



La science pour la santé _____ From science to health



CALL FOR APPLICATION

INSERM CHAIR Recruitment

Molecular physiology approaches to bioenergetics and metabolism

The Inserm chair recruitments opened to Inserm are intended for researchers with strong potential to manage and lead research teams and participate in national, European or international projects.

This recruitment, based on research and teaching projects, is aimed at researchers with a doctorate or equivalent and a first post-doctoral experience. The position is offered on a fixed-term contract (CDD) with a view to tenure in the Inserm Research Directors personnel at the end of the contract.

Application on EVA: https://eva3-accueil.inserm.fr/sites/eva/chaires/2024/Pages/default.aspx



Supporting institution:	Inserm : Institut national de la Santé et de la recherche médicale
Name of the head of the institution:	Pr. Didier Samuel
Academic region:	Auvergne Rhône Alpes
Location/ Site concerned:	Inserm U1055 - Laboratoire de bioénergétique fondamentale et appliquée (LBFA) <u>https://lbfa.univ-grenoble-alpes.fr/</u>
Partner institutions:	Univ. Grenoble Alpes (UGA), Grenoble
Research contact:	Uwe SCHLATTNER: Uwe.Schlattner@univ-grenoble-alpes.fr
Administrative contact:	chaires-professeur-junior@inserm.fr
Research fields EURAXESS :	Medical sciences
Keywords:	metabolism, bioenergetics, nutrition, muscle, aging, pathophysiology, translational research

Job title to be filled:	Chaire - Molecular physiology approaches to bioenergetics and metabolism
Body after tenure:	Research Director
Anticipated duration of the contract:	4 years
Scientific domains/fields:	Physiology and Pathophysiology
Corresponding specialized scientific commissions (CSS):	CSS 3 - Physiology and pathophysiology of major systems



Fraternité





La science pour la santé _____ ____ From science to health

Project name:	Molecular physiology approaches to bioenergetics and
	metabolism

Remuneration package	3 500€ - 5 000€ according to research experience
Quota	Full Time

Strategy of the host institution:

The project is in line with key issues of the current Inserm strategic plan. Inserm aims at strengthening the continuum of health research from molecules to clinical application, while encouraging disruptive research approaches. The CPJ project will be fully embedded in such a continuum from fundamental to applied science, and will target interdisciplinary research (potential interfaces with chemistry, physics, informatics, social sciences) and emerging technologies (functional genomics, innovation in 3D muscle cell culture, single cell biology, etc.).

Strategy of the host laboratory:

The Laboratory of Fundamental and Applied Bioenergetics (LBFA) studies energy transformation in living organisms, ranging from nutrition to intermediary metabolism and energy expenditure. It addresses molecular mechanisms as well as their translation to preclinical and clinical studies in different physiological or pathophysiological states, mostly characterized by altered energy homeostasis. LBFA intends to strengthen its Inserm-related research capacity and anticipates its future research activity in the fields of metabolism, mitochondria, nutrition and muscle physiology. By addition of a timely, state-of-the art line of research, LBFA also aims at a deeper integration of existing lines of research and further development and use of its recently inaugurated research building.

Summary of the scientific project:

The chair project should target the links between metabolism and at least one of the following research axes:

- cell signaling circuits in sensing or responding to altered cell metabolism/energetics
- one (or more) pathologies directly or indirectly involving mitochondria
- new nutritional approaches
- myocyte differentiation and/or functioning.

The project should implement cutting-edge or disruptive experimental approaches such as the use of stem cells, single cells, 3D-cell cultures, pre-clinical models, functional genomics, systems/synthetic biology, or data mining. It should also have a clearly defined translational ambition, targeting either the aging individual or those with one (or more) chronic pathologies. The project should complement ongoing LBFA research on the links between undernutrition, muscle protein turnover and sarcopenia (Pr C. Moinard), adaptations of muscle tissue to different stresses (exercise, hypoxia, chronic diseases, etc.) encountered by healthy individuals, athletes or patients (Pr H. Dubouchaud), and the cellular circuits regulating energy homeostasis (Pr U. Schlattner). It should also make use of recent LBFA research facilities/tools (animal facility, cell culture, imaging, metabolomics) and potential interfaces with chemistry, physics, informatics, or social sciences at UGA.









