Dimitra Thomaidou

Dimitra Thomaidou is Research Director in Hellenic Pasteu Institute (HPI) Neurobiology Department and Scientific co-Responsible of HPI's Light Microscopy Unit. DT has 25 years of experience in Neuroscience and Neuroimaging with her research interests focusing on adult neurogenesis and Neural Stem Cell biology. She received her BSc degree in Biology from the University of Athens in 1989 and her PhD in Neuroscience from the University of Patras in 1994. She continued to post-doctoral studies initially in University College London and then in Rockefeller University New York, with scientific focus on cell cycle regulation and neurogenesis during nervous system development. She returned back to Greece in 1999 awarded with "Career Award" Program and in 2002 she was elected Associate Researcher in HPI. In 2012, after being awarded a Greek Ministry of Education Aristeia Grant, DT formed her independent Group (Neural Stem Cells and Neuro-Imaging) in the Neurobiology Department of HPI. During her tenure in the Institute she has developed cutting-edge scientific approaches including sophisticated cell cycle analysis, primary Neural Stem Cell (NSC) cultures from embryonic and adult brain, direct reprogramming of astrocytes and fibroblasts to induced-neurons, construction and stereotaxic injection of recombinant viral vectors expressing or silencing neuronal proteins into the neurodegenerated brain and live cell imaging. The current research interests of her group are focusing on the exploitation of the mechanism of action of novel genes/ miRNAs in instructing direct neurogenic reprogramming of astrocytes and the assessment of their properties in vitro and in vivo in animal models of neurodegeneration / neuroinfalammation. To this end, her group has introduced live cell imaging approaches to follow the route of reprogrammed cells towards subtype-specific functional induced-neurons in vitro and 2-photon intravital imaging into the cortex to in vivo explore the properties of activated glial cells following neuroinflammation. publication record consists of 80 articles, 43 of them in peer-reviewed high impact factor journals, among which J. Neuroscience, JBC, Cell Reports, Stem Cell Reports, PNAS GLIA and Brain.