

Brief CV of Prof. Daniele Piomelli

Dr. Piomelli was trained in neuroscience and pharmacology. Research in his lab is focused on the function of lipid-derived messengers, with particular emphasis on the endogenous cannabinoids anandamide and 2-arachidonoylglycerol. Current research efforts converge on three areas: formation and deactivation of anandamide and 2-arachidonoylglycerol; physiological roles of the endogenous cannabinoid system; development of therapeutic agents that target anandamide and 2-arachidonoylglycerol metabolism.

Primary neural cell cultures and state-of-the-art analytical techniques such as liquid chromatography/mass-spectrometry are used to investigate formation and deactivation of anandamide and 2-arachidonoylglycerol in brain cells. Protein purification and cloning approaches are employed to characterize the molecular mechanisms underlying these processes. Cellular pharmacology and medicinal chemistry, in collaboration with leading international labs, are used to identify pharmacological agents that interfere with various aspects of endogenous cannabinoid function, and their therapeutic potential is explored in vitro and in vivo.

Dr. Piomelli developed first in vivo acting inhibitors of the main enzymes involved in the catabolism of endocannabinoids and paracannabinoids such as monoacylglycerole lipase (MGL), fatty acid amide hydrolase (FAAH) and *N*-acylethanolamine acid amidase (NAAA).

He is authors of more than 480 articles on top scientific journals (nearly 47,000 citations and a H-index of 103) and inventors in many patents on therapeutics agents.