

Research Scientist (Preclinical MRI Physicist)

Hours per Week: 35

Salary Grade R2: \$65,050 – \$76,550 (commensurate with experience)

Appointment: Continuing, Regular Full-Time

About Western

Western is one of Canada's top research-intensive universities, internationally recognized for advancing knowledge and driving discovery with real-world impact. Our employees benefit from competitive compensation, an exceptional campus environment, and the opportunity to contribute to research that changes lives.

About the Centre for Functional and Metabolic Mapping (CFMM)

The **Centre for Functional and Metabolic Mapping (CFMM)** at Western's Robarts Research Institute is Canada's National Ultra-High Field MRI Platform. CFMM houses the country's only collection of ultra-high field MR systems — including 3T and 7T human scanners, and 9.4T and 15.2T preclinical systems — supported by leading expertise in MRI physics, technical development, and applications.

Our research spans the full spectrum of brain science: from mapping healthy development and aging, to uncovering the biological basis of neuropsychiatric and neurodegenerative disorders. CFMM supports more than 100 principal investigators across Canada and internationally, making it a truly unique national resource for MRI and MRS in both humans and animal models.

Responsibilities

The **Research Scientist (Preclinical MRI Physicist)** provides expertise and support for research involving CFMM's 9.4T and 15.2T MRI scanners. In this role, you will:

- Operate the preclinical MRI systems and apply advanced imaging methods.
- Provide input on experimental design, project implementation, data analysis, and interpretation.
- Collaborate with internal and external researchers to facilitate high-impact studies.
- Conduct independent research, contributing original intellectual input and publications.
- Provide technical support, quality assurance, and troubleshooting for equipment and image data.

- Integrate and analyze complex research results, ensuring accuracy and reproducibility.
- Prepare outcomes and research outputs in support of collaborators and CFMM projects.

Qualifications

- Master's degree in Medical Biophysics, Biomedical Engineering, or related discipline with an MRI-focused thesis (PhD preferred).
- Minimum of 2 years' experience with ultra-high-field MRI in an academic research environment.
- Hands-on experience with Bruker Paravision360 and Avance Console.
- A record of independent research; strong publication output and principal authorship are assets.

Knowledge, Skills & Abilities

- Proven expertise in high-field MRI physics and systems, with ability to troubleshoot hardware, software, and image artifacts.
- Strong understanding of scientific and research principles, research design, and protocol development.
- Project management skills: ability to plan, implement, and complete research within defined timelines.
- Knowledge of imaging databases and methods for managing and analyzing large datasets.
- Well-developed communication skills for working effectively with diverse collaborators.
- Ability to interpret complex data, identify patterns, and clearly summarize findings.
- Capacity to coach and support other researchers in solving technical and experimental problems.
- Detail orientation with commitment to quality, reproducibility, and compliance with regulations (including animal research).
- Reputation for initiative, accountability, and resourcefulness.
- Motivation to stay current with new MRI methods and technologies, demonstrated through ongoing professional development.
- Ability to work independently and as part of a collaborative team.
- Flexibility to adapt to CFMM's research schedule and experimental needs.

Why Join CFMM?

This position offers the chance to work with one of the world's most advanced MRI facilities and to contribute to high-impact research at the frontiers of imaging science. You will collaborate with world-class investigators, gain hands-on experience with

unique MRI systems, and develop your own independent research portfolio in a setting designed to foster innovation.

Diversity & Accessibility

Western is committed to equity, diversity, and inclusion. Applications are welcomed from all qualified individuals, including women, visible minorities, Indigenous peoples, persons with disabilities, and people of all sexual orientations and gender identities. Accommodations are available throughout the recruitment process.

How to Apply

If interested, please visit <https://recruit.uwo.ca/> and search for Job ID **39769**.