Postdoctoral Research Staff
Hyperpolarized Imaging

Polarize ([www.polarize.dk](http://www.polarize.dk)) was established in 2018 as a startup from the Technical University of Denmark. The company is based in Denmark and has five employees. We manufacture and commercialize the SpinAligner, a pre-clinical polarizer, based on the dissolution-DNP method.

Polarize is seeking to hire a postdoctoral research staff as an on-site scientist at the Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital (MGH), to develop hyperpolarized MRI techniques under the supervision of Dr. Yi-Fen Yen and Dr. Jan Henrik Ardenkjaer-Larsen. The successful candidate will operate and maintain a SpinAligner (Polarize, Denmark), develop hyperpolarization technique and MR acquisition methodology for hyperpolarized imaging, and assist collaborators in pre-clinical and translational research.

This work will leverage the state-of-the-art MRI and PET-MRI hardware, and superb expertise in MRI physics, biomedical engineering, radiopharmacy and clinical science at MGH/Martinos. The project will involve hyperpolarized contrast agent development, optimization of MR pulse sequences on Bruker and Siemens scanners, data collection for IND applications, animal and translational hyperpolarized imaging studies for neuroscience, cancer and cardiac research.

The Martinos Center is one of the largest biomedical imaging centers in the United States with over 200 research faculty, post-doctoral fellows and graduate students. This position provides a valuable opportunity to work and collaborate with a multi-disciplinary research team dedicated to developing, validating and translating the latest MRI technology that will benefit the pre-clinical and clinical research communities as well as the diverse patient population served by the MGH.

A Ph.D. (or equivalent) in physics, electrical engineering, biomedical engineering, physical chemistry, or a related field is required; however, strong candidates with other scientific backgrounds will also be considered. The ideal candidate should have a strong analytical background while displaying a high level of creativity. First-hand experience with polarizer operations and in vivo hyperpolarized imaging is a must. Skills in spin physics, hyperpolarization techniques, MRI sequence programming of Bruker and/or Siemens scanners, hyperpolarized contrast agent development, or IND applications are highly desired. Candidates should be highly motivated and interested in working in an interdisciplinary environment with an emphasis on pre-clinical and translational research.

APPLICATION

Interested applicants should send a cover letter describing research experience, interests, and future research and career goals, as well as an up-to-date curriculum vitae and contact information for three references to Yi-Fen Yen, Ph.D., by e-mail: [yyen1@mgh.harvard.edu](mailto:yyen1@mgh.harvard.edu).

Questions regarding this position and informal inquiries should be directed to Yi-Fen Yen, Ph.D., by e-mail: [yyen1@mgh.harvard.edu](mailto:yyen1@mgh.harvard.edu).

The position is full-time with benefits and available starting immediately. A two-year time commitment is required. Polarize is an Equal Opportunity/Affirmative Action Employer.