



## Research Associate Position for Therapeutic Proteins Production

We are seeking an outstanding candidate for a research associate position for antimicrobial proteins production in cell-free systems. The successful candidate will take part of an ongoing national grand challenge funded project aimed at biologics production ([Grand-Défi-Biomédicament](#)).

The position is open at the MICALIS institute (INRAE, University of Paris-Saclay), a research unit of more than 350 researchers developing multidisciplinary approaches and promoting microbial systems biology towards the development of synthetic biology applications for health and biotechnology. Within MICALIS, the recruiting research team specializes in developing whole-cell and cell-free synthetic biology for bioproduction, and biosensor engineering to produce biologically active molecules and monitor disease biomarkers.

The successful candidate will be responsible for antimicrobial proteins (AMPs) production in *E. coli* cell-free systems. Cell-free extracts will be provided by the project partners, but cell free components and the targeted AMPs will have to be optimized. To that end the person recruited will: (i) set up a robotized workstation with liquid handlers and DNA synthesizer, (ii) run an optimization loop on the robotized workstation to maximize productivity and/or therapeutic activities and (iii) use an [active-learning](#) optimization software product the recruiting team has developed. To achieve these tasks the successful candidate will benefit from several years of experience the recruiting team (~12 members cf. <https://www.jfaulon.com>) has in developing and optimizing cell-free systems.

### Applicants' profile:

- Applicants should have a Ph.D. degree, preferably with post-doctoral experience, in one or more of: molecular biology, synthetic biology, protein bioproduction, cell-free systems.
- Essential skills required include experimental protocols and analytical techniques used in molecular biology. Experience in working with cell-free systems is desirable. Additional experience with coupling software with robotize workstation will be an additional advantage (but not essential).
- Ability to write high-quality research manuscripts, strong collaborative skills, and excellent communication skills in English are required.

**The position is open for 12 months (then renewable for two additional years) from July 1<sup>st</sup>, 2021.** The appointee will be hired through fixed-term contracts in accordance with the French legislation. A competitive salary will be proposed based on qualifications and experience.

**To Apply:** Applicants should send a detailed curriculum vitae, a letter of intent explaining their motivations for the position, and contact details of at least two references. Send your queries/ applications to: [jean-loup.faulon@inrae.fr](mailto:jean-loup.faulon@inrae.fr) and [manish.kushwaha@inrae.fr](mailto:manish.kushwaha@inrae.fr)