

Postdoctoral position: The role of hearing loss in cognitive impairment and Alzheimer's disease pathology

A full-time post-doctoral position is available in the Coleman Memorial Laboratory of at the University of California, San Francisco. The appointment is funded by a newly awarded NIH R01 grant to study potential contributions of hearing loss to cognitive impairment using a mouse model of Alzheimer's disease. The project combines large-scale *in vivo* physiology, brain-wide histological analysis, behavioral training, and computational techniques. The principal investigator for the project is Dr. James Bigelow, with co-investigators Drs. Andrea Hasenstaub and Christoph Kirst. To apply, please send a CV and brief statement of interest to james.bigelow@ucsf.edu. Applications will be considered on a rolling basis.

Minimum qualifications:

- PhD in neuroscience, physiology, cell biology, biomedical engineering, or related field.
- Strong written and oral communication skills demonstrated by peer-reviewed publications and conference presentations.
- Interest and ability to compete for extramural funding.

Preference will be given to candidates with experience in one or more of the following areas:

- *In vivo* physiology, especially acute and/or chronic recordings using multichannel electrode arrays (e.g., Neuropixels). Specific experience within the auditory cortex or hippocampal complex is desirable.
- Histological techniques, especially tissue clearing and brain-wide histological analysis using iDISCO or related pipelines.
- Behavioral assessment in Alzheimer's model mice (e.g., spatial learning and memory)
- Hearing assessment via auditory brainstem response measurements.
- Computational techniques for assessing functional interaction among neurons within and between brain regions (e.g., Granger causality, ensemble detection).
- Analyzing large, complex datasets using MATLAB or Python.