

## Early-Stage Researcher 8 (ESR2) / PhD student

### UTERINE MICROBIOME AND FEMALE FERTILITY

PhD student will carry out her/his doctoral research and training jointly at two degree-awarding universities and will be awarded a double PhD degree from **the University of Oulu (Finland)** as the main host, and **the University of Tartu (Estonia)** as the co-host.

#### Universities and research units

A successful candidate will be selected to work on a research project coordinated by the University of Oulu in a productive and dynamic [research team of Prof. Terhi Piltonen](#) that is well established in the field of reproductive medicine. [The Medical Research Center Oulu \(MRC Oulu\)](#) is a multidisciplinary research environment for clinical, translational and healthcare socioeconomic research. MRC Oulu, located at the Kontinkangas campus, has wide range of infrastructures to conduct high-quality research, including facilities of Faculty of Medicine, Biochemistry and Molecular Medicine, the Biocenter core facilities, Northern Finland Birth Cohort, the Northern Finland Biobank Borealis and Oulu University Hospital.

The research fellow will also work at **the University of Tartu (UT)** for the secondment period for an estimated period of 12 months. **The UT**, established at 1632, includes four faculties, four colleges and several regional development units. The UT belongs to the top 2% of universities worldwide. UT is the leading centre of research and training and the only medical university in Estonia. In Tartu, ESR8 will be hosted by [Prof. Andres Salumets' group](#) at [the Faculty of Medicine](#).

#### Project

A PhD researcher will be hired on a project funded through [the EU project MATER](#), a Marie Curie Training Network.

The goal of the project is: **(1)** To define how normal uterine microbiome changes during the menstrual cycle and whether the changes in microbiome of women with reduced fertility differs from that of fertile controls and **(2)** To develop a molecular biology method to detect inflammatory conditions predisposing to infertility. The ESR8 will use endometrial biopsy and fluid samples to identify microbial and inflammatory players using next-generation sequencing methods and other biomedical technologies.

ESR8 will mostly be hosted by the University of Oulu and will be seconded for a shorter period to the University of Tartu (minimum of 6 months in total). The position also includes a training period in European company focusing on reproductive health.

#### Eligibility criteria

- Researchers can be of any nationality.
- There is no age limit.
- All researchers recruited in a Marie Skłodowska-Curie ITN must be ESRs. An ESR shall, at the time of recruitment by the host organisation, be in the first four years of their research

career and not yet have been awarded a doctoral degree. The four years start to count from the date when a researcher obtained the degree, which would formally entitle her/him to embark on a doctorate.

- Researchers are required to undertake transnational mobility (i.e. move from one country to another) when taking up their appointment.
- At the time of recruitment by the host beneficiary, researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of their main host university for more than 12 months in the 3 years immediately prior to the reference date.

#### **Requirements for a successful PhD candidate:**

- Master's degree (MSc) in biology, biochemistry, microbiology, biotechnology, bioinformatics, medicine or in a related discipline;
- Highly motivated candidate with strong interest in female reproduction, microbiome research and the immune system;
- Experience in molecular biology techniques;
- Experience in microbiome studies is preferable but not mandatory;
- Proven proficiency in English, both written and orally;
- Strong writing and analytical skills;
- Good communication and organization skills;
- Ability to meet deadlines and complete a PhD thesis within the defined project time;
- Capacity to work both as an independent researcher and as part of a team;
- Ability to work in an interdisciplinary context.

#### **What we offer**

We are offering one full time appointment (100%) as a PhD student for a period of 4 years, of which the first three years are covered by the Marie Curie ITN project and the fourth year by the hosting research institutes. ESR8 will be hosted by the Department of Obstetrics and Gynecology (University of Oulu) and Institute of Clinical Medicine at Faculty of Medicine (University of Tartu). The starting date is negotiable. ESR8 will be awarded a PhD by the University of Oulu and the University of Tartu.

The project also offers a unique opportunity to train under several established researchers in the field of reproductive health and thus opportunity to obtain vast network facilitating establishment of fellow's future career. The multinational research environment will help in advancing adaptation and organization skills, both important traits to become a successful researcher.

#### **Interested?**

For more information please contact **Dr. Riikka Arffman** ([riikka.arffman@oulu.fi](mailto:riikka.arffman@oulu.fi)), **Prof. Terhi Piltonen** ([terhi.piltonen@oulu.fi](mailto:terhi.piltonen@oulu.fi)) or **Prof. Andres Salumets** ([andres.salumets@ut.ee](mailto:andres.salumets@ut.ee)).

For questions regarding MSCA EJD double degree, please contact Teemu Pennanen ([teemu.pennanen@oulu.fi](mailto:teemu.pennanen@oulu.fi)) at the University of Oulu or Reet Marits ([reet.marits@ut.ee](mailto:reet.marits@ut.ee)) at the University of Tartu.

**Apply here:** <https://mater.ut.ee/application>



Candidates who make the shortlist will be invited for an interview. These may be conducted in person or via Skype.

