

Postdoctoral researcher (2 years)

Microfluidic and clinical approaches to study the impact of menstrual protection on the vaginal environment

Geographic location: Montpellier, France Detailed assignment: IRD, MIVEGEC

Project Title: Combining a vagina-on-a-chip model and clinical investigation to evaluate the effect of chemicals from menstrual protections on the vaginal environment

Project acronym : V-CHIP

Project duration: 2 years (4 years possible)

Brief description of the project: This work is part of the V-CHIP project, which aims to combine experimental and bioinformatics analyses to study the impact of various factors, including menstrual protection, on the vaginal environment.

Job title to be filled: Postdoctoral researcher - Microfluidic and clinical approaches to study the impact of menstrual protection on the vaginal environment

Main mission: Studying the impact of contaminants from menstrual protection on the vaginal environment

Definition of tasks to be accomplished: The postdoctoral researcher will take advantage of a new microfluidic system to recapitulate the vaginal environment (vagina-on-a-chip). He or she will work in tandem with an engineer who will be responsible for the direct implementation of the vagina-on-a-chip. Skills in experimental biology, particularly microfluidics, cell culture and/or bacterial culture would be strongly recommended. This system will mainly be used to assess the toxicity of certain pollutants from menstrual protection, such as silicates or elastomers on the viability of vaginal cells, and associated bacterial communities. It will also be possible to experimentally explore questions relating to the dynamics of bacterial communities, particularly with regard to certain factors such as antibiotics and their resistance. In parallel, the postdoctoral researcher will have access to an already established clinical cohort to quantify pre-identified chemical residues in vaginal swabs from healthy young women followed longitudinally.

Qualifications / area of training required: PhD in microbiology / cell biology or any relevant field

Job constraint: The main constraint associated with this position is the precariousness associated with the non-permanent type contract. Some of the work will also be carried out while part of the team will be remote, which could result in less than ideal remote working conditions. Beyond that, classic risks associated with laboratory work, cell and bacterial culture are anticipated.

Useful information: Experience in microfluidic systems would be a major asset. Excellent command of English and basic skills in statistics are required. Additional skills in cell biology, molecular biology or biochemistry would be welcome.

Nicolas Tessandier nicolas@tessandier.fr https://tessandier.fr

To apply, you can contact me by email with a cover letter and CV.