

## RECRUITMENT NOTICE Chaire de Professeur Junior (CPJ) For an intended duration of 5 years

Recruitment for a research and teaching project on a fixed-term contract known as the "Chaire de Professeur Junior " aims to allow the candidate, after evaluation of his or her scientific value and professional aptitude, to access a permanent position as university professor.

Details regarding the recruitment process and the contract are available online: <u>https://www.uca.fr/universite/travailler-a-luca/recrutement-chaire-professeurs-juniors</u>

## Job description and project statement

Title of contract and position to be filled: Junior Professor chair

Position: Professor

Hosting institution: Université Clermont Auvergne Name of the head of establishment /organization: Mathias BERNARD Location: Clermont-Ferrand Academic region: Auvergne Rhône Alpes Position number:

Faculty: IUT Clermont Auvergne Department: M2iSH

**Project name**: Modulation of Glycosylation by Pathobiont *Escherichia coli*: Towards a Better Understanding of Host-Microbe Interactions (Glyco-Path)

Keywords: Host-microorganism interactions, Glycosylation, Inflammation, Chronic intestinal diseases, Pathobiont *Escherichia coli* 

Intended duration: 5 years

Scientific theme: Host-pathogen interactions, Inflammation, Infectiology and microbiology

Corresponding CNU/CoNRS/CSS section(s): CNU 64/64, Inserm CSS5

## **Research fields EURAXESS:**

Champs 1	Sous-champs 1	Champs 3	Sous champs 3
6.Biological science	6.Biology		
Champs 2	Sous champs 2	Champs 4	Sous-champs 4

**Job profile:** Glycobiologist specialized in host–intestinal bacteria interactions, with teaching responsibilities in biochemistry for the BUT (University Bachelor of Technology, Biology).



#### University strategy:

Labeled as an I-SITE since 2017, UCA asserts its identity as a leading regional university and its ambition to support scientific fields in which it has gained international recognition. Research on host-pathogen interactions conducted by the M2iSH laboratory significantly contributes to the national and international reputation of the institution. As a major component of the Sysmic microbiology research federation and a member of the national Inserm program on the microbiome, the M2iSH unit is integral to the site's scientific policy priorities, particularly within the I-SITE CAP2025 International Research Center on personalized mobility as a key factor in human health, and the graduate track (SFRI) "Nutrition, Health and Mobility." The scientific project for the junior professorship, themed "Modulation of glycosylation by pathobiont *Escherichia coli*: towards a better understanding of host-microbe interactions," aims to consolidate the expertise and international recognition already acquired by the M2iSH laboratory in this field and will contribute to the dynamism of the research community.

Regarding the CPJ (Junior Professor Chair) scheme, since 2021, UCA has opened 9 CPJs, all of which have been filled (6 men, 3 women). Among the awardees, seven were working abroad at the time of their recruitment. UCA's strategy has been to prioritize the site's UMRs (mixed research units) and to propose job profiles previously discussed with ONR to support a common strategy. Two aspects are prioritized during recruitment: international experience and links with the socio-economic world. Obtaining a CPJ is a strong incentive for laureates to submit, in the short term, an ERC Starting Grant application, which UCA strongly encourages.

## Department strategy:

Crohn's Disease (CD) is a chronic inflammatory bowel disease with a microbial component in its etiology. Various studies, including those conducted by the M2iSH unit, have shown that bacteria known as AIEC (adherent-invasive *E. coli*) are involved in the disease's etiology. Our data show that changes in glycosylation of the intestinal mucosa in patients may promote AIEC adhesion. This CPJ aims to strengthen our expertise in glycobiology to better understand these mechanisms through an original approach. This project will fit perfectly into the unit's strategy, whose objective is to reinforce its strong AIEC research theme with significant international visibility while developing this new research axis. The CPJ will be expected to develop their projects with the unit's researchers and collaborators, with the goal of creating their own research team within the unit by the end of the project.

