There is an immediate opening for a postdoctoral researcher to work on two projects. The first and predominant effort is to apply machine-learning methods to fMRI data in real time in a project to test a new scheme to treat post-traumatic stress disorder (PTSD) using immersive virtual reality within a MRI scanner. fMRI brain data obtained from PTSD patients in the scanner will be analyzed to provide feedback to inform coping strategies. Results are expected to enable more effective treatment of PTSD, and improve our understanding of the mechanisms that create PTSD. A second project concerns the mechanisms of neurovascular coupling within the brain, the physiological basis of fMRI signals. More experienced applicants will be considered at the Instructor level, a junior faculty position. The position is for one year, extendable to 3 years with strong performance and the availability of funding. Other projects in the lab include studies of visual function in cerebral cortex and sub-cortical brain regions using high-resolution fMRI methods. The laboratory has extensive access to the Core for Advanced MRI at Baylor College of Medicine, which features two Siemens 3T human MRI scanners, a 32-channel Trio, and a 64-channel Prisma.

**Required qualifications**
- Ph.D. in Engineering, Physics, Computer Science, Neuroscience, or equivalent
- ≥3 years experience in image- or signal-processing methods
- ≥5 years computer-programming experience

**Desired qualifications**
- Experience in machine-learning methods such as support-vector machines and neural networks
- Experience in MRI
- Experience in Matlab and Python
- Strong background in neuroscience

To apply link to: [https://chk.tbe.taleo.net/chk01/ats/careers/requisition.jsp?org=BCM&cws=42&rid=13921](https://chk.tbe.taleo.net/chk01/ats/careers/requisition.jsp?org=BCM&cws=42&rid=13921)

Applicants should submit a cover letter with a statement of research interests, a CV, and a list of at least 3 references. Baylor College of Medicine is an Equal Opportunity/Affirmative Action/Equal Access Employer.