

**ANGERS UNIVERSITY**  
Mitolab teams-Mitovasc Laboratory

Junior Contract Researcher  
Post-doctoral contract in public law

Category : A

### **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 !

#### **Contract features:**

**Starting date : 02/01/2025**

**Contract duration :** 24 months French law work contract

**Work quota :** 100%

**Monthly wage :** 2967 € gross

**Location :** Angers University, Mitovasc laboratory, Mitolab team, UMR 6015 CNRS / Inserm1083, IBS/CHU, 4 rue Larrey, 49933 Angers cedex 09

**Name of research project :** Role of senescence and associated signaling pathway in genetic mitochondrial diseases

#### **Description of the research project in which the research activities entrusted to the officer take place:**

Mitolab (<http://mitovasc.univ-angers.fr/en/index.html>) is a joint unit (University of Angers, CNRS and INSERM), specialized in the pathophysiology of mitochondrial diseases. We aim at understanding the role of mitochondrial alterations in the development of common (neurodegenerative and cardiovascular diseases, cancer) and rare diseases (hereditary mitochondrial diseases) by pursuing preclinical research towards clinical applications. To achieve these goals, our research programs are conducted from molecular, cellular to the most integrative levels of cardiac pathophysiology using cutting-edge technologies. We are currently seeking a highly motivated candidate in order to develop a new project to study the role of senescence and associated signalling pathways in mitochondrial hereditary diseases.

**Expected results :** Altogether, these studies could pave the way for new therapies targeting senescence in cardiac diseases and genetic diseases affecting mitochondria.

## Definition of research activities and tasks to be accomplished:

The experiments will be performed on different samples from a cohort of patients with mitochondrial disorders (Angers hospital). We will measure the senescence parameters and associated pathways (senescence-associated secretory phenotype) on primary cultures of fibroblasts and mouse models of mitochondrial diseases. We will target senescence pathways to evaluate disease evolution in vitro and in vivo. The methodological approaches include immunofluorescence, biochemistry, physiology and omics studies. The team benefits from well-equipped laboratory and has access to the shared equipment of the SFR multidisciplinary life sciences facilities (<https://sfricat.univangers.fr/fr/index.html>).

### Expected skills :

#### Knowledge :

- Mitochondrial function and metabolism
- Aging and senescence
- Cell signaling pathways

#### Know-how:

- Certificate for animal experimentation
- Experiments on rodents and tissue sampling
- Cell culture
- Molecular biology

#### Soft skills:

- Team work
- Ability to communicate, to listen and to transmit knowledge
- Analytical reasoning
- Creativity, innovation
- Ability to write articles and present data

### Qualifications

#### **PHD degree of less than 3 years**

Specialty : molecular biology, cell biology, aging, physiology

### Recruitment procedures and contact :

You must submit your CV, cover letter and doctoral degree by mail at : [jeanne.mialetperez@univ-angers.fr](mailto:jeanne.mialetperez@univ-angers.fr) copy to : [recrutement@univ-angers.fr](mailto:recrutement@univ-angers.fr)

**Deadline for applications: 15/10/2024**

**This job description is available until the closing date for applications.  
On that date, it will no longer be available on the website.**