Carla Distasi

Curriculum vitae

BIO AND EDUCATION

Baccalaureat (classical studies) – 1978 Master degree in Physics (110/110) – University of Turin- Italy - 1984 PhD in Physiological Sciences– University of Milan - Italy 1992

She performed research at:

Laboratoire de Biologie Cellulaire et Moléculaire-Centre National pour la Recherche Scientifique, Gif-sur-Yvette, France 1984–1985.

Département de Physiologie – Centre Médical Universitaire –Geneve –Switzerland 1986-1987 Dipartimento di Biologia Animale e dell'Uomo – University of Torino– Italy 1987-1998 University of Piemonte Orientale – Department of Pharmaceutical Sciences (DSF) Novara –Italy 1998-today

She is head of the Laboratory of Cellular Physiology and Biophysics at DSF Novara and she is an expert in electrophysiology, calcium imaging, quantitative time–lapse videomicroscopy, immunocytochemistry, primary cell cultures, cell biology.

UNIVERSITY CAREER

2002-	Associate Professor, Department of Pharmaceutical Sciences, University of
	Piemonte Orientale, Novara, Italy.
1999-2002	Assistant Professor, Faculty of Pharmacy, University of Piemonte
	Orientale, Novara, Italy.
1993-1999	Assistant Professor, University of Turin, Faculty of Sciences M.F.N.,
	Alessandria, Italy
1986-1987	Assistant professor, University of Geneva, Faculty of Medicine, Geneva,
	Switzerland

MAIN FIELDS OF INTEREST

- 1. Mechanisms of regulation of potassium and calcium-permeable ion channels
- 2. Neuron-glia interactions during cellular migration: the role of calcium signals
- 3. Neurotoxicity and ionic signals induced by metal oxide nanoparticles
- 4. Assessment of a SiPM-based detector for bioluminescent signals

- 5. Pathogenesis of chemotherapy-induced peripheral neurotoxicity
- 6. Role of calcineurin in neurodegenerative diseases

CURRENT ISSUES OF RESEARCH

- 1. Pathogenesis of Chemotherapy-Induced Peripheral Neurotoxicity. Study of the underlying mechanisms in chemotherapy-induced peripheral neuropathy. The research, in collaboration with Prof. G. Cavaletti of the University of Milan Bicocca, aims to characterize the molecular mechanisms underlying the peripheral neuropathy induced by chemotherapy, investigating in particular the effect on the activity and expression of channels and transporters, calcium signals and pH homeostasis.
- 2. **Assessment of a SiPM-based detector for bioluminescent signals**. The research, in collaboration with prof. M. Caccia of the University of Insubria, aims to develop a detector for the signals emitted by luminescent biosensors
- 3. Role of astrocytes in Alzheimer's disease. The research conducted in collaboration with prof. D. Lim (UNIUPO) is devoted to the study of the role of calcium signals and astrocytic calcineurin in Alzheimer's disease

CURRENT FUNDED PROJECTS

Programme	FUNDED PROJECT
PRIN 2017	Pathogenesis of Chemotherapy-Induced Peripheral Neurotoxicity

TOP FIVE PAPERS

<u>Distasi C</u>, Dionisi M, Ruffinatti FA, Gilardino A, Bardini R, Antoniotti S, Catalano F, Bassino E, Munaron L, Martra G, Lovisolo D. (2019) Nanomedicine (London). 14:575-594.

Bolis V, Busco C, Ciarletta M, Distasi C, Erriquez J, Fenoglio I, Livraghi S, Morel S (2012) Hydrophilic/hydrophobic features of TiO2 nanoparticles as a function of crystal phase, surface area and coating, in relation to their potential toxicity in peripheral nervous system .J Colloid Interface Sci. 369:28-39.

Billington RA, Bellomo EA, Floriddia EM, Erriquez J, Distasi C, Genazzani AA. (2006) A transport mechanism for NAADP in a rat basophilic cell line. FASEB J.; 20 (3): 521-3.

<u>Distasi C</u>, Torre M, Antoniotti S, Munaron L, Lovisolo D. (1998) Neuronal survival and calcium influx induced by basic fibroblast growth factor in chick ciliary ganglion neurons. Eur J Neurosci. 1998; 10 (7): 2276-86.

Munaron L, Antoniotti S, <u>Distasi C</u>, Lovisolo D. (1997) Arachidonic acid mediates calcium influx induced by basic fibroblast growth factor in Balb-c 3T3 fibroblasts. Cell Calcium.; 22 (3): 179-88.