

Non- and minimally-invasive diffuse optical tissue monitoring

A postdoctoral position is available in the laboratory of David R. Busch, Ph. D. in the Departments of Anesthesiology and Pain Management & Neurology and Neurotherapeutics at UT Southwestern Medical Center. This laboratory, new to UTSW, focuses upon development and translation of diffuse optical and correlation spectroscopic instrumentation to monitor the central nervous system.

Candidates must hold a PhD in physics, biomedical engineering, bioengineering, or a similar field.

A solid record of publication is required to demonstrate writing and technical expertise. Candidates with experience in development of fiber optic probes, diffuse optics (DCS/DOT/DOS), tissue optics, and clinical translation are preferred. Previous work in an operating theater or intensive care unit is helpful.

The fellow will be focused on translation of diffuse optics into the surgical and critical care setting. This work is performed in close collaboration with enthusiastic clinical collaborators. Current projects include non-invasive monitoring of cerebral hemodynamics during extracorporeal membrane oxygenation (Prof. Lakshmi Raman, Children's Medical Center, PI: Busch, Hartwell Foundation) and minimally invasive monitoring of the spinal cord in animal models (Prof. Thomas Floyd, UTSW, PI: Floyd, NIH U01). The fellow will be expected and encouraged to develop new lines of research, collecting pilot data for their future independent research careers, within the general themes of the lab.

This lab and our collaborators are committed to the professional development of the members, making this position a valuable preparation for those interested in academic, industrial or entrepreneurial careers. The position has no mandatory teaching or administrative duties.

Initial appointment is for 12 months with the possibility of renewal. Compensation will be commensurate with experience and includes competitive benefits.

Interested individuals should send a CV, statement of interests, expected date of availability, and a list of three references to:

David R. Busch, Ph. D.
UT Southwestern Medical Center
5323 Harry Hines Blvd.
Dallas, TX 75390-9068
david.busch@utsouthwestern.edu
<https://www.utsouthwestern.org/david-r-busch/>

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