Staff Scientist or Postdoctoral Fellow in Pulmonary MRI

The Center for Pulmonary Imaging Research at Cincinnati Children’s Hospital Medical Center seeks to fill multiple positions at the level of postdoctoral fellow and/or permanent staff scientist. The selected candidates will work with a multidisciplinary team of engineers, physicians, and scientists to quantify lung structure and function in mouse models and/or human subjects using ultra-short echo-time (UTE), hyperpolarized $^{129}$Xe, and related MRI techniques. Research will involve developing pulse sequences and image analysis methods to study a variety of diseases, with currently funded projects focused on Idiopathic Pulmonary Fibrosis (IPF), Cystic Fibrosis and cross-validation of imaging and proteomic biomarkers of disease severity. However, significant flexibility exists for the candidates to pursue their own research interests in MR physics and preclinical, pediatric, or adult imaging.

Research instrumentation includes 7T horizontal bore and 9.4 T vertical bore preclinical (Bruker) scanners, a custom-built 22-cm bore 1.5T neonatal scanner, a 1.5T human scanner, and three 3T scanners (Philips). We also have access to clinical MRI equipment for in-patient research, state-of-the-art NMR Metabolomics and Confocal Microscopy Cores, and a world-class MR engineering laboratory to design and fabricate RF coils and related hardware.

Candidates with strong backgrounds in magnetic resonance and PhDs in science or engineering are encouraged to apply. Successful staff scientist applicants will likely have previous postdoctoral or work experience in academia or industry. Ideal candidates will possess expertise in one or more of the following: non-Cartesian MRI (radial, spiral, etc.), scientific computing (MATLAB, C++, python, etc.), hardware design, \textit{in vivo} spectroscopy, or hyperpolarized media MR. The position start date is anticipated in autumn or winter of 2021, but significant flexibility exists for the right candidates.

To apply, provide the following materials via email: cover letter stating research experience and interests, curriculum vitae, contact information of 3 references, and reprints of up to 3 peer-reviewed publications. Correspondence and inquiries should be sent to: Zackary I. Cleveland, Ph.D. Associate Professor of Radiology, Pulmonary Medicine, Pediatrics, and Biomedical Engineering at: zackary.cleveland@cchmc.org. (https://www.cincinnatichildrens.org/bio/c/zackary-cleveland)

Cincinnati Children’s Research Foundation

CCHMC is a premier pediatric research institution with over 900 diverse and productive faculty members that consistently ranks #2 or 3 on the US News list of top Pediatric Hospitals, and with the Pulmonary Division recently ranked #1. Career mentoring, compensation for moving expenses, and support for international staff are a few of the features that set our institution apart. Cincinnati Children’s is a respected part of the broader and vibrant Cincinnati community, which includes a thriving arts scene, affordable housing, numerous music and food festivals, college and professional sports teams, and opportunities for a wide range of outdoor activities. Universal COVID-19 vaccination will be required for all faculty, staff, students, and volunteers beginning Oct. 1, 2021.