

THE LORRAINE UNIVERSITY IS RECRUITING JUNIOR PROFESSORSHIP CHAIR

Present throughout Lorraine (the two metropolises of Metz and Nancy and 10 towns and conurbations in the region), the Lorraine University, which has been awarded the HR Excellence in Research ([HRS4R](#)), label since 2017, places its expertise at the service of knowledge production and sharing. Committed to raising the level of education of its citizens, it relies on an intensive research dynamic (I-Site Lorraine Université d'Excellence perpetuated in 2021), both fundamental and applied.



62000 students



+ de 7100 employees



+ de 4000
research lecturer or
lecturing and research
personnel



60 laboratories
and 43 training
centers



A budget of nearly
€682m

Decree n° 2021-1710 of 17 December 2021 relating to the junior professorship contract provided for by article L. 952-6-2 of the Education Code and Body in which the person concerned is destined to be appointed: University Professor.

Decree n° 2021-1710 of 17 December 2021 relating to the junior professorship contract provided for by article L. 952-6-2 of the Education Code and by article L. 422-3 of the Research Code.

Working time : 100%

CNU Section : 66/27

Publication profile (title of the contract and the position concerned) :
phylogenomics and evolutionary biology

Starting date: no later than 12/31/2026

Department/University : Department of Plant Biology, Genetics and Microbiology, Faculty of Science and Technology

Location: Campus Aiguillettes, FST Vandoeuvre lès Nancy

Laboratory : UMR 1136 Interactions arbres microorganismes

Location: Campus Aiguillettes, FST Vandoeuvre lès Nancy

VALUES OF THE LORRAINE UNIVERSITY



universality



créativité



réflexivité



solidarity



responsability

www.univ-lorraine.fr



Job profile and EURAXESS

Job profile (maximum two-line summary of the profile in English) :

The candidate will develop research about the functional and directed evolution of proteins in order to understand the molecular adaptation of organisms to stress and to obtain new leads for biotechnological innovation.

Euraxess research fields (see coding table in the annexed documents) :

Biochemistry, Biological sciences, Biological engineering, Environmental science, Modelling tools

Job profile

Nature and purpose of the research project : Functional and directed protein evolution, and biotechnological innovation

Nature and purpose of the proposed teaching project : Phylogenomics, bioinformatics and evolutionary biology

Associated funding amount : 200 keuros

Anticipated contract duration: 5 years

Teaching profile:

The junior professor will be invited to build and teach courses in phylogenomics, bioinformatics and evolutionary biology to graduate students in life sciences at the Faculty of Science and Technology and in the Agrosciences Environnement Territoires Paysages Forêt (AETPF) and Microbiology Master's programs, with a teaching load of 64 hours per year for 5 years. Computational biology will enable students to approach scientific questions from an integrative point of view, combining multi- and interdisciplinary knowledge for the study of biological systems. In particular, bioinformatics skills are a priority for biology students, whatever the biological models studied. These teaching activities will be facilitated by the Department of Plant Biology, Genetics and Microbiology, the training facilities of the Faculty of Science and Technology, and the University Pedagogy Training Program (DACIP). The professor recruited will also be involved in the Orion project ("Oser la Recherche durant la formation") aimed at boosting the attractiveness of research, doctoral studies and research careers to undergraduate and graduate students.

Department/University : Faculty of Science and Technology

Keywords : Bioinformatics, systems biology, evolution, molecular biology

Research profile:

The candidate recruited for this "junior professor" chair will carry out his/her research activities in the "Stress response and redox regulation" team (SR3) of the "Interactions Arbres-Microorganismes" unit (UMR IAM). The SR3 team wishes to complement its current expertise in biochemistry with skills in molecular evolution, and thus develop evolutionary biochemistry or paleobiochemistry approaches. In this context, the candidate will bring advanced skills and knowledge, and possibly a professional network, in one or more of the following areas: evolutionary biology, phylogenomics, bioinformatics, molecular biology, and protein biochemistry. The Junior Professor will be encouraged to develop a research program in evolutionary biochemistry aimed at understanding the selection pathways of protein properties during evolution, in particular via the prediction and resurrection of ancestral proteins, followed by their comparison at biochemical and functional levels with modern proteins. In addition to understanding the molecular evolution of key proteins involved in the resilience of organisms in a changing environment, these approaches will open up prospects in protein engineering and synthetic biology for modifying the properties of certain proteins. To achieve this, the Junior Professor will benefit directly from i) the SR3 team's expertise in protein biochemistry and knowledge of the functional diversity of plant and fungal protein families involved in stress response or redox regulation, ii) the favorable and stimulating working environment offered by UMR IAM (around 100 people, including several bioinformaticians) iii) the experimental platforms of the A2F scientific cluster, which offer state-of-the-art equipment and know-how for molecular analysis, bioinformatics, genomics, protein engineering, microscopy and plant and microorganism cultivation, and iv) NANCY's dynamic, collaborative research clusters (pôle scientifique agronomie-agroalimentaire-forêt (A2F) and the ARTEMIS project, which is taking over from Labex ARBRE), as well as the University of Lorraine's ambitious programs (eg. Lorraine Université d'Excellence, Orion, EURECA-PRO).

