

# Neuroscience: molecular basis and clinical applications. 1.

<https://neurodegenerationresearch.eu/survey/neuroscience-molecular-basis-and-clinical-applications-1/>

## Title of project or programme

Neuroscience: molecular basis and clinical applications. 1.

## Principal Investigators of project/programme grant

Title	Forname	Surname	Institution	Country
Dr	Luigi	Institute of Biomedical Technologies, CNR, Milan	Institute of Biomedical Technologies, CNR, Milan	Italy
Dr		Sale	Neuroscience Institute, CNR, Pisa	Italy
Dr	Nicola	Origlia	Neuroscience Institute, CNR, Pisa	Italy
Dr	Marta	Di Carlo	Institute of Biomedical Technologies, CNR, Milan	Italy
Dr	Nadia	Canu	Insitute of cell Biology and Neurobiology, CNR, Rome	Italy
Dr	Francesca Luisa	Conforti	Insitute of Neurological Sciences, Catania	Italy

## Address of institution of lead PI

Institution Enrica Strettoi, Consiglio Nazionale delle Ricerche

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City Area della Ricerca, Via Giuseppe Moruzzi 1

Postcode 56124 Pisa

## Country

Italy

## Source of funding information

Consiglio Nazionale delle Ricerche

## Total sum awarded (Euro)

10000000

## Start date of award

01-01-2009

## Total duration of award in months

## **The project/programme is most relevant to**

- Neurodegenerative disease in general

## **Keywords**

mitochondria, environment, amyloid, signal transduction, synapse, microglia, aging, cell biology, biochemistry, pharmacology, imaging, nanoparticles

## **Research abstract in English**

The Neuroscience Program of the Italian CNR comprises numerous lines of research headed by investigators of 10 different Institutes located all over the Country. Several laboratories carry on studies on Alzheimer's, Parkinson's, Huntington's and prion disease and other disorders of the CNS. The studies are funded by the CNR, the Italian Ministry of Education, the EU and by numerous national and international foundations and charities. Methods of study range from molecular techniques to epidemiological approaches. The PIs listed above are responsible of the projects listed here (in order):

- 1) Cellular mechanisms of Parkinson disease: age related alterations in cellular organelles and effects on mitochondrial turnover.
- 2) Neurotrophic factors and Alzheimer disease: effects of environmental manipulations
- 3) Signalling mechanisms in Alzheimer disease: direct effects of beta-amyloid on synaptic physiology. Influence of microglial activation and ischemia on brain function in AD.
- 4) Molecular mechanisms of fibrillogenesis of beta amyloid peptide: biophysical and and biomolecular studies
- 5) Mechanisms underlying the effect of N-terminal 26-230 tau fragment on synaptic dysfunction and neurodegeneration
- 6) FUS (fused in sarcoma) mutations in sporadic amyotrophic lateral sclerosis: clinical and genetic analysis.

## **Lay summary**

The Neuroscience Program of the Italian CNR comprises numerous lines of research headed by investigators of 10 different Institutes located all over the Country. Several laboratories carry on studies on Alzheimer's, Parkinson's, Huntington's. ALS and prion disease and other disorders of the CNS. Methods of study range from molecular techniques to epidemiological approaches.