

## Multiple Postdoctoral Positions in Computational Neuroscience Available at Boston University, and beyond.

Three, NIH-supported postdoctoral positions in computational neuroscience are available immediately at Boston University in the labs of Uri Eden and Mark Kramer. The positions center on two projects:

**Project:** *Measure, model, and modulate cross-frequency coupling.*

**Team:** An interdisciplinary team of researchers at BU (Mark Kramer and Uri Eden) and the University of Minnesota (Alik Widge).

**Goals:** (i) Develop new statistical modeling methods to assess cross-frequency coupling (CFC) in real-time, and deploy these tools in *in vivo* animal experiments. (ii) Develop simple, biophysical models to identify candidate mechanisms of CFC.

**Project:** *Assess human seizure dynamics across spatial and temporal scales.*

**Team:** An interdisciplinary team of researchers at BU (Mark Kramer and Uri Eden) Harvard/MGH (Sydney Cash), and Columbia University (Catherine Schevon).

**Goals:** (i) Analyze human seizure activity in a unique data set, consisting of invasive brain voltage recordings across spatial scales - from single units to large brain areas, and temporal scales - from high-frequency oscillations to slow brain rhythms. (ii) Build biophysical models to probe how human seizures start, propagate, and stop.

For either project, the successful candidate will have a strong background in statistics and computer programming; experience in interdisciplinary neuroscience research and biophysical modeling is preferred, although not essential.

The positions are based at Boston University in the labs of Uri Eden and Mark Kramer. Both projects are highly interdisciplinary and will involve frequent and extensive interactions with neuroscientists at UMN (Alik Widge), or clinicians at Harvard/MGH (Sydney Cash) and Columbia University (Catherine Schevon).

To apply, or for more information about the position, please send an email to Mark Kramer ([mak@math.bu.edu](mailto:mak@math.bu.edu)). Please include an updated CV, names and contact information of three references, and a brief statement of your interest in the position and relevant qualifications.

Boston University offers a vibrant community of statistical, mathematical, and neuroscience faculty and students, and many opportunities for collaboration within and outside the University.