

Postdoctoral Fellowships

Marie Skłodowska-Curie Actions Developing talents, advancing research



CALL FOR APPLICATIONS 2025 – FELLOWS

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Host Institution Sorbonne Université

https://www.sorbonne-universite.fr/en

Research Lab Development Adaptations and Aging

https://www.ibps.sorbonne-universite.fr/en/research/development-

adaptations-and-aging

Research Team Stem Cells, Cardiovascular pathophysiology and Biotherapies

https://www.ibps.sorbonne-universite.fr/en/research/development-

adaptations-and-aging/carther

Project Title

Generation of Extracellular Vesicles for Cardiac Therapy: A Cell-Free Alternative to Stem Cell Transplantation

Project Description

Cardiovascular diseases (CVD) are leading causes of death worldwide and developing effective treatments is challenging. The use of mesenchymal stem cells (MSC) has shown limitations as low clinical efficacy and donor-related issues. To address these challenges, we are investigating whether preconditioning MSC with mitochondria enhance their secretion of therapeutic extracellular vesicles (EV). Our aim is to develop a cell-free therapy using these EV, rather than MSC, for effective CVD treatment.

Keywords

stem cells, extracellular vesicles, heart regenerative therapies

Description of the Host Research Lab

Dev2A builds on its long-standing expertise in many aspects of integrative developmental biology, using a wide variety of model organisms, including C. elegans, Drosophila, zebrafish, Xenopus, chicken, mice and plants. We also develop work on cell and tissue culture, organoids and organ-on chips.