

CALL FOR APPLICATION

INSERM CHAIR Recruitment

Development of nano-imaging methods for complex patho-physiological processes monitoring

The Inserm chair recruitments are Tenure Tracks 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 post-doctoral experience. The position is offered on a fixed-term contract (CDD) with a view to tenure in the Inserm Research Directors staff at the end of the contract.

Location/ Laboratory:	Inserm U1182 - Laboratoire d'Optique et Biosciences 91120 Palaiseau, FRANCE, https://lob.ip-paris.fr/en
Partner institution:	Ecole polytechnique/ Institut Polytechnique de Paris
Body after tenure:	Inserm Research Director
Anticipated duration of the contract:	5 years
Scientific domains/fields:	Biology and Health
Specialized scientific commission (CSS):	Health Technology – CSS7
Remuneration package	3 500€ - 5 000€ according to research experience
Quota	Full time
Research contact:	marie-claire.schane-klein@polytechnique.edu
Administrative contact:	chaires-professeur-junior@inserm.fr
Application deadline:	September 2, 2026
Required profile:	Education: PhD Researcher Profile: R3/R4 R3 researcher who has developed a level of independence and can be described as an established researcher R4 researcher who can be termed a 'leading researcher'. This would include the team leader of a research group or head of an industry R&D laboratory

Summary of the scientific project:

Understanding many complex diseases and designing rational treatments requires research on multiple scales, ranging from molecular events to morphological and functional behaviour at the organ level. The dynamics and spatial organization of signalling pathways can be essential in determining normal or pathological responses in cells and tissues.

This project aims to provide a versatile toolkit for precision imaging at the nanometre scale and with sub-second resolution, compatible with complex systems. This approach will be applied *in vitro* to study the



spatiotemporal organization of fundamental biological functions (division, transcription, trafficking, etc.) in single-celled organisms in various contexts, providing a new test for relevant biomedical questions, such as stress response or antibiotic resistance.

Summary of the teaching project:

The junior professor is expected to teach and train students at École Polytechnique/IP Paris, either at the master's level (two majors: Biology-Health & Biomolecular Engineering-BME) or at the bachelor's level and in the École Polytechnique engineering program. He/she will also benefit from an environment conducive to innovation, with the local Drahi-X innovation centre and local initiatives aimed at supporting technology transfer.

Strategy of the host institution:

The French National Institute for Health and Medical Research (Inserm) is the primary public institution dedicated to biomedical and health research. Inserm conducts research with a focus on translating research findings into clinical and therapeutic applications that address current public health challenges. Partners include universities, hospitals, and international research organizations.

École Polytechnique is a leading French institute within the Institut Polytechnique de Paris and part of the dynamic Saclay scientific hub, combining high-level research, teaching, and innovation at the cutting edge of science and technology. The research conducted covers all modern scientific fields, with the aim of providing answers to today's major societal challenges. Among these fields, the theme of "Biology-Health" has seen significant development in recent years, with the creation of a highly active interdisciplinary center called "Engineering for Health (E4H)". Supported by the ExcellenceS (France2030) "STEP2" project, the center will be joined by several junior professors. The researcher recruited in this program will strengthen the Laboratory for Optics and Biosciences, a leading laboratory in the "Biology-Health" theme at the Institut Polytechnique de Paris and participate in this major movement for the Life Sciences.

Strategy of the host laboratory:

The junior professor will join the Laboratory for Optics and Biosciences Laboratory (LOB, <https://lob.ip-paris.fr/en>), a joint Inserm-CNRS Physics-École Polytechnique unit. The LOB recently received a very positive evaluation from HCERES and Inserm, and the unit has been renewed in January 2026. The unit is part of a dynamic environment within the interdisciplinary Engineering for Health (E4H) centre, which brings together fundamental, technological, and computational activities for health sciences in the laboratories and facilities of Institut Polytechnique de Paris. The junior professor will strengthen the "Quantitative Nanoimaging of Biological Systems – Organization and Dynamics" team, <https://lob.ip-paris.fr/en/research/nanoimaging-cell-dynamics-and-quantitative-biology>, which focuses on cell signalling processes and develops original techniques based on tracking single molecules using fluorescent nanoparticles or super-resolution.

Inserm package: 200k€

Additional support (co-funding):

Allocation doctorale (IP Paris)

Master fellowships

Recurrent funding allocated by LOB

Part-time teaching role as a *Professeur chargé de cours (PCC)* in Ecole Polytechnique

How to apply: <https://pro.inserm.fr>

Supplementary information (Scientific dissemination, Selection of candidates, indicators, required profile...):

https://pro.inserm.fr/wp-content/uploads/2026/03/U1182_Fiche-de-poste-CPJ-2026_LOB_pr_aff_2026.pdf



Laboratoire d'Optique et Biosciences

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