
CBI Call for Post-doctoral fellows

The CBI (Centre for Integrative Biology) – MCD (Molecular, Cellular, and Development Biology) unit is seeking motivated postdoctoral researchers to apply for various postdoctoral fundings (Marie Skłodowska-Curie, EMBO, FRM, etc.) and join our laboratory to carry out their research project.

Research topic

Mechanobiology of Colonic Crypt Renewal

The [MechanoGut](#) team led by Denis Krndija at the Centre de Biologie Intégrative (CBI Toulouse), seeks a motivated postdoctoral researcher to investigate how mechanical forces regulate epithelial renewal and crypt maintenance in the colon.

The gut epithelium is the fastest-renewing in the body (3–5 days) and is uniquely adapted to withstand continuous chemical, biological, and mechanical stress throughout adult life. Yet how this remarkable balance between rapid renewal, barrier maintenance, and mechanical resilience is achieved — and how tissue architecture is defined and preserved in such a dynamic environment — remains poorly understood.

Building on our recent discovery of robust epithelial mechanoadaptation under physiological load in the mammalian colon ([bioRxiv](#)), this project will explore how the colonic crypt is shaped during development and maintained in homeostasis within the mechanically active gut.

The work combines *in vivo* and *ex vivo* approaches to characterise crypt architecture and cell dynamics using advanced imaging, EdU pulse-chase assays, immunofluorescence, quantitative image analysis and biophysical modelling (in collaboration). All methods and imaging tools are well established in the host lab, and full training and mentoring will be provided.

Keywords: Cell biology, cell/tissue mechanics, intestinal epithelium, morphogenesis

Experience/Skills required:

- PhD in Life Sciences – cell biology and/or developmental biology
- Experience in light microscopy, image analysis, mouse models and tissue culture
- Ability to work autonomously, analyse and present data, write manuscripts

Research environment

Host Institution: [Centre National de la Recherche Scientifique, Université de Toulouse](#)

Research federation: [Centre for Integrative Biology \(Toulouse, France\)](#)

Laboratory: [Molecular, Cellular, and Development Biology Unit](#)

Supervisor: Denis Krndija BlueSky: [@deniskrndija.bsky.social](#)

Team: [MechanoGut](#) | Krndija

Why join CBI ?

Located in Toulouse, France, CBI brings over 400 researchers across three research units in Biological Sciences at the University of Toulouse and the French National Centre for Scientific Research (CNRS).

We offer:

- **A cutting-edge research environment** with access to state-of-the-art core facilities in genomics, imaging, bioinformatics, and more – all dedicated to advancing fundamental research in life sciences
- **A collaborative, international scientific community**, committed to equality, diversity and inclusivity
- **A multidisciplinary campus at the University of Toulouse**, offering education in science, health, engineering, and technology, representing one of France's major research cluster
- **A supportive career development**, including mentoring, networking, and fellowship guidance
- **Collaborative opportunities** across research centers in Toulouse and within European networks
- **A dynamic, affordable city offering rich culture and high quality of life.** Ideally located between the Mediterranean, the Atlantic, and the Pyrenees' Mountain, Toulouse has long been a key crossroads in Europe. As the capital of the Occitanie region, France's leader in research and innovation, Toulouse hosts over 15,000 academic researchers, 7,500 PhD students, and dedicates 3.5% of its GDP to R&D

Targeted fundings

- [EMBO Postdoctoral Fellowship](#) – Deadline : **23 January 2026**
- [AToUT Postdoctoral Fellowship Programme](#) – Deadline : **28 February 2026**
- [Marie Skłodowska-Curie Postdoctoral Fellowship](#) – Deadline : **September 2026**
- [FRM – Post-doctorate in France](#) – Deadline : **Expected in May 2026**
- [HFSP Long-Term Fellowship](#) – Deadline : **7 May 2026 (Letter of intent) and 25 September 2026**
(Submission of Full Proposal)
- [EMBO Postdoctoral Fellowship](#) – Deadline : **July 2026 (2 calls per year)**
- And other potential fundings depending on your topic and the eligibility

Most fundings provide living allowance, mobility allowance, family allowance (if applicable, research costs, travel and relocation support). However, each funding opportunity has specific eligibility requirements.

Application Process

- 1) Send a detailed CV and cover letter describing your research interests and how they relate to our team, and including the contact information of at least two references (potential supporters and mentors), to:
 - Denis Krndija: denis.krndija@utoulouse.fr
 - Isabelle Saves: isabelle.saves@utoulouse.fr

Email subject line: CBI_PF Application: Denis Krndija _[Candidate Name]

2) Internal deadline: 15 January 2026

Don't hesitate to apply now as applications will be reviewed on a rolling basis.

- 3) Expected Starting date: From September 2026 to September 2027 depending on the funding