



IBMM
Institut des
Biomolécules
Max Mousseron



M2 INTERNSHIP OFFER

February-July 2027

Development of the next generation of non-invasive therapies for endometriosis

Key words: polymers, hydrogels, drug delivery, women's health, endometriosis, ultrasounds

CONTEXT

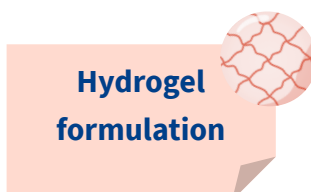
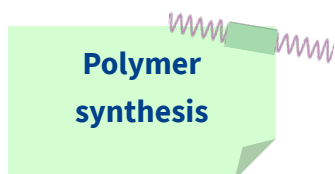
Endometriosis affects approximately one in ten women of reproductive age, yet treatment options remain very limited and are often associated with significant side-effects or invasive surgery. Novel biomaterials and drug delivery technologies have the potential to transform the management of this chronic disease.

PROJECT

At the interface of **formulation science, polymer chemistry and drug delivery**, this research project aims to develop a **novel acoustically triggered drug delivery system based on implantable hybrid hydrogels** for personalized, on-demand and efficient treatment of endometriosis.

WHAT YOU WILL DO

- **Synthesize and characterize polymers** able to form hydrogels under relevant conditions
- **Formulate a library of hybrid hydrogels** and characterize them (physicochemical & rheological behaviors)
- **Evaluate their biocompatibility** on several cell lines



CANDIDATE PROFILE

We are looking for a **highly motivated Master (M2) student or final-year engineering student** who is eager to work on an interdisciplinary research project. Ideal candidates should have a background in **formulation, polymers, gels and/or physicochemical characterization**. We are seeking for a curious, rigorous candidate with a strong interest in developing innovative solutions for biomedical applications.

Application fields: chemistry, pharmaceutical sciences, materials science, chemical & biomedical engineering

PRACTICAL INFORMATION

Duration: 5 to 6 months

Start Date: (January)/ February 2027

Host Institution: Institut des Biomolécules Max Mousseron (IBMM)

Team: Polymers for Health and BioMaterials (PHBM)

<https://ibmm.umontpellier.fr/polymeres-pour-la-sante-et-biomateriaux/>

Location: IBMM, Pôle Chimie Balard, 1919 Route de Mende, Montpellier, France

Supervisor: Dr Léa Guerassimoff, CNRS

INTERESTED?

Join our multidisciplinary and dynamic team if you want to contribute to impactful and innovative research in drug delivery for women's health!

📧 **Interested candidates must send a CV, an official transcript (2 previous years) and a motivation letter to** lea.guerassimoff@gmail.com, benjamin.nottelet@umontpellier.fr and xavier.garric@umontpellier.fr.