



## Alejandro Carrancho Arroyo

Graduated in Biochemistry at the University of Castilla-La Mancha (2020), with Master in Genetics Cell Biology at the Complutense University of Madrid (2021), and stays at Akershus University Hospital (Oslo), where she gained experience about neurodegenerative diseases. In 2022, she joined the BIFI in the group of Dr. Nunulo Cremades, where she studies protein misfolding and amyloid aggregation. She is also doing her PhD thesis, funded by a DGA grant.



### Researcher profile

She is currently an R1 level researcher. Her work focuses on the study of amyloid protein aggregation, a key process in the development of neurodegenerative diseases for which there is still no cure. She uses biophysical and molecular biology techniques to understand the mechanisms. She participates in several projects, including the development of a diagnostic method for Parkinson's disease based on molecular biomarkers and the generation of cellular models of amyloid aggregation.

### Importance of her research

Neurodegenerative diseases represent a major challenge for public health, and at present, many of these pathologies have no cure. A key process in the development of these diseases is amyloid aggregation. Understanding these mechanisms is fundamental to develop therapeutic strategies. Her research focuses on the development of methodologies for the early detection of Parkinson's disease, and the characterization of the mechanical properties of biomolecular condensates formed by amyloid proteins, including alpha-synuclein and Tau.

