



# Reducing the Health Impact of Heat Waves!

Put your skills to work on an **innovative preclinical MRI project** at the University of Angers

# **Research Engineer**

Preclinical Magnetic Resonance Imaging (MRI) Thermometry and Heat Stroke Study

## **Presentation of the University of Angers**

In the heart of a region recognized for its quality of life, the University of Angers, the 3rd largest employer in the region, offers an environment conducive to the development of its staff and students. The UA is a multidisciplinary university, welcoming more than 26000 students spread over 3 campuses and 2 relocated campuses (in Cholet and Saumur). It has 8 components (5 UFR, 1 IUT, 1 internal engineering school and 1 internal business and management school), and 31 federative research units and structures. Thanks to the many innovative projects it carries out and its openness to the world, the AU allows everyone to evolve in a stimulating environment. Its annual budget is €156 million (including €123 million in payroll). The UA has 1167 teachers and teacher-researchers, 917 administrative and technical staff and nearly 2000 individual contractors and is looking for involved and daring actors. You recognize yourself in this job offer? Join us!

## A supportive and exceptional work environment

The **PRISM Platform**, based in **Angers and Rennes** (University of Angers, University of Rennes, INRAe, Biogenouest, France Life Imaging), offers cutting-edge biomedical imaging solutions. With **four preclinical MRI systems** (1.5T, 4.7T, 7T, 11.7T) and **ISO 9001:2015 certification**, PRISM provides a unique technological environment.

The project will take place at the **Angers site**, within the SFR ICAT on the health campus of the University of Angers. Angers is renowned for its **high quality of life** and **dynamic atmosphere**.

#### **Contract Details**

Desired start date: November 2025

• Contract duration: 18 months renewable for 6 months

Workload: 100% (full-time)

• **Annual gross salary:** €31,000 to €35,000, depending on experience

• Work location: Angers, PRISM facility core (Faculty of Health)

## The project

This position is part of the **Thermolyse** project (ANR), which aims to improve resilience to extreme temperatures, whose frequency is increasing due to climate change. The goal is to characterize brain thermoregulation mechanisms in a mouse model under thermal stress using **MRI thermometry**, in order to develop **innovative pharmacological approaches against heat stroke**, targeting mitochondrial thermal regulation.

# Responsibilities

The recruited engineer will be responsible for:

- **Designing and optimizing in vivo protocols in rodent models** (MRI thermometry, management of environmental thermal challenges, influence of anesthesia, selection of thermoactive molecules) in collaboration with project partners.
- Carrying out MRI thermometry studies (data acquisition and analysis) to investigate the impact of heat waves on mouse models and test pharmacological mitigation strategies.
- Conducting research projects, keeping up with scientific developments, and communicating and disseminating results.

The engineer will also participate in the **general activities of the PRISM Platform**, contributing to its **scientific and technical visibility**.

#### **Collaborations**

The recruited engineer will work in close collaboration with the following research units:

- MitoVasc (UMR Inserm U1083 CNRS 6015, Angers), specializing in mitochondrial metabolism.
- **CRMSB** (UMR 55369, Bordeaux), experts in MRI innovation.

This interdisciplinary approach combines **biological and technological expertise**, providing a stimulating and innovative research environment.

# **Candidate profile**

**Degree:** Engineer and Master's level or PhD.

Scientific background with a specialization in biomedical imaging and/or preclinical experimentation.

## **Required skills and Competencies**

# **Knowledge:**

- Experience in **preclinical rodent model experimentation** (required certification)
- Strong understanding of MRI fundamentals
- Proficiency with computer tools (programming skills and/or experience with imaging analysis software recommended)

## **Practical Skills and Personal Qualities:**

- Proficiency in English (written and spoken)
- Project management skills
- Scientific communication and literature monitoring skills
- Strong organizational skills, Rigor and attention to detail, Autonomy, Responsiveness, Initiative and proactivity
- Interest in collaborative and multidisciplinary work

## **Recruitment Procedure and Contact**

Please submit your CV, cover letter, and degree certificate on the University website. Email contacts: <a href="mailto:prism\_bioscans@listes.univ-angers.fr">prism\_bioscans@listes.univ-angers.fr</a> (copy to: <a href="mailto:recrutement@univ-angers.fr">recrutement@univ-angers.fr</a>). Application deadline: October 30, 2025

This job posting is available until the application deadline. After this date, it will no longer be accessible on the website.

For additional information, you may contact:

Phone: (+33) 02 44 68 83 31

Email: prism\_bioscans@listes.univ-angers.fr