

## SCHOOL OF MEDICINE

## **AI-Empowered MRI for Microstructural Brain Imaging**

We are seeking a highly motivated individuals interested in contributing to the development and applications of advanced AI-Powered MRI techniques and biophysical models of brain tissue microstructure and functioning.

Candidate should hold a PhD in Physics, Biomedical Engineering, Neuroscience, or similar programs. Required experiences include MRI, computer programming languages such as MATLAB, Python or C/C++. Familiarities with machine learning and Siemens MRI sequence programming are desirable.

In this position you will:

- Play a key role in refining and utilizing our AI-Powered advanced MRI methods to study human brain genetic and cellular microstructure and functioning.
- Contribute to ongoing multi-disciplinary research on Alzheimer's disease, multiple sclerosis, and other CNS conditions.

The work will involve image acquisition at clinical MRI scanners, post-processing and analysis of imaging data using previously developed programs and developing innovative AI-Powered approaches for data analysis and MRI acquisition techniques.

The candidate should be self-motivated, enthusiastic, and able to work independently and in a collaborative environment of multi-disciplinary group of experts including MRI physicists, computer scientists, radiologists, neuroscientists, and clinicians at the Washington University School of Medicine.

Our lab has access to 7T human MRI scanner, several human 3T MRI scanners, 3T human PET-MR scanner and preclinical MRI and PET facility.

This NIH-funded position offers opportunities for learning from experts in different research areas and pursue further career in academia and industry.

Interested candidates should e-mail their CV and a list of three references to:

Dmitriy A. Yablonskiy, PhD
Professor of Radiology and Biomedical Engineering
Mallinckrodt Institute of Radiology
Washington University School of Medicine
4525 Scott Ave, Room 3216
St. Louis, MO 63110

e-mail: YablonskiyD@wustl.edu

Further information about our work and publications can be found at:

<u>Dmitriy A. Yablonskiy - Mallinckrodt Institute of Radiology - Washington University School of Medicine in St. Louis (wustl.edu)</u>