

Senior Research Scientist – Magnetic Resonance Imaging

Recruitment Contact Information:

Julia Menke, jmenke@uark.edu, Sr. HR Partner

How to apply:

Direct apply link: https://uasys.wd5.myworkdayjobs.com/UASYS/job/Fayetteville/Senior-Research-Scientist---Magnetic-Resonance-Imaging_R0062558

All application materials must be uploaded to the University of Arkansas System Career

Site <https://uasys.wd5.myworkdayjobs.com/UASYS>

Please do not send to listed recruitment contact.

Current University of Arkansas System employees, including student employees and graduate assistants, need to log in to Workday via [MyApps.Microsoft.com](https://myapps.microsoft.com), then access Find Jobs from the Workday search bar to view and apply for open positions. Students at University of Arkansas System two-year institutions will also view open positions and apply within Workday by searching for “Find Jobs for Students”.

All Job Postings will close at 12:01 a.m. CT on the specified Closing Date (if designated).

If you close the browser or exit your application prior to submitting, the application process will be saved as a draft. You will be able to access and complete the application through “My Draft Applications” located on your Candidate Home page.

Closing Date:

10/04/2024

Type of Position:

Research

Workstudy Position:

No

Job Type:

Fixed Duration of Project/Grant (Fixed Term)

Sponsorship Available:

No

Institution Name:

University of Arkansas, Fayetteville

Founded in 1871, the University of Arkansas is a land grant institution, classified by the Carnegie Foundation among the nation's top 2 percent of universities with the highest level of research activity. The University of Arkansas works to advance Arkansas and build a better world through education, research and outreach by providing transformational opportunities and skills, promoting an inclusive and diverse culture and climate, and nurturing creativity, discovery and the spread of new ideas and innovations.

The University of Arkansas campus is located in Fayetteville, a welcoming community ranked as one of the best places to live in the U.S. The growing region surrounding Fayetteville is home to numerous Fortune 500 companies and one of the

nation's strongest economies. Northwest Arkansas is also quickly gaining a national reputation for its focus on the arts and overall quality of life.

As an employer, the University of Arkansas offers a vibrant work environment and a workplace culture that promotes a healthy work-life balance. The benefits package includes university contributions to health, dental, life and disability insurance, tuition waivers for employees and their families, 12 official holidays, immediate leave accrual, and a choice of retirement programs with university contributions ranging from 5 to 10% of employee salary.

Below you will find the details for the position including any supplementary documentation and questions, you should review before applying for the opening.

If you have a disability and need assistance with the hiring process, please submit a request via the [Disability Accommodations | OEOC | University of Arkansas \(uark.edu\)](#) : Request an Accommodation. Applicants are required to submit a request for each position of which they have applied.

For general application assistance or if you have questions about a job posting, please contact Human Resources at 479.575.5351.

Department:

Executive Director I3R

Summary of Job Duties:

ABOUT THE INSTITUTE FOR INTEGRATIVE & INNOVATIVE RESEARCH (I³R):

Established through a transformative gift from the Walton Family Charitable Support Foundation, the Institute for Integrative and Innovative Research (I3R) at University of Arkansas pioneers solutions to wicked problems through convergence research across academic, industry, government, and non-profit sectors to make a positive societal impact by creating and deploying innovations at scale.

You will have the opportunity to collaborate with purpose-driven coworkers in one of the fastest-growing and most naturally beautiful regions in the U.S. You will join a growing team of visionary researchers and thought leaders dedicated to working with a thriving entrepreneurial ecosystem to deliver innovative solutions. I³R is committed to building a diverse, collaborative, and inclusive team and cultivating a welcoming atmosphere where all opinions are valued, all voices are heard, and ideas become reality.

The I3R MRI facility houses a 3-Tesla Siemens Magnetom Cima.X to support academic and clinical research. This state-of-the-art system is designed with several technical advances to enhance imaging capabilities, workflow efficiency, and MRI recipient experience. It has a fast gradient system capable of high-speed structural and functional imaging, and a 64-receiver channel data acquisition system for parallel imaging with acceleration, which permits faster temporal resolution for functional MRI scans. The scanner has industry-leading gradients for human MRI scanning (i.e., gradient rise time = 200 T/m/s on each of the three gradient axes; peak gradient strength = 80 mT/m per axis). Its high performance driven by superior signal-to-noise ratio and AI powered advanced technology delivers high-quality images with faster acquisition time. It has advanced coil technology with a range of options that can be adapted for various anatomical regions and imaging needs and offers sophisticated imaging sequences that support specialized applications such as functional MRI and diffusion tensor imaging. An intuitive user-friendly interface simplifies operation and offers quieter operation and comfortable design to enhance MRI recipient's comfort during scans. A mock-MRI setup is also in the facility as are adjacent rooms to conduct other human health related research including use of EEG, and fNIRS. Besides the support potential for advanced clinical scanning, the Magnetom Cima.X offers university researchers opportunities to establish stronger collaborations with the Arkansas Children's Research Institute, the University of Arkansas for Medical Sciences, and the Laureate Institute for Brain Research, for MRI in both adult and pediatric populations. Additionally, I3R researchers conducting medical robotics and mixed reality research seek MRI imaging of various anatomical regions.

