



Assistant Professor in pathophysiology of cardiovascular & metabolic diseases

We are currently seeking a highly motivated and creative scientist with more than 3-year experience in cardiovascular research to develop independent research at *l'institut du thorax* and contribute to teaching activities in animal physiology at *Nantes Université*, in France.

Host institution: *Nantes Université* proposes a new university model in France by bringing together one university, one university-hospital (*CHU de Nantes*), one Institute for Technological Research (*IRT Jules Verne*), the French National Institute of Health and Medical Research (*Inserm*) and three high-education schools (*Centrale Nantes, École des Beaux-Arts Nantes Saint-Nazaire, École d'Architecture de Nantes*) as full members. By developing specialized areas of research excellence in the fields of Health and Engineering, *Nantes Université* also provides students with new training opportunities through blending different ways of thinking, cultures and practices. *Nantes Université* also defines itself as an institution that is sustainable, committed, and actively involved in the evolution of society, with a comprehensive and original policy for open science, open education and open innovation.

Host laboratory: *L'institut du thorax* integrates research, training and care against cardiovascular and metabolic diseases. Our research laboratory, based at Nantes University jointly with the INSERM and the CNRS, combines basic research and translational approaches to elucidate the molecular bases of these diseases, to identify new risk markers and/or new therapeutic targets. Our medical ambition is to detect them earlier and prevent or reverse their clinical manifestations through novel approaches in precision medicine. In this context, in tight collaboration with the clinicians of the clinical investigation center (CIC) we have built cohort studies and preclinical models on pathologies such as cardiac arrhythmia, cardiac valve defect, dyslipidaemia, obesity and intracranial aneurysm. We aim at strengthening our capabilities to exploit such resources through international collaborative networks – particularly in the context of the EU framework program Horizon Europe.

Research profile: While improving basic knowledge of the pathophysiology of cardiovascular disease, the laboratory is constantly transferring its research discoveries to the clinic in close collaboration with the teams at Nantes University Hospital, who are also members of *l'institut du thorax*. Thus, each of our teams develops its own basic research while contributing to the development of integrated and transdisciplinary research programs. The successful applicant will join one of our teams specialized in cardiovascular and metabolic pathophysiology to develop his/her own research projects and participate to cross-disciplinary programs of *l'institut du thorax*. He/she should have a strong background in animal physiology and experience in the field of research in cardiac, vascular and/or metabolic functions and diseases. Academic teaching experience in the field of cell or animal biology and physiology is a plus.

Teaching profile: The position holder will be part of the Department of Animal Physiology at the Faculty of Sciences and Technology of Nantes Université. He/she will teach at Bachelor level

in life science (courses are in French) as well as in the Graduate Program in cardiovascular research (GP InnoCaRe) recently opened in the Graduate School of Health Sciences and Technologies. His/her courses will cover the basics and experimental approaches in electrophysiology, pharmacology and physiology in humans and small rodents. The candidate must be trained in animal surgery. He/she will also be involved in teaching relating to cardiovascular pathophysiology and/or metabolism as part of the GP InnoCARE. In addition, he/she will develop teaching activities designed to boost student learning and skills acquisition, such as flipped classroom teaching, project-based teaching and hybrid teaching (face-to-face/off-site).

Keywords: animal physiology, integrative approaches, cardiovascular disease, metabolic disease, pre-clinical models, translational research

Scientific field: animal physiology / translational research / pathophysiology / cardiovascular system / metabolism

Contract :

- Type: Permanent position
- Salary: According to experience
- Envisaged Start Date: by Sept. 2025

Application :

Deadline for application and submission: April 10th, 2024

On the basis of our equal opportunities policy, women are particularly encouraged to apply.

To apply for this position at l'institut du thorax, send **a cover letter, a CV, and the names and contact information of three references** to direction.u1087@univ-nantes.fr.

All applications will be reviewed, and successful candidates will be contacted. Any questions about the position should be directed to Richard Redon (direction-u1087@univ-nantes.fr)