichting, M., Menegazzi, P., Lelito, K.R., Zepeng, Y., Buhl, E., Benetta, E., **Bahle, A.H**., Denike, J., Hodge, J., Helfrich-Förster, C., Shafer, O.T. (2016) A Neural Network Underlying Circadian Entrainment and Photoperiodic Adjustment of Sleep and Activity in *Drosophila*. *J. Neuroscience* 36(35), 9084-9096

Collins, B., Kaplan, H.S., Cavey, M., Lelito, K.R., **Bahle, A.H.**, Zhonghua, Z., Macara, A., Roman, G., Shafer, O.T., Blau, J. (2014) Differentially Timed Extracellular Signals Synchronize Pacemaker Neuron Clocks. *PLOS Biology* 12(9): e1001959.

INVITED/SELCTED TALKS

COSYNE main meeting, selected talk **2023**
Institute Seminar, Max Planck Institute for Biological Intelligence **2022**
Janelia Junior Scientist Workshop on Mechanistic Cognitive Neuroscience **2022**
Department of Veterinary Medicine Seminar Series, MIT **2021**
Brain and Cognitive Sciences Interview Day talks, MIT **2021**
Computational Neuroscience Tutorial Department of Brain and Cognitive Sciences, MIT **2018**