RNSR of the laboratory M2iSH : 201220155K

## Strategy to enhance the international attractiveness:

As part of its institutional contract and project, UCA aims to strengthen its internationalization. This will rely on the institution's ability to leverage European tools as well as major international calls for proposals, improving response and success rates for these projects, thus securing its place in top scientific rankings and enhancing its international visibility. Within this global strategy, the CPJ scheme has been used to introduce, as a major selection criterion, the international background of candidates. The presence of UCA staff with strong international experience helps structure and strengthen partnerships, responses to calls for projects, and the establishment of international networks supporting both research and training, particularly within the Graduate Tracks (SFRI) aimed at promoting a highly visible research university. Recruiting a CPJ in this disciplinary field within the M2iSH unit will contribute to this strategy. Finally, in June 2024, the "Alliance for Regional Transition, Equality, Mobility, Inclusion and Sustainability (ARTEMIS)" project led by UCA was selected as part of the "European Universities" initiative. The chair will be part of this alliance, with the goal of facilitating exchanges of international Master's level students, faculty, and developing relationships with partner universities in infectiology and microbiology.



#### Scientific project:

Glycosylation is the most abundant post-translational modification present on cells. Glycans mediate immunity and are involved in interactions between bacteria and host cells. The CPJ will bring expertise in biochemistry, microbiology, and glycobiology to deepen the understanding of interactions between AIEC and the host intestinal environment, focusing on the glycans/glycoproteins involved, to better understand the pathophysiology of Crohn's Disease and propose new targeted therapies. The goal is to biochemically characterize protein/glycan interactions and work on the purification and identification of glycans/(glyco)proteins in various in vitro/in vivo models of AIEC infection. The project will benefit from technological advances in glycan identification (mass spectrometry) and affinity measurement (microscale thermophoresis).

## Teaching project:

The Biological Engineering department of the IUT offers courses in biochemistry and microbiology as part of the BUT. The CPJ will provide interdisciplinary teaching in these two subjects to third-year students, integrated into learning and assessment situations. These courses, focusing on host-pathogen interactions and glycobiology, may be offered as tutorials and practical sessions. The CPJ may also offer a course entitled "Host-microbe interactions: the role of glycans in mediating commensalism or dysbiosis" in English as part of the Microbiology and Biology-Health Master's programs. This will expand the curriculum on interactions between the gut, immune system, microbiota, and pathogens or pathobionts. The CPJ will also take advantage of international networks to develop opportunities for internships abroad in these various programs.

#### Funding:

ANR welcome pack	200k€	
PhD		
Post-doctoral reseacher (three-year contract)	160k€	
Equipement		
	15k€	
Lab material/Travel funds		
	25k€	
Co-funding (PEPR SAMS)	15k€	
Master Interns students 5k€	15k€	
Fee of Services (Mass spectrometry + analysis) 10k€		
Total	215k€	

**Scientific diffusion:** The results will be promoted through publications in leading open-access international journals, as well as through oral and/or poster presentations at national and international conferences (in the fields of microbiology, biochemistry, and/or gastroenterology).

Eventually, and with support from professionals, the findings be shared via the media (X/Twitter, BlueSky, Threads, Reddit) and on our institutional social media platforms (UCA website, SVSAE institute, INSERM, INRAE, etc.).

**Open science:** The project aligns with the open science policy of EPE UCA, reflecting the institution's commitments in this area (https://science-ouverte.uca.fr/nos-engagements/engagements-uca). The project will promote accessibility of publications through the open repository HAL, with systematic deposition of final versions of articles, the submission of preprints to BioRxiv, and their availability upon request on ResearchGate.



**Science and society:** The project and its findings will be communicated to the general public through various channels: Popular science talks held in educational and cultural institutions or during national events such as the Fête de la Science; Press releases targeting local and national media (newspapers, radio, television); Engagement with patient associations such as the François Aupetit Association (www.afa.asso.fr) through open labs, participation in the association's general assembly, etc. The selected candidate will benefit from the "Science with and for Society" label awarded to the site in November 2021.

**Indicators:** Support will be provided in collaboration with UCA to guide and assist the junior professor chairholder (CPJ) on administrative, regulatory, HR, and financial matters, and to help identify solutions in case of difficulties. A quarterly scientific review will be conducted with the unit director to assess project progress (ongoing work, publications, and dissemination of results), efforts to secure additional funding, encountered challenges, and any necessary adjustments. This follow-up aims to ensure the best possible conditions for tenure at the end of the Chair.