Laboratory name: Interactions Arbres Microorganismes

Keywords: Phylogenomics, paleo-biochemistry, protein engineering, evolution, functional diversity, biomolecules, ecological and energy transition

Additional information

- Requirements for applicants:
 - Hold a doctorate or an equivalent degree (upon recognition by UL Scientific Committee).
- The list of supporting documents to be attached to the application:

Your application file, consisting of the application form entered online, must include the following items:

- An official identity document with a photography;
- A document certifying that you hold a PhD, or an equivalent degree (whose equivalence must be recognized by the University of Lorraine Scientific Committee);
- The PhD examination report, or a certificate from the institution stating that no examination report has been drawn up;
- An analytical presentation of the works, books, articles, achievements and activities related to the profile of the Junior Professorship Chair tenure-track position in question, mentioning those that the candidate intends to present at the audition;
- A copy of each of the works, books, articles and achievements mentioned in the analytical presentation and which the candidate intends to present at the audition, not exceeding six documents.

Administrative documents written in whole or in part in a foreign language must be accompanied by a translation into French, the conformity of which the candidate certifies on his or her honor. The translation of the analytical presentation is compulsory and the works, books, articles and achievements in a foreign language must be accompanied by a summary in French. Otherwise, the application will be declared inadmissible.

Candidates who are or have been for less than eighteen months a teacher-researcher at a level equivalent to that of the post to be filled, in a higher education institution in a country other than France, must indicate this status.

Applications must be submitted on the Galaxie platform (FIDIS module) according to the calendar available on the University of Lorraine website.

Any application incomplete by the above-mentioned deadline will be declared inadmissible.

Only those candidates who have been selected by the recruitment committee on the basis of their applications will be invited to the audition.

*When searching for positions, Junior Professorships will be distinguished from others by the recruitment article (CPJ).

How auditions are organized

- The audition of candidates by the selection committee may include a work placement (decree no. 84-431 of June 6, 1984), in the form of a lesson or research presentation seminar. This experience is not open to the public.

Professional situation:

☐ yes (with public audition ☐ yes ☐ no) ☒ no

In the form of:

- ☐ of lesson(s)
- ☐ research presentation seminar
- ☐ meetings (with students or teachers/researchers/researchers of the research or teaching unit in which the post is open)

- The position for which you are applying is likely to be located in a "restricted area" within the meaning of article R 413-5-1 of the penal code. If this is the case, your appointment and/or assignment can only take place after authorization of access issued by the head of the establishment, in accordance with the provisions of article 20-4 of decree n°84-431 of 6 June 1984.

Joining the Lorraine University, means sharing it's values and benefiting from is working conditions

- Our commitments, our values** : In 2016, the Lorraine University adopted a charter of values based on universality, creativity, reflexivity, solidarity and responsibility.
- Our working conditions** : The Lorraine University has taken a number of steps to prevent psychosocial risks (appointing an occupational psychologist, setting up awareness-raising initiatives, introducing warning and listening systems). It was also a pioneer in the introduction of teleworking, which it continues to develop.
- Dayli support** : Throughout your career at the Lorraine University, employees are supported by the institution in their professional lives (occupational health, disability). The university also offers its staff a range of assistance and support services designed to promote work-life balance and personal fulfilment. A social assistance service is also available to university staff to help them deal with difficult situations.
- Equality - Diversity - Inclusion** : The Lorraine University Since 2015, the Group has developed a comprehensive equality - diversity - inclusion policy that goes beyond the framework of gender equality in the workplace, taking into account discrimination that goes beyond gender and adding six criteria: age, gender identity, sexual orientation, origin, religion and disability.
- Attractiveness and cultural offering** : The Lorraine University offers a wide range of cultural, sporting and leisure activities to all its employees: more than 70 sporting activities are available, and there are venues dedicated to cultural activities (including the Espace Bernard-Marie Koltès - Conventional Stage of National Interest). Every year, more than 500 different cultural events are held throughout the region.

Department/University

Educational team : Department of Plant Biology, Genetics and Microbiology

URL Department: <https://fst.univ-lorraine.fr/la-faculte/departement-de-biologie-vegetale-genetique-et-microbiologie>

Place(s) of work : Faculty of Science and Technology

Name of Department Director : Mireille Cabané

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Research Laboratory

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Name/first name Morel-Rouhier Mélanie
The role : Team leader
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