

Katsipis Georgios



Dr. Georgios Katsipis is a Chemist, holds a PhD in Biochemistry from the Aristotle University of Thessaloniki (AUTH), and is a Postdoctoral Researcher in the Laboratory of

Neurodegenerative Diseases (LND)excellence group of the Center for Interdisciplinary Research and Innovation (CIRI) of the AUTH. His research focuses on the analysis of biomarkers for the diagnosis and treatment of Alzheimer's disease (AD) and mild cognitive impairment (MCI), as well as the involvement of inflammation and infections in the onset of neurodegenerative diseases. He has established an in vitro model of AD neuroinflammatory pathology, based on primary neuron-glia cells isolated from rat brains. He has participated in two funded research projects by the Greek Association of Alzheimer's disease and related disorders (GAADR), concerning the beneficial effects of physical exercise in patients with early dementia and the analysis of inflammatory biomarkers and microbial infections in Alzheimer's patients. Additionally, he has researched the anti-inflammatory and antimicrobial properties of natural products in rat primary neuron-glia cultures and neuronal cancer cells. Results from these studies have highlighted, for the first time, the potential of involving bacterial metabolites (lipopolysaccharides, flagellin, etc) in the diagnosis of Alzheimer's disease, while also promoting the employment of non-intervention diagnosis, i.e. saliva and blood analysis. His research results are reflected in 19 published papers in international journals (>260 citations, H-index 10) and more than 30 presentations at national and international conferences. He is a member of the scientific committee of the Pan-Hellenic and Mediterranean Conference on Alzheimer's Disease and Related Disorders, a member of the Greek Society of Biochemistry and Molecular Biology, the Greek Society of Biological Sciences, and the Association of Greek Chemists. He currently works on a HORIZON project (2D-BioPAD), for developing a biosensor with magnetic nanoparticles and DNA aptamers for early diagnosis and monitoring of Alzheimer's disease. He is also involved in in vivo studies for the effect of induced-inflammation on rat models of Alzheimer's disease, while also performing blood analysis for the cutting-edge blood test "Lumipulse ptau-217/A β 42", for the diagnosis of Alzheimer's

disease patients enrolled in clinical studies of the GAADR.