## Job attractiveness

- > The junior lecturer has a teaching service obligation on an annual basis of 64 hours HTD without the possibility of doing complementary courses,
- > He/she will be supported throughout the project by a scientific advisor,
- The gross annual salary is : 41 331 € (based on INM 735),
- > The junior professor will benefit from an ANR support of 200 k€ (PhD student, post-doc, project funding).

## Organisation of the interview

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

Planned role-playing YES  $\square$  NO  $\boxtimes$ 

The interview will last 50 minutes: it will start with a 20-minute presentation of the candidate's scientific and pedagogical background, motivations, and research and teaching projects. The interview will conclude with 30 minutes of discussion with the members of the selection committee.

At the end of the interviews, the committee will decide on the merits of the candidates, taking into account the quality and originality of their research projects, their motivations, their forward-looking vision of the field and their capacity for scientific and teaching supervision.



## NOMINATION PROCEDURE AND TIMETABLE

## Candidates must <u>imperatively</u> enter their declaration and submit the documents on the website ODYSSEE <u>by clicking here ICI</u>

Opening of registrations on ODYSSEE: july 7, 2025, 10 a.m. (Paris time), deadline for submission of the file on ODYSSEE: <u>August 25, 2025, 4 p.m. (Paris time)</u>

Any file that is still incomplete on the deadline will be declared inadmissible.

## YOUR APPLICATION FILE

#### References:

- Decree No. 2021-1710 of December 17, 2021 relating to the junior professor chair contract provided for by article L. 952-6-2 of the education code and by article L. 422-3 of the code of the research

- Order of 6 February 2023 setting the procedures for applying for recruitment by way of junior professorship contract

**The candidates send a file** <u>in digital version</u> to the President of the University Clermont Auvergne. The file is accessible to the members of the selection board.

In accordance with <u>article 26 de l'arrêté du 6 février 2023</u>, the application file includes the **following documents**:

1) The application form entered online (under ODYSSEE);

2) Both sides of an identity document with photograph

3) A document attesting to the possession of a doctorate, as provided for in article L612-7 of the education code, or for candidates who do not hold a doctorate, a diploma whose equivalence is recognized by the Council of Staff of Teachers and Teacher Researchers (CP2E) of UCA, according to the procedure set out in 1°) of article 5 of decree 2021-1710 of December 17, 2021;

4) The diploma defense report produced (Thesis defense report);

It is recommended that the document be on university letterhead with the names of the referees identifiable. 5) An analytical presentation of the work, books, articles, achievements and activities related to the profile of the position in question, mentioning those that the candidate intends to present at the audition, **produced on the model of the " fiche de candidature CPJ » (to be downloaded from the CPJ page of the site UCA or** <u>click</u> <u>here</u>)

6) Full work of each article, book or achievement the candidate wishes to present during the interview. (max 6 documents)

## French translation of certain documents:

The administrative documents (documents 2 and 3) as well as the defense report written in whole or in part in a foreign language must be accompanied by a translation into French, of which the candidate certifies compliance on honor. Otherwise, the file is declared inadmissible.

The translation of the analytical presentation as well as the works, books, articles and achievements is optional.

# <u>In the event of multiple applications</u>, the candidate must compile a file for each position for which he/she wishes to apply.

Warning:ODYSSEE is not compatible with the use of a tablet or smartphone, please use a computer only.



## ADDITIONAL INFORMATION

#### Additional information on recruitment and the characteristics of this UCA contract are available on the

Clermont Auvergne University website: www.uca.fr, "University" tab then "Working at UCA" then " Recruitment of teaching staff" and "Recruitment of Junior Professor Chair": please <u>click here</u>

## YOUR APPLICATION AND STAFFING SCHEDULE

#### **Dematerialized application:**

You will not receive any paper documents from the University.

The ODYSSEE will allow you:

- to monitor your application(s) and the processing status of each file,
- to learn about the result of the recruitment,
- to formulate, if necessary, your acceptance of position.

#### Provisional timetable:

- Collection of applications: until August 25, 2025 until 4:00 p.m. (Paris time)
- Selection of applications and auditions\*: october 2025
- Entry into office: between december 1, 2025

\* See the calendar on the UCA website: <u>https://www.uca.fr/universite/travailler-a-luca/recrutement-chaire-</u> professeurs-juniors