Postdoctoral Researcher, Magnetic Resonance Imaging, Faculty of Medicine

Faculty of Medicine, Health Sciences and Technology

The University of Oulu is one of the biggest and most multidisciplinary universities in Finland. We create new knowledge and innovations that help to solve global challenges. We offer you an international and inspiring working environment where you are given responsibility and can use your skills, develop yourself and do work that matters. Our flexible and family-friendly workplace makes it easy for you to balance work and leisure. The University of Oulu is ranked in the top 3% of the world’s universities.

We are now looking for a highly motivated and talented

Postdoctoral Researcher

to join us in the Research Unit of Health Sciences and Technology at Faculty of Medicine. The position will be filled for a fixed three-year term starting earliest on 1st September 2024.

Our research group

Our research group focuses on medical imaging working at the interface of the university and university hospital. We are a balanced mixture of university researchers and medical physicists whose core areas of expertise is magnetic resonance imaging (MRI). In addition to our academic and hospital connections, we are actively collaborating with various industrial partners. We have a long history of developing quantitative MRI methods for clinical applications. We focus on developing relaxometry-based methods to identify constituent-specific alterations in tissue ultrastructure, histological correlation of MRI parameters, speeding up MRI image acquisition, developing tools and algorithms for image analysis, and applying these methods in human and patient studies.

We are seeking a Postdoctoral Researcher to work full-time in the field of MRI research within the Flagship of Advanced Mathematics for Sensing, Imaging and Modelling (FAME), appointed by the Research Council of Finland. The central idea of FAME is to form an internationally leading competence centre of applied mathematicians, physicists, and applied scientists with a vision of providing solutions and methodologies for various imaging and sensing problems arising from the industry and society to boost Finnish economy and global wellbeing.

About the job

Your main responsibilities will include:

- Conducting research in clinical-related MRI research
- Collaborating with national and international research institutions and companies
- Writing scientific publications in peer-reviewed journals
- Supervising doctoral researchers, students, and interns
Participating in teaching

**What we offer?**

- The support of an experienced and enthusiastic team where you can share your expertise and grow as an expert.
- Wellness benefit ePassi covering sport, culture and well-being. [Read more about other staff benefits here](#).
- Our [Buddy Programme](#) and [Spouse Network](#) support you and close-ones in settling into Oulu.
- Development and career options of the big organization.
- We have a [HR Excellence in Research](#)-quality label which is a recognition awarded by the European Commission for the development of researchers’ working conditions and careers.
- Work that matters and a workplace that promotes flexibility and work-life balance. [Read more about working with us](#).
- Finland is one of the most livable countries in the world, with a high quality of life, safety, excellent education system, and competitive economy. [Read more about living in Oulu](#).

**Who are you?**

**Requirements and expectations**

- A doctoral degree in physics, engineering, computer science, or mathematics.
- The doctoral degree may not have been completed more than five years ago at the time of accepting the position (a net period of time, which does not include parental leave, military service etc.). Applicants whose doctoral degree will be completed soon and whose doctoral dissertation topic is particularly relevant to this call may also be considered eligible to apply.
- Potential candidates should have a good command of the English language.

The following will be considered an advantage:

- Experience in experimental or clinical MRI
- A strong interest in interdisciplinary scientific work (demonstrated by the motivation letter).
- Programming skills with Matlab, C/C++ or Python.
- Research experience in inverse problem and/or machine learning and artificial intelligence applied to imaging applications.
- A good publication track record.
- Experience in supervising undergraduate students.

**Salary**

The position is fixed-term for 3 years as of 1st of September, 2024 or as soon as possible thereafter.

The salary will be based on the levels 5-6 of the demand level chart for teaching and research staff of Finnish universities. In addition, a salary component based on personal work
performance will be paid (maximum of 50 % of the job-specific component). Starting gross salary will be approx. 3600-4200 € per month (before taxes).

A trial period of 6 months is applied in the position.

**How to apply?**

Interested? If yes, please apply by 9th of June, 2024 (23:59 Finnish local time) through our recruitment system.

The application should be written in English and include the following:

1. CV, following the guidelines of the Finnish Advisory Board on Research Integrity
2. Cover letter
3. List of publications, following the guidelines of the Academy of Finland
4. Certificates/Diplomas
5. Contact information of 2 persons available for recommendation

The eligible applicants fitting best in the profile expected for the position will be invited to an on-site or remote interview. All applicants will be notified during the selection process.

We welcome applicants from all backgrounds, such as people of different ages, different genders and members of different language, cultural or minority groups.

**Contact Information**

If you have any further questions, please contact professor Miika Nieminen, Research Unit of Health Sciences and Technology, Faculty of Medicine, University of Oulu by email: miika.nieminen@oulu.fi with "FAME-postdoc in MRI" as the subject of the message.