Postdoctoral Fellow – Protein Aggregation and Neurodegenerative Disease

A postdoctoral position is available to study prion-induced neurotoxicity and protein aggregate spread using iPSC-derived human neurons and primary mouse neurons as well as prion-infected mouse models and biochemistry techniques. The prion protein is GPI-anchored and glycosylated in the outer leaflet of the plasma membrane, is abundant in lipid rafts, and binds aggregated prion protein as well as amyloid-β and α-synuclein aggregates. We are investigating the molecular basis for neuronal degeneration and astrogliosis as well as how prions spread from cell-to-cell, with a goal of developing novel therapeutic strategies. Candidates should have a PhD and research experience in neuroscience, cell biology, biochemistry, and/or molecular biology, and a strong interest in protein misfolding diseases.

Projects include understanding the mechanisms of prion spread between cells and through the glymphatic pathways, selective neuronal vulnerability in prion disease, mechanisms underlying spongiform change, and neurotoxicity. Our team is highly interactive with other teams across UCSD and on the La Jolla Mesa. Additional information can be found at http://sigurdsonlab.ucsd.edu.

The University of California, San Diego is located on the La Jolla Mesa in close proximity to The Scripps Research Institute, the Salk Institute, and the Sanford Burnham Prebys Medical Discovery Institute Research and provides a highly stimulating research environment.

Please send curriculum vitae and contact information for three references to: Christina Sigurdson, D.V.M., Ph.D., Dept. of Pathology, UCSD, 9500 Gilman Drive, La Jolla, CA 92093-0612; e-mail: csigurdson@ucsd.edu.