

Postdoctoral Fellow and Ph.D. Student Positions in Pulmonary MRI

The Center for Pulmonary Imaging Research (CPIR) at Cincinnati Children's Hospital anticipates hiring multiple Postdoctoral Fellows and/or Ph.D. students in MR imaging research. Selected candidates will work with a multidisciplinary team of engineers, pulmonologists, and imaging scientists to quantify lung structure and function using ultra-short echo-time (UTE) ^1H and hyperpolarized ^{129}Xe MRI in preclinical mouse models of lung disease, as well as in clinical studies of children and adults.

Our research focuses on MR sequence development, lung development, and structure-function relationships in a variety of diseases including asthma, cystic fibrosis, interstitial lung disease, and neonatal lung disorders. Research-dedicated instrumentation includes 9.4T and 7T Bruker preclinical scanners, a 1.5T and three 3T Philips clinical scanners, a unique 22-cm bore 1.5T neonatal scanner, as well as three ^{129}Xe polarizers. We also have access to a world-class and fully staffed engineering laboratory, capable of designing and fabricating a wide range of RF coils and related MR hardware.

Postdoctoral applicants with training in magnetic resonance—EPR, NMR or MRI—and a PhD in a relevant discipline (e.g., engineering, physics, medical physics, or chemistry) are encouraged to apply. While all candidate with strong MR backgrounds will be considered, ideal candidates will possess expertise in one or more of the following: pulse programming, image reconstruction/analysis, scientific computing (MATLAB, C++, etc.), hardware design, *in vivo* imaging/spectroscopy, or hyperpolarized media. To apply, provide the following materials: cover letter stating research experience and interests, curriculum vitae, contact information of 3 references, and reprints of 2-3 peer-reviewed publications.

Student applicants must have an undergraduate or master's degree in science or engineering and provide a cover letter, curriculum vitae, and contact information of 3 references. Admission to the University of Cincinnati will be required (either Biomedical Engineering or Physics Ph.D. programs). For more information about the UC Graduate School, please visit (<https://grad.uc.edu>).

Correspondence should be sent to Jason C. Woods, Ph.D. (Professor; Director, CPIR); Zackary I. Cleveland, Ph.D. (Assistant Professor); or Laura L. Walkup, Ph.D. (Assistant Professor) at: jason.woods@cchmc.org, zackary.cleveland@cchmc.org, or laura.walkup@cchmc.org. (Website: <https://cpir.cchmc.org>)