POSITION DESCRIPTION:

A full-time MRI Senior Research Scientist position is available at the Institute for Integrative and Innovative Research (I3R) at University of Arkansas. We are looking for a researcher who can engage in state-of-the-art, multi-modal imaging research and in the application and development of novel, advanced imaging methods and data analytic strategies and their applications. The Magnetom Cima.X offers an unprecedented opportunity to be at the forefront of establishing an outstanding research program in multimodal imaging in the Northwest Arkansas region. In addition, there is a tremendous interest and need for support of clinical imaging. Some of the areas of research interest include: 1) development and implementation of novel real-time multimodal EEG and fMRI techniques; 2) development and implementation of quantitative MRI and fMRI protocols and MRS techniques; and 3) development and implementation of techniques for analyzing large and complex data sets involving data from multiple sources (e.g., structural MRI, fMRI, DTI, EEG, bio- and behavioral data). Additional areas of research related to the candidate's expertise are welcome. This position involves supervising and supporting all aspects of the MRI facility daily operations, ongoing clinical imaging research, and scientific collaboration within the I3R and across the University of Arkansas. It is also anticipated that, through partnerships with healthcare providers, the facility will support the advanced MRI needs for the clinical patient population in Northwest Arkansas and neighboring regions. The position offers excellent opportunities in all aspects of MRI technology development, clinical applications, and data analysis in a dynamic, interactive, and transdisciplinary research environment with a diverse team of researchers that include physicists, psychologists, neuroscientists, engineers, and data scientists.

The successful applicant will have the ability to work effectively on interdisciplinary teams in a fast-paced environment, work independently and collaboratively with clinical and industry partners, and have excellent communication skills. A professional demeanor and the ability to establish effective working relationships are crucial in building trust and influence to accomplish work within a setting that includes a wide array of individuals, groups, policies, and processes.

Qualifications:

Minimum Qualifications:

- PhD in Physics/Medical Physics, Engineering, Neuroscience or a relevant field with experience in MRI research
- Postdoctoral experience of at least 3 years
- Evidence of direct role and contribution to the medical imaging field (publications in peer-reviewed scientific journals, presentations at imaging-related conferences and/or developed software codes)
- Experience in designing and executing clinical MRI studies with human subjects
- Experience in managing multi-faceted and complex data sets and in performing statistical analysis
- Excellent written and verbal communication skills, particularly the ability to present and publish complex scientific approaches and results in an interdisciplinary field as well as to maintain clear and concise documentation
- Excellent ability to work effectively in a team environment, across multiple clinical sites

Preferred Qualifications:

- Experience with managing an MRI facility
- Experience with high-field Siemens MRI systems
- MRI Certified by the American Board of Medical Physics and/or certified by the American Board of MR Safety as an MR Safety Expert
- Participation in clinical trials and implementation of MRI biomarkers
- Knowledge of structural, diffusion, functional MRI procedures and acquisition protocols
- Proven expertise in programming and medical imaging & statistical software
- Proven leadership, organizational, and communication skills
- Highly creative with exceptional abstract problem-solving abilities and attention to detail

Additional Information:

This position is renewable annually based on continued need for the position, availability of funding, and satisfactory job performance.

Salary Information:

Commensurate with education and experience

Required Documents to Apply:

Cover Letter/Letter of Application, List of three Professional References (name, email, business title), Resume

Optional Documents:

Proof of Veteran Status

Special Instructions to Applicants:

Pre-employment Screening Requirements:

Criminal Background Check, Sex Offender Registry

The University of Arkansas is committed to providing a safe campus community. We conduct background checks for applicants being considered for employment. Background checks include a criminal background check and a sex offender registry check. For certain positions, there may also be a financial (credit) background check, a Motor Vehicle Registry (MVR) check, and/or drug screening. Required checks are identified in the position listing. A criminal conviction or arrest pending adjudication or adverse financial history information alone shall not disqualify an applicant in the absence of a relationship to the requirements of the position. Background check information will be used in a confidential, non-discriminatory manner consistent with state and federal law. The University of Arkansas seeks to attract, develop and retain high quality faculty, staff and administrators that consistently display practices and behaviors to advance a culture that embeds inclusion, opportunity, educational excellence and unparalleled access for all.

The University of Arkansas is an equal opportunity, affirmative action institution. The University does not discriminate in its education programs or activities (including in admission and employment) on the basis of age, race, color, national origin, disability, religion, marital or parental status, protected veteran status, military service, genetic information, or sex (including pregnancy, sexual orientation, and gender identity). Federal law prohibits the University from discriminating on these bases. Questions or concerns about the application of Title IX, which prohibits discrimination on the basis of sex, may be sent to the University's Title IX Coordinator and to the U.S. Department of Education Office for Civil Rights.

Persons must have proof of legal authority to work in the United States on the first day of employment.

All application information is subject to public disclosure under the Arkansas Freedom of Information Act.

Constant Physical Activity:

N/A

Frequent Physical Activity:

N/A

Occasional Physical Activity:

N/A

Benefits Eligible:

Yes