La science pour la santé _____ From science to health

Summary of the teaching project:

Teaching will be carried out at the UFR Chimie-Biologie of UGA Grenoble. It will strengthen the teaching potential in the field of physiology and energy metabolism at the L3 and Master levels. The recruited researcher is expected to:

- promote interdisciplinarity in his teaching
- be innovative in its teaching practices
- strengthen the link between training and research, in particular the master-doctorate link, in conjunction with the Graduate School (EUR) Chemistry-Biology-Health (i.e. by contributing to a summer school bringing together master and doctoral students)
- contribute to the international attractiveness of the UGA Master in Biology

National Research Agency package:

200k€

Other package:

Co-funding^{*} by the partner organism (UGA): A PhD contract (3 years) - ca. 110 k€ Co-funding^{*} by the host laboratory (LBFA): Free access to all LBFA facilities (incl. animal facility) for the duration of the project (4 years) : ca. 80 k€

Scientific communication and dissemination, Science and society:

Scientific communication and dissemination:

The recruited researcher is expected to aim at peer-reviewed publications with high impact, to disseminate results at an international level, and to actively collaborate within the scientific community. Activities may include conferences, active participation in a learned society, or sharing information through public broadcasting, e.g. via print media, social media or the LBFA and UGA websites.

Open Science:

The recruited researcher will implement Open Science standards in all his/her activities, in particular early open sharing of research and research outputs even beyond publications. This will include, but is not be limited to, open access publishing and open data sharing. Costs of Open Science are generally taken in charge by the laboratory.

Science and society:

The recruited researcher is expected to actively communicate on his/her research with the general public. This includes classical channels like public lectures, print media and the LBFA website, but even more the modern possibilities of social media and new formats for the web. The recruited researcher should also consider contacts with patient's organizations.



Liberte Égalité Fraternité





La science pour la santé _____ From science to health

Indicators:

Teaching:

Teaching will be carried out at the UFR Chimie-Biologie which will apply its usual indicators.

- Capacity to effectively transfer knowledge through teaching
- Usage and development of innovative teaching and pedagogical practices
- Ability to work as part of a teaching team

Among others, this will be assessed by student feedback on the teaching provided, and the number of students supervised (internships, tutored projects, etc.).

Research:

The main indicators will be

- The successful launch of an independent line of research
- A good integration within LBFA research projects and infrastructure
- Collaborative projects within UGA, but also at national and international levels
- High level and steady scientific production
- Obtained additional funding.

These indicators will be assessed based on a final report, as well as a bi-annual external evaluation by the LBFA Scientific Advisory Board.

Knowledge transfer:

Useful indicators will be the communication and dissemination output

- to the scientific community (publications, conferences, social media)
- to the general public (public lectures, traditional media, social media).

These indicators will be assessed as the research (see above).

Selection of candidates:

It is expected the recruited researcher to become rapidly a group leader in the GAD team. So the candidate should demonstrate ability to supervise Ph.D students, post-doctoral fellow and technical support staff. She/he should have the capacity to obtain competitive funding to manage her/his group.

Successful candidates are chosen by a selection commission composed of six to ten members, the majority of whom are specialists in the fields of research concerned.

The commission carries out an initial examination of the applications, focused in particular on candidate experience and skills relative to the research and teaching project presented above. A shortlist of candidates is then selected for interview.

Only candidates selected by the selection committee on the basis of their applications will be invited to interview.

The interviews are followed by a deliberation during which selection commission will discuss the quality, originality and, where appropriate, the interdisciplinarity of the research and teaching projects presented by the candidates, their motivation and their scientific and teaching supervision capacity.

The candidates selected at the end of the selection process will be offered a researcher contract, following approval from the President and CEO of Inserm.



Égalité Fraternité





La science pour la santé _____ From science to health

Required profile:

Education Level : Phd

Researcher Profile : R3/R4

R3 Established researcher A stage in a researcher's career describing those who have developed a level of independence and can described as an established researcher

R4 Leading Research A stage in a researcher's career where they can be termed a 'leading researcher'. This would include the team leader of a research group or head of an industry R&D laboratory.

Your application will be evaluated according to the following criteria :

- Relevance and originality of the project related to the research field
- International exposure in research projects
- Your ability to raise funds
- Participation in editorial and reviewing activities
- Your teaching experience
- Your ability to lead a team...

Application instruction:

Applications can be submitted online at <u>EVA</u>. Deadline application: **April 2, 2024**

Please complete the scientific file in English.

It is imperative to contact the laboratory corresponding to the Chair you have applied for in order to build the project with them.

Position also open to 'Bénéficiaires de l'Obligation d'Emploi' (disabled persons), as defined in article 27 of law no. 84-16 of January 11, 1984 on statutory provisions for the civil service.