

PASQUAL MARAGALL RESEARCHERS PROGRAMME

## The Pasqual Maragall Foundation visits the Institute for Neurosciences to deliver the Pasqual Maragall Researchers Programme grant



From left to right: Jorge Brotons Mas, José Vicente Sánchez Mut, Arcadi Navarro, Ángel Barco, Cristina Maragall, Ángel Carbonell, Emilio Geijo and Cristina Orts at the IN.

The president of the Pasqual Maragall Foundation, Cristina Maragall, and its director, Arcadi Navarro, visited yesterday the Institute for Neurosciences (IN), a joint center of the Spanish National Research Council (CSIC) and the Miguel Hernández University (UMH) of Elche, on the occasion of the awarding of the Pasqual Maragall Researchers Programme grant to researcher **Jose Vicente Sánchez Mut**, who, thanks to this project, will study how sleep quality favors resilience to Alzheimer's. The Pasqual Maragall Foundation, in its scientific and social commitment to Alzheimer's research, launched the first edition of this programme in 2023, endowed with a total of 1.5 million euros, to promote clinical or translational research projects focused on Alzheimer's or other age-related neurodegenerative diseases.

The board of directors of the Pasqual Maragall Foundation was received by the vice-rector for Research and Transfer of the UMH, Ángel Carbonell, the Vice-dean of the Degree in Physiotherapy of the CEU Cardenal Herrera University (CEU UCH) in Elche, Cristina Orts, and the IN management team. Also attending the visit was CEU UCH professor, IN collaborator, and electrophysiology expert **Jorge Brotons Mas**, who, within the framework of this project, will characterize how rodents behave in the different sleep phases. After an initial meeting, in which the director of the IN, **Ángel Barco**, presented the main lines of research of the institute, the delegation took a tour of several laboratories and facilities.

They visited the IN's Molecular Imaging Service, which has state-of-the-art Magnetic Resonance (MRI) and a Bruker BioSpec 7 Tesla fully equipped to perform *in vivo* and *ex vivo* MR imaging and spectroscopy. During the visit to this facility, the researchers showed some of the MR images that they obtained in the development of several experiments related to Alzheimer's in collaboration with the [Translational Imaging Biomarkers laboratory](#), directed by researcher **Silvia De Santis**.

Next, they visited the [Functional Epi-Genomics of Aging and Alzheimer's Disease laboratory](#) of the Molecular Neurobiology and Neuropathology Department. In it, attendees could learn first-hand some of the key aspects of the project led by Jose Vicente Sánchez Mut, which also showed several preliminary results. Thanks to obtaining this grant, the researcher is developing a multidisciplinary study to identify new therapeutic strategies to increase resilience to Alzheimer's disease.

Resilient patients are those who, although they present Alzheimer's pathology, do not develop the symptoms of the disease. Along these lines, evidence suggests that better sleep quality could promote resilience to Alzheimer's, but the mechanisms are still unknown. "The award of this project will allow us to carry out large-scale research, with the aim of not only determining the effects of sleep quality on resilience to Alzheimer's disease but also knowing through what mechanisms it does so, which would allow us to find potential therapeutic targets to improve the resilience of patients," highlights Sánchez Mut.

Finally, the delegation also visited the IN Microscopy Facility, a microscopy and image analysis platform offering state-of-the-art equipment to perform various techniques such as confocal microscopy, multiphoton, light-sheet (*in vivo* and clarified), or super-resolution microscopy. At this point in the visit, the researchers showed super-resolution images of brains showing plaques of the pathology.

### **When you take care of yourself, Alzheimer's takes a step back**

The awarding of the grant and the official presentation of the project directed by Sánchez Mut was held during a new informative talk on Alzheimer's prevention, titled '**When you take care of yourself, Alzheimer's takes a step back**'. The meeting, organized by the Pasqual Maragall Foundation at the Palacio de Congresos de Alicante, was led by **Nina Gramunt**, a neuropsychologist expert in training and dissemination at the Foundation. The session, attended by more than 100 people, aimed to provide advice on healthy lifestyle habits that can help in Alzheimer's disease and other age-related neurodegenerative diseases prevention.

Currently, it is estimated that Alzheimer's and dementia affect 900.000 people, a figure that translates into one in ten people over 65 years old and a third of those over 85. However, it is estimated that one in three cases of Alzheimer's could be prevented by adopting healthy lifestyle habits.

### **About the Pasqual Maragall Foundation**

The Pasqual Maragall Foundation is a private non-profit entity that was born in April 2008, in response to the commitment made by Pasqual Maragall, former mayor of Barcelona and former president of the Generalitat of Catalonia, when he publicly announced that he had been diagnosed with Alzheimer's.

Around 200 professionals work at the foundation who pursue a double mission: promoting research to prevent Alzheimer's and offering solutions that improve the quality of life of affected people, their families, and their caregivers. Their work is possible thanks to the support of fifteen entities and a social base of more than 61,000 members, who contribute financially to the continuity of the project.

The objective of the Pasqual Maragall Researchers Programme grants is to promote the search for solutions against dementia. In this first call, 1.5 million euros have been destined to finance the three award-winning projects. "It is an investment in the future of scientific research and a firm commitment to the health and well-being of our society. Through this program, we reaffirm our commitment to research into Alzheimer's and other age-related neurodegenerative diseases, with the conviction that science will guide us toward a future in which they are eradicated", says Arcadi Navarro, director of the Pasqual Maragall Foundation.

You can collaborate with the Pasqual Maragall Foundation at the following link:  
<https://fpmaragall.org/donativos/>

Source: Institute for Neurosciences CSIC-UMH ([in.comunicacion@umh.es](mailto:in.comunicacion@umh.es)) /  
Pasqual Maragall Foundation ([ptalero@fpmaragall.org](mailto:ptalero@fpmaragall.org))

**Sant Joan d'Alacant, May 22<sup>nd</sup>, 2024**