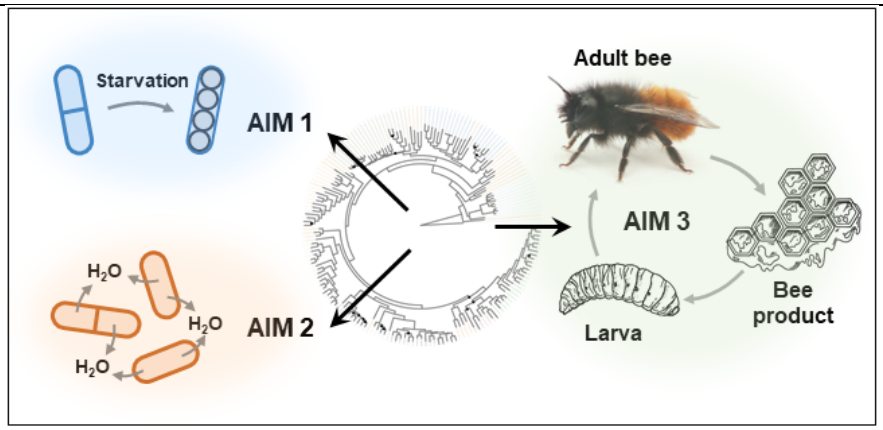
Centre de Recherche de Biologie cellulaire de Montpellier
CRBM / CNRS – Université de Montpellier
1919 Route de Mende, 34293 Montpellier Cedex 05

2027 Internship Offer

Master 1: YES – Duration: 4+2 months **Master 2**: YES – Duration: 6 months

Team, Contact	Dom Helmlinger dhelmlinger@crbm.cnrs.fr
Title	Diversity of sexual reproduction strategies in fission yeasts
Research Themes and questions	The recent expansion of *Schizosaccharomyces pombe* wild strain collections offers a unique opportunity to uncover new principles of genome regulation and evolution. In this species, the switch from asexual to sexual reproduction is triggered by nutrient starvation and controlled by well-characterized signaling pathways. However, our preliminary work revealed striking variations in this response across individual strains, hinting that distinct environmental cues may govern reproduction in different ecological contexts.
Methods and experimental approaches	In this rotation project, you will investigate the genetic basis of these variations using comparative genomics and molecular genetics. The project offers hands-on experience with yeast genetics, cell biology, and data analysis, and contributes to a broader effort to understand how natural diversity shapes reproductive strategies in micro-organisms.
Illustration	
2-3 Publications	Tusso *et al.*, Mol. Biol. Evol., 2019, DOI: 10.1093/molbev/msz126 D'Angiolo M and Bähler J., 2024, DOI: 10.1002/yea.3930 Noly *et al.*, bioRxiv, 2026, DOI: 10.64898/2026.04.13.718246