



## Postdoctoral Position in biology/immunology and maternal-fetal interface in late pregnancy, Institut Cochin, Paris

A postdoctoral fellowship for 2 years is available as early as February 2021 at [Institut Cochin](https://www.institutcochin.fr). This project, part of the Myestrom project, funded by the ANR, and coordinated by [Céline Méhats](#) in collaboration with [Anne Hosmalin](#) and [Ludivine Doridot](#), aims to further unravel the heterogeneity and functions of myeloid subpopulations at the maternal-fetal interface and unveil their dynamics during parturition.

### Context

Prematurity and its complications are the leading cause of death in children under the age of 5 years and can cause long-term health problems. Our goal is the identification of all cell types of the human and murine maternal-fetal interface, especially myeloid and stromal cells, and the characterization of their crosstalk and fate around labor, to better understand the dynamics and molecular mechanisms responsible for labor onset. We will use cutting edge technologies, including multidimensional flow and spectral cytometry and single-nucleus RNA sequencing.

Institut Cochin provides a highly dynamic scientific life between fundamental and clinical research in the center of Paris (<https://www.institutcochin.fr>). The postdoctoral fellow will work in the group of [Céline Méhats](#) from the team "From Gametes to Birth", DRC Department (Development, Reproduction, Cancer) and in the team of [Anne Hosmalin](#), 3I Department (Infection, Immunity, Inflammation) and will benefit from the expertise of the other project partner [Ludivine Doridot](#) and of the state-of-the-art core facilities (Genomics, NGS, cytometry).

### Job description

The successful post-doctoral fellow will perform detailed immunophenotyping of myeloid cells of maternal-fetal interface during late pregnancy. The project will include a variety of ex vivo and in vitro approaches in human and mouse models, including multidimensional cytometry and Single cell profiling (snRNA-seq and snATAC-seq). The fellow will be also involved in the integration of these data with other "omics" data generated by the consortium in close collaboration with a postdoctoral fellow in bioinformatics.

The fellow is expected to interpret and criticize his/her own results as well as to write scientific articles and perform oral presentations in local, national and international meetings.

### Keywords

Maternal-fetal interface, parturition, multidimensional cytometry, Single cell profiling

### Candidate profile

-PhD in Immunology

- Strong experience in Immunology and demonstrated skills in multidimensional flow cytometry, cell biology, including cell cultures, molecular biology is required.
- Experience in myeloid cell biology, mouse models, single-cell and bulk transcriptomics and genomics are a plus.
- Dedicated, highly self-motivated and innovative, autonomous and rigorous. Good communication skills that allow productive interactions with an interdisciplinary team (Bioinformatics and biology). Ability to communicate in both spoken and written English.
- Prior experience in the field of reproduction is not mandatory.

**Availability, type and duration of the contract**

- 24 months, as early as February 2021.
- Fixed-term employment (CDD), project funded by the ANR (Agence Nationale de la Recherche)
- Salary level determined according to experience following Inserm internal guidelines, i.e. according to experience. Exceptional skills may be considered.

**How to apply**

- Motivation letter, CV and two reference letters should be sent to [celine.mehats@inserm.fr](mailto:celine.mehats@inserm.fr) and [anne.hosmalin@inserm.fr](mailto:anne.hosmalin@inserm.fr)
- For the subject line, please use “Myestrom post-doctoral biology position 2021”
- Any questions regarding this position can be sent to this e-mail address.





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A 2 years postdoctoral fellowship funded by the ANR is available in the group of [Céline Méhats](#) in the “From Gametes to Birth” team in collaboration with the team of [Anne Hosmalin](#), at [Institut Cochin](#), Paris.

The Myestrom consortium works on the human and mouse maternal-fetal interface to characterize cell crosstalk and fate during parturition. The project will **integrate multiple synergistic technologies and expertise**: multidimensional flow cytometry, Single cell profiling (snRNA-seq and snATAC-seq), bulk RNA-seq and ATAC-seq to better understand the molecular mechanisms responsible for labor onset.

The position is for a talented and motivated immunologist to perform detailed immunophenotyping of myeloid cells of maternal-fetal interface during late pregnancy. The project will include a variety of ex vivo and in vitro approaches in human and mouse models. Applicant will have a strong background in immunology and demonstrated skills in multidimensional flow cytometry, cell biology, including cell culture, molecular biology. Experiences in myeloid cell biology, mouse models and single cell transcriptomics are a plus. Prior experience in the field of reproduction is not mandatory. The candidate will be able to communicate effectively with scientists from various backgrounds and motivated to work in an interdisciplinary team (Biology and Bioinformatics).

Please send a motivation letter summarizing your past experience and research interests and a CV including the names and 2 referee contact information via email to [celine.mehats@inserm.fr](mailto:celine.mehats@inserm.fr) and [anne.hosmalin@inserm.fr](mailto:anne.hosmalin@inserm.fr)