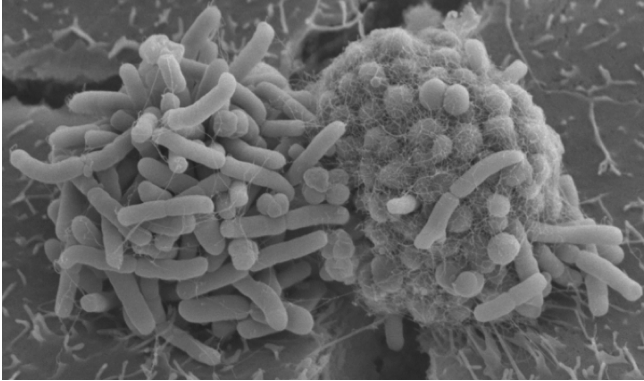




# Postdoctoral Researcher in Bacterial Mechanics and Physiology



Many bacteria initiate biofilm formation by building, either by motility, accretion or division, small aggregates referred as **microcolonies**. These microcolonies, comprised of anywhere between a few hundreds to a few thousands bacteria are in many respects the **embryo of mature biofilms**.

Similarly to what has been discovered in multicellular eukaryotic organisms, intercellular and external **mechanical forces** play a crucial role in the physiology of these early biofilms.

The goal of this project is to use bacterial model systems showing stereotypical formation of microcolonies in order to understand the way mechanical forces are transduced to physiological and morphological changes in microcolonies. You will combine **molecular biology, genetics, microscopy, micromanipulation and force measurement** to pursue this goal. We will compare results found in these simpler prokaryotic aggregates to results found in organized eukaryotic aggregates to see if we can discover general principles on the use of **mechanical forces in multicellular living matter**.

**Are you a passionate scientist ready to dive into the captivating world of bacterial mechanics and physiology? We're looking for a highly motivated and dedicated Postdoctoral Researcher to join our dynamic team and contribute to the storied legacy of the Laboratoire Jean Perrin at Sorbonne Université.**

## What You'll Do:

As a Postdoctoral Researcher, you will have the opportunity to:

- Investigate the mechanics and physiology of bacteria in-depth.
- Conduct cutting-edge experiments to unravel the secrets of bacterial behavior.
- Collaborate with a diverse team of scientists and experts in the field.
- Publish your findings in leading scientific journals.
- Present your research at national and international conferences.

## Qualifications:

To excel in this role, you should have:

- A Ph.D. in Microbiology, Biochemistry, Molecular Biology, Physics or a related field.
- Exceptional problem-solving and critical-thinking skills.
- A passion for advancing our understanding of bacterial biology.

## How to Apply:

**If you're ready to embark on an exciting research journey and contribute to our understanding of bacterial mechanics and physiology, we want to hear from you!**

Please submit the following to [nicolas.biais@sorbonne-universite.fr](mailto:nicolas.biais@sorbonne-universite.fr) preferably **before November 23rd 2023**

- Your up-to-date CV.
- A cover letter outlining your research interests, qualifications and motivation for this position.
- Contact information for at least two professional references.

**Don't miss this opportunity to shape the future of microbiology! Apply today and be a part of our innovative research team! The initial contract is 12 months renewable. Tentative start date: January 2024. Salary commensurate with experience.**

Sorbonne Université is an equal opportunity employer. We encourage applications from candidates of all backgrounds and experiences.