Staff Scientist in advanced EEG-fMRI multimodal brain neuroimaging.

**Position:** A full-time Staff Scientist position is available in the LIBR MRI-EEG facility to a researcher who wants to engage in state-of-the-art, multi-modal brain neuroimaging research and in the application and development of novel, advanced neuroimaging methods and data analytic strategies and their application to the study of major psychiatric disorders. Projects will include: 1) development and implementation of novel real-time multimodal EEG and fMRI techniques including neurofeedback, hyperscanning, real-time processing of multimodal-data, and data fusion analyses; 2) development and implementation of quantitative MRI and fMRI protocols and techniques such as brain perfusion measurements, and measurements of MRI relaxation times (T1/T2); 3) development and implementation of techniques for analyzing large and complex data sets involving data from multiple sources (e.g., structural MRI, fMRI, DTI, EEG, genetic data, bio- and behavioral data). As a Staff Scientist you will be responsible for supporting the LIBR MRI-EEG facility daily operations and ongoing clinical neuroimaging research, and for assisting the LIBR faculty with their scientific needs.

The position offers excellent opportunities in all aspects of state-of-the-art MRI/fMRI/EEG technologies, clinical applications, and data analysis in a dynamic, interactive, and multidisciplinary research environment with a diverse team of researchers that includes physicists, psychiatrists, psychologists, and neuroscientists.

**Institute:** Located in Tulsa, Oklahoma (USA), LIBR is a privately funded non-profit clinical neuroscience research institute with the mission of reducing the suffering of psychiatric patients by leveraging leading talent and technology to discover novel therapies. The institute is attached to a major regional psychiatric hospital (Laureate Psychiatric Clinic & Hospital). The institute houses a state-of-the-art neuroimaging research environment. The equipment consists of two research-dedicated and customized 3-Tesla GE MRI scanners (MR750), each equipped with the high-density 128-channel Brain Products MRI-compatible EEG system and a wide selection of receive-only coil arrays for imaging the human brain and spinal cord. LIBR is a leader in advanced real-time fMRI, simultaneous EEG-fMRI, EEG-fMRI neurofeedback, hyperscanning methods development, and clinical fMRI brain research. In addition, LIBR has accumulated a large multimodal neuroimaging dataset which includes thousands of patients and healthy subjects with detailed EEG-fMRI, clinical and bio- and behavioral assessments available for data discovery and novel data analytics development.

**Qualifications/Requirements:** Ph.D. in physics, engineering, neuroscience, or a relevant field is required. A successful applicant will be expected to actively contribute to ongoing real-time EEG and fMRI methods development, conduct experiments, contribute his or her own ideas and proposals, help develop research protocols, analyze large datasets with hundreds of subjects, write manuscripts for publication in peer-reviewed journals, and present findings at scientific meetings. Applicants should have a solid foundation in fMRI and/or EEG methods and data analysis, statistics, and capability of computer programming. Expertise with Matlab, Python/Perl/C, UNIX/Linux environments, and stimulus presentation software is preferred.

**Salary/Benefits:** This is a full-time research position with multiple years of funding. Salary will be commensurate with the experience of the candidate. A full benefits package is available.

**How to apply:** Interested candidates should email a CV, a brief statement of long-term career goals, and contact information for 3 references to:

Attn: Jerzy Bodurka, Ph.D., Chief Technology Officer, Director MRI-EEG Facility
Laureate Institute for Brain Research, 6655 S. Yale Ave., Tulsa, OK 74136
Email: jboburka@laureateinstitute.org