

## Staff Scientist / Research Associate in Pulmonary MRI

The Center for Pulmonary Imaging Research (<https://cpir.cchmc.org>) at Cincinnati Children's Hospital Medical Center seeks to hire a permanent Staff Scientist / Research Associate in the area of MRI relevant to lung disease. The selected candidate will work with a multidisciplinary team of engineers, physicians, and scientists to quantify lung structure and function in mouse models and human subjects using ultra-short echo-time (UTE) and hyperpolarized  $^{129}\text{Xe}$  MRI. Research involves developing pulse sequences and image analysis methods to study a variety of diseases, with currently funded projects focusing on Cystic Fibrosis and Idiopathic Pulmonary Fibrosis (IPF). However significant flexibility exists for the candidate to pursue his or her own research interests in MR physics and preclinical, neonatal, pediatric, and 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 Philips human scanner, and three 3T Philips scanners. 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 capable of designing and fabricating a wide range of RF coils and related hardware.

Candidates with strong backgrounds in MRI—including pulse sequence development and—a PhD in science or engineering, and relevant postdoctoral experience are encouraged to apply. M.S. candidates with substantial work experience may also be considered. Ideal candidates will also possess expertise in one or more of the following: preclinical imaging, non-Cartesian MRI (radial, spiral, etc.), scientific computing (MATLAB, C++, python, etc.), hardware design, *in vivo* spectroscopy, or hyperpolarized media. The position start date is anticipated in summer of 2021, but flexibility exists for the right candidate.

To apply, provide the following materials: 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  
Radiology, Pulmonary Medicine, Pediatrics, and Biomedical Engineering at:  
[zackary.cleveland@cchmc.org](mailto: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 only 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.

