

## **Researcher Ana Paredes wins the International Birnstiel Award 2023**

29/09/2023

*The Spanish National Centre for Cardiovascular Research (CNIC) researcher Dr Ana Paredes has won the International Birnstiel Award 2023*

The [Spanish National Centre for Cardiovascular Research](#) (CNIC) researcher Dr Ana Paredes has won the International Birnstiel Award 2023.

This prize is awarded in recognition of the research undertaken for her doctorate, supervised by Dr Mercedes Ricote, on cardiac metabolism. As noted by the jury “during her doctorate, Dr Paredes made a crucial discovery: maternal milk plays a key role in maturing the metabolism of murine neonates. More specifically, an omega-6 fatty acid called gamma-Linolenic acid, which is found in maternal milk, triggers essential genetic programmes that equip mitochondria in the heart with the necessary enzymes to consume lipids instead of glucose. This critical metabolic reprogramming enables extra-uterine heartbeats, and ultimately enables neonatal survival. Beyond cardiac health, these discoveries bear major implications for diseases in which there is abnormal materno-foetal harmony”.

The study was published in Nature in 2023 (Paredes A., Justo-Méndez, R., Jiménez-Blasco, D. Núñez, V., Calero, I., Enríquez, JA., Ricote, M. g-linolenic acid in maternal milk drives cardiac metabolic maturation. Nature 2023: [/doi.org/10.1038/s41586-023-00000-0](https://doi.org/10.1038/s41586-023-00000-0) ).

Dr Paredes is joined by 5 other young scientists: Sam van Beljouw (TU Delft), Ariën Schiepers (Rockefeller University), Ida Jentoft (Max Planck Institute of Science), Rosalie Lipsh-Sokolik (Weizmann Institute of Science) y Stanislau Yatskevich (MRC Laboratory of Molecular Biology MRC / Cambridge University

---

**Source**

**URL:** <https://www.cnic.es/en/noticias/researcher-ana-paredes-wins-international-birnstiel-award-2023>