BIOGRAPHICAL SKETCH

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NAME: Javier Santos Cantador

eRA COMMONS USERNAME (credential, e.g., agency login): N/A

POSITION TITLE: Predoctoral researcher, Centro Nacional de Investigaciones Cardiovasculares (CNIC)

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
Universidad Autónoma de Madrid	BSc	07/2023	Biochemistry
Universidad Complutense de Madrid	MSc	07/2024	Translational Medicine Research

A. Personal Statement

From an early age, life sciences and human health have been a fascination that has matured over time into the pursuit of a career in academic research. After finishing my high school studies with a distinction, I started my trajectory by pursuing a Graduate's Degree in Biochemistry at Universidad Autónoma de Madrid, where my initial interest steered me towards the field of neurology and the signalling pathways involved in brain disease. With an ultimate aspiration to contribute to academia through competitive research, I first joined Dr. Felipe Ortega's lab in the Biochemistry Department of Universidad Complutense de Madrid's Veterinary faculty for a period of extracurricular formation. There, I studied the role played by purinergic signalling and its receptors in adult neurogenesis in conditions of health and disease. Furthermore, I remained with the group the following year to develop my graduate's thesis, which focused on the role played by purinergic receptor P2X7 in conditioning the behaviour and differentiation patterns of neural stem cells in the brain's subependymal zone (the main neurogenic niche in the adult brain).

However, as someone with diverse interests, I followed the advice of a fellow predoctoral student at the lab and applied for one of CNIC's Cicerone scholarships for the formation of young researchers. This opportunity granted me a two-month stint at José Luis de la Pompa's laboratory, which focuses on the study of the genetic factors underlying congenital heart disease during development through *in vivo* models. After finishing my education period, I followed my academic journey by starting a Master's Degree in Translational Medicine Research at Universidad Complutense de Madrid, which deals with the practical applications of basic research. Regarding my master's thesis, I continued my previous work at CNIC and studied the expression of newly identified genes during heart development using ISH and immunofluorescence.

Once I finished my master's degree, I remained with José Luis de la Pompa's group through a new Cicerone scholarship, which was followed by a predoctoral fellowship to develop my doctor's thesis and continue my journey in biomedical research. My PhD project focuses on the study of the role of the Tm2d1 gene in cardiac development and pathology, using newly generated genetically modified mouse models.

B. Positions, Scientific Appointments, and Honors

Predoctoral researcher. Since September 2024

C. Contributions to Science

N/A