



## PhD position 2023 - 2026

Molecular chaperones in tissue proteostasis and stress resilience

### Project

Our [team](#) investigates the mechanisms governing protein homeostasis (proteostasis) in development and aging using the powerful *Caenorhabditis elegans* model system. The PhD project will focus on dissecting the role of molecular chaperones in different tissues of adult *C. elegans*, to understand how they contribute to maintaining the integrity of the proteome in basal conditions and in the face of proteotoxic stress. It will combine diverse techniques, including reverse genetics, imaging, CRISPR/Cas9 genome editing, and genomic approaches.

### Candidate profile

- Master's degree in molecular biology, cell biology, genetics or related field
- Substantial research experience
- Ability to work independently and as a team
- Strong communication and organizational skills

### Position

Funding is available for 3 years  
Starting date is October 1<sup>st</sup>, 2023

### Environment

The position is to join a young, ATIP-Avenir funded group within the department of Cell Biology of the Institute for Integrative Biology of the Cell ([I2BC](#)), in Gif-sur-Yvette. The institute comprises 60 research groups distributed in 5 departments and is jointly affiliated with the CNRS, the CEA, and Paris-Saclay University. The I2BC provides access to state-of-the-art facilities and a vibrant international research environment.

### Contact

Interested candidates should send a cover letter and a CV including at least two references to [ambre.sala@i2bc.paris-saclay.fr](mailto:ambre.sala@i2bc.paris-saclay.fr)

### References

- Sala, A.J., L.C. Bott, and R.I. Morimoto, *Shaping proteostasis at the cellular, tissue, and organismal level*. J Cell Biol, 2017. **216**(5): p. 1231-1241.
- Sala, A.J., et al., *Embryo integrity regulates maternal proteostasis and stress resilience*. Genes Dev, 2020. **34**(9-10): p. 678-687.
- Sala, A.J. and R.I. Morimoto, *Protecting the future: balancing proteostasis for reproduction*. Trends Cell Biol, 2021.
- Sala, A.J., et al., *Nuclear receptor signaling via NHR-49/MDT-15 regulates stress resilience and proteostasis in response to reproductive and metabolic cues*. BioRxiv, 2023. <https://doi.org/10.1101/2023.04.25.537803>