

Postdoc or Research associate/engineer position in Fungal Cell Biology/Biophysics

A funded position is available at the Institute of Biology Valrose, University of Côte d'Azur, Nice France to investigate the **roles of cytoplasmic crowding in fungal pathogen morphogenesis, antifungal responses and host interactions**. Our initial findings indicate that cytoplasmic crowding is altered during *Candida albicans* morphogenesis and tolerance to azole antifungal drugs. The goal of this project is to elucidate how cytoplasmic crowding is sensed and regulated in this fungal pathogen and how do changes in the pathogen's environment affect cytoplasmic crowding. In this ANR funded collaborative project, we aim specifically to determine the link between morphogenesis, antifungal drug tolerance and host interactions, and cytoplasmic crowding at the single cell level. The project will take advantage of cutting-edge imaging approaches, micro-fabrication, molecular genetics and image analysis to investigate relationship between the physical characteristics of the cytoplasm and fungal pathogen physiology as well as tolerance to antifungal drugs.

We are seeking highly motivated candidates with a background in Cell Biology and/or Biophysics and previous experience in live-cell imaging or image analysis. Previous Microbiology experience is a plus.

Interested candidates contact R. Arkowitz (robert.arkowitz@univ-cotedazur.fr)

- 1) E. Plumb, A. Serrano, L. Chevalier, J. Elferich, L.R. Sinn, N. Grigorieff, M. Ralser, J. Berman, M. Bassilana & R.A. Arkowitz. *BioRxiv*. 2025.
- 2) A. Serrano, C. Puerner, E. Plumb, L. Chevalier, J. Elferich, S. Diggs, L.R. Sinn, N. Grigorieff, M. Ralser, M. Delarue, M. Bassilana & R. A. Arkowitz. *Nature Microbiology*. 2026. 11:169.
- 3) A. Serrano, M.A. Basante-Bedoya, M. Bassilana M & R.A. Arkowitz. *mBio*. 2023. 14:e0249323.
- 4) R. Garcia-Rodas, H. Labbaoui, F. Orange, N. Solis, O. Zaragoza, S. G. Filler, M. Bassilana, & R. A. Arkowitz. *mBio*. 2022. 13:e0387321.
- 5) C. Puerner, A. Serrano, R. S. Wakade, M. Bassilana & R. A. Arkowitz. *mBio*. 2021. 12: e0252821.

