

	Luiz Philipe de Souza Ferreira, PT, PhD candidate Institutional address: Department of Morphology and Genetics, Paulista School of Medicine, Federal University of São Paulo, São Paulo, SP, Brasil. E-mail: luiz.philipe@unifesp.br
Background: PhD candidate in Sciences (Structural and Functional Biology) at the Federal University of São Paulo, Paulista School of Medicine. Completed a visiting PhD internship at the Institute of Pharmacology and Neuroscience, School of Medicine, University of Lisbon (Dec 2024- Nov 2025). Previously, he was a PhD trainee at the Bordeaux School of Neuroscience, France, under the CAJAL Advanced Neuroscience Training Programme. He holds a BSc in Physical Therapy from the University of Fortaleza (2021). During the COVID-19 pandemic, he worked as a coder and data reviewer for the Oxford COVID-19 Government Response Tracker Project at the University of Oxford, Blavatnik School of Government (2020). His research focuses on the role of the Annexins proteins in neurodegenerative diseases, particularly Parkinson's and Alzheimer's disease. He has experience in neurobiology with emphasis on molecular, cellular, and tissue biology, working mainly on: nigrostriatal pathway, dopaminergic neurons, neuroimmune interactions, Annexin A1, Annexin A2, Annexin A5, inflammation resolution mediated by microglia and astrocytes, and pyroptosis induced by NLRP3 inflammasome activation in neurodegenerative disorders. Science goals: The global increase in neurodegenerative diseases has fueled the search for new therapeutic targets. In this context, the emphasis has been on treatments with fewer	

side effects, focused on protecting neurons and reducing neuroinflammation. My goals are to find a new pharmacology candidate for Parkinson's and Alzheimer's disease treatment based on a protein name Annexin A1 (AnxA1), a 37kDa protein, seems to have promising effects for mitigating neuronal damage. In view of this, I study the neuroimmune response mediated by astrocytes and microglia as well as systemic responses to understand the pro-inflammatory and pro-resolving profile of endogenous and exogenous AnxA1 in the nigrostriatal pathway. I am also exploring the interaction between the NLRP3 inflammasome and AnxA1 in hippocampal slices stimulated with A β oligomers (A β _{olig}) and phosphorylated Tau (pTau) to mimic the neurodegenerative environment of Alzheimer's disease.

Link: <http://lattes.cnpq.br/7155133675189041>