University of Houston - Biomedical Engineering Seminar

Friday, October 29, 2021, 12 noon

In Person 105 SEC or

Via Zoom: https://uh-edu-cougarnet.zoom.us/j/93512038041

Neuromodulation Therapies:
Lessons from a Career in Clinical Translation

Kip Ludwig, PhD

Abstract

In this seminar, Dr. Kip Ludwig will discuss his practical experiences translating implantable devices to stimulate the nervous system – commonly known as neuromodulation, bioelectronic medicine or electroceutical practice – into clinical practice. From his experiences spanning industry as well as running NIH translational devices programs, he will outline key concepts often overlooked in academia that are critical in designing a neuromodulation device for market. He will also discuss his efforts leading the Wisconsin Institute for Translational Neuroengineering to create a multifaceted research environment to accelerate the path for neuromodulation devices from basic science discovery to regulatory approval and sustainable market.

Biosketch

Dr. Ludwig is an Associate Professor of Biomedical Engineering and Neurological Surgery at Wisconsin. The primary focus of his lab is developing next-generation neuromodulation therapies that use minimally invasive strategies to hack the nervous system to treat circuit dysfunction and deliver biomolecules to target areas with unprecedented precision. Dr. Ludwig served as the Program Director for Neural Engineering at NIH. He led the NIH BRAIN Initiative programs to catalyze implantable devices to stimulate and/or record from the central nervous system, and developed the ~250 million dollar S.P.A.R.C. Program to stimulate advances in neuromodulation therapies for organ systems. Dr. Ludwig connects his academic research to the neuromodulation industry and clinical translation through multiple consulting and advisory roles. He is Chair of the NeuroOne Scientific Advisory Board on Artificial Intelligence, is a member of the Scientific Advisory Board for Abbott, Battelle, Blackfynn, Cala Health and the National Center for Adaptive Neurotechnologies, and is a co-founder of Neuronoff, Inc. Dr. Ludwig is also a paid consultant for Galvani Bioelectronics and Boston Scientific.