Available Positions

Senior Postdoc/Specialist in Bioinformatics/Computational Biology to study selective vulnerability in human neurodegenerative diseases

Job Summary

We are seeking an innovative Bioinformatician who will be integral in a multidisciplinary effort to identify markers of selective vulnerability in neurodegenerative diseases, with the goal of developing effective therapeutic strategies.

The ideal candidate has a strong background in bioinformatics, computer science or software engineering, as well as general experience in the life sciences. Working with neuropathologists, neurologists, and neuroscientists, they will help design and implement analyses of high dimensional data (e.g., single-cell RNA sequencing, genotype or WGS data, proteomics, etc.) from human brain tissue, utilizing bioinformatics tools and databases to reach biologically meaningful insights. Successful candidates should be scientifically motivated self-starters, comfortable working in a highly productive academic environment, and keen on modeling biological processes using rich datasets.

This position presents an outstanding training experience for a computational/bioinformatics scientist seeking to break into dementia, Alzheimer’s disease, and the larger neurodegenerative disease field. Neurodegenerative conditions, including Alzheimer’s disease and frontotemporal lobar degeneration selectively target specific neuronal subpopulations, making identification of molecular signatures of these vulnerable populations imperative for achieving effective treatment.

The candidate will work with a multidisciplinary team as part of the Weill Neurohub, which brings together world-class researchers and clinicians at three premier West Coast research institutions to speed the development of new treatments for neurological and psychiatric diseases. The primary appointment will be with the Memory and Aging Center at UCSF at the Grinberg (https://grinberglab.ucsf.edu/) and Seeley (https://seeleylab.ucsf.edu/lab) Labs.

Required qualifications

MS or PhD in Bioinformatics, Computational Biology, Computer Science, Mathematics, Statistics or a related field. 3+ years of postdoc experience. Strong experience with pipeline development, bioinformatics tools, data management, and demonstrated competence in programming languages such as R or Python for bioinformatics analyses. Experience with cloud-based storage and service tools.

Applications will be reviewed on an ongoing basis until the position is filled. Please direct
Postdoctoral fellow in neurodegenerative disease

Job Summary
The fellow will pursue a series of related experiments regarding selective neuronal vulnerability in frontotemporal dementia, Alzheimer’s disease, and related disorders. The fellow will obtain advanced training in neuroanatomy, neurohistology, quantitative human neuropathology, and gene and protein expression profiling to facilitate experiments geared toward understanding what makes specific sets of neurons vulnerable to disease. The environment will further provide opportunities to pursue correlations between brain pathology and antemortem clinical or imaging findings.

Required qualifications
PhD in neuroscience and a career interest in neurodegenerative disease. Preference will be given to applicants with prior training in mammalian anatomy and histology and a capacity to blend neuroanatomy with molecular biological approaches, but all interested applicants are encouraged to apply.

Applications will be reviewed on an ongoing basis until the position is filled. Please direct inquiries to Dr. Seeley by sending a letter of interest, CV, and at least 3 references to wseeley@memory.ucsf.edu.

Postdoctoral fellow in clinical neuroimaging

Job Summary
The fellow will conduct human neuroimaging research on normal brain organization and changes in network architecture among patients with neurodegenerative disease. Current imaging techniques include voxel-based morphometry and functional MRI, with an emphasis on intrinsic functional connectivity network mapping (also referred to as resting-state fMRI). The fellow will combine these techniques with diffusion tensor imaging and autonomic physiology recordings. The ideal candidate will have an interest in frontal systems, neuroanatomy, fMRI methods/biomarker development, or a combination. The fellow will contribute to ongoing experiments and pursue self-directed projects within the lab’s area of investigation.

Required Qualifications
Appropriate areas of doctoral training include but are not limited to neuroscience, bioengineering, applied mathematics, or computer science. Strong computational skills, including script writing or programming, are required.
Applications will be reviewed on an ongoing basis until the position is filled. Please direct inquiries to Dr. Seeley by sending a letter of interest, CV, and at least 3 references to wseeley@memory.ucsf.edu [5].