



October-December 2016



Seattle Institute for Biomedical and Clinical Research Spotlight Feature

BRIAN KRAEMER, PHD



Brian Kraemer, PhD, has a joint appointment as acting Associate Director for Research in the Geriatrics Research Education and Clinical Center at VA Puget Sound, and as Research Associate Professor in the Departments of Medicine, Psychiatry, and Pathology at the University of Washington.

Dr. Kraemer's research group investigates the molecular causes of neurodegeneration in Alzheimer's disease, amyotrophic lateral sclerosis (ALS), and related disorders of the nervous system. His lab develops *C. elegans* and mouse models for the tau pathology seen in Alzheimer's disease and for the TDP-43 pathology seen in ALS. Recent work has utilized CRISPR/Cas9 genome engineering technology to develop new disease models and test hypotheses about molecular disease mechanisms in *C. elegans*, human cells, and mice. Ongoing investigation in the Kraemer lab focuses on identifying new strategies for intervening at the molecular level early in the neurodegenerative process.

Research in Dr. Kraemer's lab is currently funded by: a VA BLR&D Merit Review grant, "Identifying new tau targeted therapeutics: a drug repurposing approach," a National Institute on Aging R21 entitled "Unfolded protein response activation protects neurons against pathological tau," a BrightFocus Foundation investigator-initiated grant, "Dopamine signaling controls pathological tau," a Department of Defense ALS research program Therapeutic Idea Award entitled "Treating ALS by targeting pathological TDP-43," and a National Institute of Neurological Disorders & Stroke R01 grant entitled "Developing Neuroprotective Strategies for Proteinopathy: A Comparative Modeling Approach."

Dr. Kraemer's administrative service to VA Puget Sound involves acting as a voting member of the Research & Development committee and as Chair of the recombinant DNA use sub-committee. He also serves as a voting member on both the space utilization and radiation safety sub-committees, which govern laboratory space assignments and research use of radioactive materials. In addition to these regulatory duties, Dr. Kraemer, in partnership with Elaine Peskind, leads the Alzheimer's Disease Training Program an NIH funded T32 grant focused on training the next generation of Alzheimer's disease research scientists.

MARK YOUR CALENDARS!

We are pleased to announce the following speakers for upcoming R&D Seminars to be held in Building 1, Room 240 from Noon – 1 PM:

- **October 6th - Jeffrey Iliff, PhD**, Assistant Professor, Oregon Health Science University, Department of Anesthesiology & Perioperative Medicine, "Perivascular pathways in the mouse and human: evaluating glymphatic function in aging and post-traumatic brain"
- **November 15th - William Grady, MD**, Professor, Department of Medicine/Gastroenterology, University of Washington; Member, Fred Hutchinson Cancer Research Center
- **December 8th - David Cummings, MD**, Professor, Department of Medicine/Metabolism, Endocrinology & Nutrition, University of Washington

CLINICAL RESEARCH UNIT (CRU)

A new VA clinical research facility is in construction and is scheduled to be completed in 2018. The new space will cover approximately 5,600 square feet and comprise one entire floor dedicated to clinical research activities. The CRU is staffed by a registered nurse and a research associate who may be reached at 206-277-4681 or by email at Susan.Bigda@va.gov. The unit is currently located on the first floor of Building 1 in Rooms 117-127. More information can be found on the SIBCR website: <http://www.sibcr.org/clinical-research-unit.html>.