## **CURRICULUM VITAE**

Cameron Wilhite August 2025

Ph.D. Candidate
Neuroscience Graduate Program
University of California, San Francisco
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#### **EDUCATION**

2019 - Present

University of California San Francisco, San Francisco, CA

Advisor: Massimo Scanziani

**Ph.D., Neuroscience** (GPA 4.0)

Neuronal dynamics in the superior colliculus during navigation

2018 University of Arizona, Tucson, AZ

M.S., Physiological Sciences (GPA 4.0) Advisors: Stephen Cowen and Russell Witte

Acoustoelectric and electrophysiological mapping of cardiac and neural activity

2014 University of Arizona, Tucson, AZ

B.S., Physiology (GPA 4.0)

# **EMPLOYMENT**

2018 – 2019 University of Arizona, Tucson, AZ

Research Specialist, Medical Imaging Advisor: Russell Witte

Experimental Ultrasound and Neural Imaging Laboratory

Summer 2017 University of Arizona, Tucson, AZ

Graduate Research Assistant, Medical Imaging Advisor: Russell Witte

Experimental Ultrasound and Neural Imaging Laboratory

2016 – 2018 University of Arizona, Tucson, AZ

Graduate Teaching Assistant, Physiology

### **HONORS AND AWARDS**

Graduate Student Award, Memory, Space, and Time Workshop, Tucson, AZ. November 2022

Discovery Fellow, UCSF Graduate Division, 2021-2024

NIH Training Grant Award (T32), UCSF Neuroscience Graduate Program, 2020-2021

Infinity Trainee Award, NIH BRAIN Initiative Investigators Meeting, Rockville, MD. April 2018.

#### **SCHOLARSHIP**

# Manuscripts

- Wilhite C., Frank LM., Scanziani M., "Engagement of the superior colliculus during overt and covert orienting dynamics," in preparation.
- Alvarez A., Preston C., Trujillo T., Wilhite C., Burton A., Vohnout S., and Witte RS., "In vivo acoustoelectric imaging for high-resolution visualization of cardiac electric spatiotemporal dynamics," Appl. Opt. 59, 11292-11300, 2020.

#### **Conference Presentations**

- Wilhite C., Frank LM., Scanziani M. "Coordination between nonlocal hippocampal representations and the collicular orienting system," Society for Neuroscience Meeting, October 2024.
- Wilhite C., Frank LM., Scanziani M. "A locomotor rhythm organizes directional firing of neurons in the superior colliculus," Society for Neuroscience Meeting, October 2023 / HHMI Science Meeting, December 2023.
- Wilhite C., Senzai Y., Scanziani M. "Poor spatial representation in primary visual cortex in the absence of visual input," Society for Neuroscience Meeting, November 2021.
- Wilhite C., Witte RS., Cowen SL. "Parallel signal transfer through hippocampal CA2 region following perforant-path stimulation and internally generated dentate spikes," Society for Neuroscience Meeting, October 2019.
- Wilhite C., Alvarez A., Burton A., Preston C., Gothard KM., Fuglevand AJ., Mustacich D., Cowen SL., Witte RS. "*In vivo* swine model for developing and validating acoustoelectric brain imaging of neuronal current," BRAIN Initiative Investigators Meeting, April 2019.
- Wilhite C., Witte RS., Cowen SL. "Peak activation of the CA2 sub-region of the hippocampus precedes peak activation of CA3 following perforant-path stimulation," Society for Neuroscience Meeting, November 2018.
- Wilhite C., Burton A., Hill D., Bera T., Ingram P., Cowen SL., Witte RS. "Acoustoelectric brain imaging in anesthetized rats: towards noninvasive, real-time 4D electrical brain mapping," BRAIN Initiative Investigators Meeting, Rockville, MD. April 2018.

#### **Departmental Talks**

- "A locomotor rhythm in the superior colliculus phases hippocampal theta sweeps," Research in Progress Seminar, University of California San Francisco, San Francisco, CA. March 2024.
- "A locomotor rhythm organizes turn-selective firing of neurons in the superior colliculus," Research in Progress Seminar, University of California San Francisco, San Francisco, CA. February 2023.

"Re-examining memory circuits: Role of hippocampal CA2 region in the initial processing of cortical input," Neuroscience Data Blitz, University of Arizona, Tucson, AZ. April 2019.

"Acoustoelectric brain imaging in the rat hippocampus: towards noninvasive, real-time electrical brain mapping," Physiological Sciences, University of Arizona, Tucson, AZ. May 2018.

## **TEACHING EXPERIENCE**

2021

University of California San Francisco, San Francisco, CA

Cell Physiology (TA)

2016 – 2018

Human Anatomy and Physiology (TA)

University of Arizona, Tucson, AZ