The Department of Radiology at the University of New Mexico Health Sciences Center is seeking applicants for the position of MRI Physicist at the Research Assistant/Associate Professor level (PhD). The successful candidate will have experience in preclinical and/or clinical MRI research and will serve as Director of the preclinical PET/MR imaging core and principal investigator or co-investigator on externally funded research; make intellectual contributions as a collaborator on preclinical and clinical research projects; exercise technical discretion in the design, execution and interpretation of experiments that contribute to project strategies; develop novel MR pulse sequences and image analysis programs; and will assist with the analysis of reconstructed images, reformat and transform to required image space, and delineate anatomical regions of interest. The candidate will be expected to develop externally funded independent research and collaborations (30% effort), operate and train users for a Bruker 7T/30 PET/MRI system (50% effort), develop MRI research protocols, and support graduate student education (20% effort). The ideal candidate will have excellent oral and written communication skills and a strong commitment to advancing radiology research.

The Department's research mission is to improve patient care by optimizing image acquisition techniques and developing new imaging methods that increase sensitivity and specificity for disease detection and progression. To this end, the Department provides imaging leadership and strategic vision for preclinical, clinical, and quantitative imaging with a focus on cancer and neurological imaging. The Department is committed to supporting collaborations, team science, and opportunities to engage clinicians and scientists throughout the health system. The Radiology research team is focused on innovating and translating research from bench to bedside.

Clinical research is conducted on several MRI scanners, Siemens and Philips, and preclinical research is carried out on a new Bruker 7T/30 PET/MRI.

The University of New Mexico Health Sciences Center is located in the heart of the Rio Grande Valley with stunning natural beauty. There are 300+ days of sunshine per year in Albuquerque and an ideal environment for outdoor activities.

Minimum Qualifications:

- PhD degree from an accredited institution in medical physics, imaging, biomedical engineering, computer science, or related field focused on MRI.
- Knowledge of MRI physics and imaging techniques including diffusion-weighted, diffusion tensor, diffusion spectrum imaging, spectroscopy, fMRI, and perfusion imaging
- Knowledge of various image processing techniques to include co-registration, reformatting and transformation, segmentation, ROI analysis, atlas-based analysis, voxel-based morphometry, and experience with various imaging software such as FSL, Matlab, Freesurfer, SPM, or VivoQuant
- Excellent communication skills

Preferred Qualifications:

- A track record of external funding
- Previous experience operating a Bruker preclinical MRI (4.7T or above)
- Previous experience with PET imaging
- Experience with advanced diffusion imaging, pulse programming, and computer programming experience in IDL, C, or Matlab
- Knowledge of RF coil development, tuning and matching
- Technical writing experience, specifically in grantsmanship, IRB, and/or IACUC protocol development
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To apply and view the complete description, please access Req# 33089 : <u>https://unmjobs.unm.edu/</u> a complete application will include a CV and cover letter.

For questions, please contact the Vice Chair for Research, Reed Selwyn, PhD, DABR, <u>hsc-medphys@salud.unm.edu</u>.

UNM's confidentiality policy ("Disclosure of Information about Candidates for Employment," UNM Board of Regents' Policy Manual 6.7), which includes information about public disclosure of documents submitted by applicants, is located at http://www.unm.edu/~brpm/r67.htm.

The University of New Mexico is committed to hiring and retaining a diverse workforce. We are an Equal Opportunity Employer, making decisions without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, veteran status, disability, or any other protected class.