

Dr. Mario Costa is senior research scientist at Neuroscience Institute, National Research Council (CNR) and Adjunct Professor at Scuola Normale Superiore (Bio@SNS).

Dr. Costa is Author/co-author of over 70 peer reviewed Publications, with an H Index of 27 (Scopus)

## **EXPERIENCE AND TRAINING:**

1990 degree on Biological Science, University of Pisa.

1994 Ph.D. in Pharmacology and Toxicology, University of Pisa

1993-96 Assistant research scientist, New York University, N.Y. USA

1996-99 fellow at the International Centre for Genetic Engineering and Biotechnology, ICGEB, Trieste.

2000-2021: Research Scientist, C.N.R Neuroscience Institute, Pisa.

2001 and 2012 Visiting scientist at the Rockefeller University N.Y. USA. J. Friedman director Star center for Human Genetics.

2014 Visiting scientist at the MRC Cancer Unit, University of Cambridge UK. Dr. C. Frezza

2021-present: Senior Investigator, CNR Neuroscience Institute, Pisa

## HONOURS AND MEMBERSHIPS

-Member of the Bilateral Committee of the Neuroscience Institute (CNR) and the Scuola Normale Superiore (Bio@SNS), Pisa

- 2000- present: Associate scientist at Scuola Normale Superiore (Bio@SNS), Pisa.

-Review Editor for Frontiers Cellular Neurophysiology -Guest editor in the Special Issue "Cellular and Molecular Mechanisms in Neurodevelopmental Disorders and Brain Tumors" International Journal of Molecular Sciences (IJMS)

## FINANCIAL SUPPORT OF ONGOING RESEARCH PROJECTS

- Co-investigator in the project -Stretch-growth and cell therapy: a novel combinatorial approach for treating spinal cord injuries. Wings for Life Spinal Cord Research Foundation (2021-2023)
- Researcher in the project -Radiotherapy with hIgh Dose-rate particle beAms (FRIDA) INFN CSN5 Call 2021

## SELECTED PUBLICATIONS

1) Storti B. et al. A spatial multi-scale fluorescence microscopy toolbox discloses entry checkpoints of SARS-CoV-2 variants in Vero E6 cells. Computational and Structural Biotechnology Journal, 2021

2) Vannini E. et al. CTX-CNF1 Recombinant Protein Selectively Targets Glioma Cells In Vivo: Toxins. 2021

3) Tantillo E. et al Differential roles of pyramidal and fast-spiking, GABAergic neurons in the control of glioma cell proliferation. Neurobiology of Disease 2020

4) Testa G. et al. A triheptanoin-supplemented diet rescues hippocampal hyperexcitability and seizure susceptibility in Foxg1+/- mice. Neurpharmacology 2019

5) Dilillo E. et al Ultra-high mass resolution MALDI imaging mass spectrometry of proteins and metabolites in a mouse model of glioblastoma Scientific reports 2017

6) Vannini E et al Electrophysiology of glioma: a Rho GTPase-activating protein reduces tumor growth and spares neuron structure and function. Neuro-Oncology 2016.

7) Boggio EM. Et al Visual impairment in FOXG1-mutated individuals and mice. Neuroscience. 2016

8) Pancrazi L et al. Foxg1 localizes to mitochondria and coordinates cell differentiation and bioenergetics. Proc Natl Acad Sci U S A. 2015

9) Vannini E. et al The bacterial protein toxin, cytotoxic necrotizing factor 1 (CNF1) provides long-term survival in a murine glioma model.BMC Cancer. 2014

10) Putignano E. et al. Developmental downregulation of experience-dependent histone phosphoacetylation and CRE-mediate gene expression in mouse visual cortex: an inibitory role in adult visual cortical plasticity. Neuron 2007