UT Southwestern Medical Center

Postdoctoral fellowship: Non- and minimally-invasive diffuse optical tissue monitoring

A postdoctoral training position is available in the laboratory of David Busch in Anesthesiology and Pain Management, Neurology, and Biomedical Engineering at UT Southwestern Medical Center. This laboratory focuses upon development and translation of diffuse optical and correlation spectroscopic instrumentation to monitor the central nervous system.

Candidates must hold a recent Ph.D. and/or M.D. degree, preferably 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, speckle flowmetry techniques), 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, NIH R01), microvascular dysfunction associated with COVID-19, (PI: Busch, NIH R21), and minimally invasive monitoring of the CNS in large animal models (Prof. Thomas Floyd, UTSW, PI: Floyd, NIH U01; UG3/UH3). Fellows 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 in preparation for academic, industrial, or entrepreneurial careers. The position has no mandatory teaching or administrative duties. Information on our postdoctoral training program, benefits, and a virtual tour can be found at http://www.utsouthwestern.edu/postdocs.

Interested individuals should send a CV, statement of interests, 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.utswanesthesia.org/david-r-busch/
Busch Lab | UT Southwestern, Dallas, Texas
David Busch, Ph.D. - Faculty Profile - UT Southwestern

UT Southwestern Medical Center is committed to an educational and working environment that provides equal opportunity to all members of the University community. As an equal opportunity employer, UT Southwestern prohibits unlawful discrimination, including discrimination on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, citizenship status, or veteran status. To learn more, please visit: https://jobs.utsouthwestern.edu/why-work-here/diversity-inclusion.