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| JUNIOR PROFESSOR CHAIR **Biotechnologies and et biotherapies***Ecole Supérieure de Biotechnologie de Strasbourg**Biotechnologie et Signalisation Cellulaire (UMR7242)* | UMR 7242  |

**TEACHING**

ESBS (**École Supérieure de Biotechnologie de Strasbourg**) is an engineering school affiliated with the University of Strasbourg. It has a trinational teaching program with Germany (Freiburg) and Switzerland (Basel). The school promotes humanistic, scientific, and technical values for a sustainable and better-shared world. Its educational offerings are enhanced by an engineering degree in Chemistry-Biotechnology in partnership with ECPM (*Ecole Chimie Polymères et Matériaux*, Strasbourg) a Master's in Biotechnology offered in four specializations (Synthetic Biology, High-Throughput Analysis, Design and Production of Biomedicines, and Data Sciences), as well as two university diplomas (Eco-Responsible Engineering, Therapeutic Research and Innovation). The teaching team includes about twenty permanent faculty members and benefits from the administrative support of around ten collaborators. The recruited person will work with the engineering students of ESBS and the students of the Master's in Biotechnology. The recruited candidate will integrate into the teaching team and participate in the evolution of the education offered to the students of the engineering school. Teaching service: 64 hours/year.

**RESEARCH**

The research unit BSC (**Biotechnologie et Signalisation Cellulaire UMR 7242**) supported by the CNRS (National Center for Scientific Research), INSERM (National Institute of Health and Medical Research), and the University of Strasbourg, is located in the research building of ESBS, in the heart of the Illkirch-Graffenstaden campus. It develops research projects at the crossroads of functional genomics and chemical biology. Eight research teams and around one hundred people conduct research to innovate in therapies for pain, autoimmunity, inflammation, cancer, and microbial and genetic diseases.

Biotherapies and biotechnology offer new therapeutic prospects. The project aims to enhance our research aimed at treating pain and complex diseases of inflammatory, microbial, or genetic origin, including cancers and immune system disorders. The junior professor will integrate into this interdisciplinary network, combining the production and optimization of biomolecules, vectorization technologies, and validation on relevant biological models for clinical and industrial application. He/she will develop biotechnologies to define candidate biopharmaceuticals and accelerate their therapeutic exploitation. Challenges remain in the design of natural or semi-synthetic biomolecules, tissue targeting and vectorization, engineering of complex multicellular systems such as organoids, and the validation of relevant preclinical tests with advanced processing of large data sets.

**OBJECTIVES**

The Junior Professor contract is a new pathway to pre-tenure equivalent to 'tenure track.' This program aims to lead to a permanent position. The contract is accompanied by a working environment and a financial envelope to facilitate the start of research activities and support the researcher in view of a tenure position within the body of university professors. At the end of the contract, a tenure commission hears the candidate during an audition and assesses their scientific value as well as their ability to carry out the responsibilities. The Junior candidate Professor will be expected to develop and lead high-quality research in accordance with international standards and to demonstrate by the end of the contract the ability to perform the duties of a university professor at the University of Strasbourg.

**CONTACTS**

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