

Neuroscience: molecular basis and clinical applications. 1.

<https://www.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
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Dr	Marta	Di Carlo	Institute of Biomedical Technologies, CNR, Milan	Italy
Dr	Nadia	Canu	Institute of cell Biology and Neurobiology, CNR, Rome	Italy
Dr	Francesca Luisa	Conforti	Institute of Neurological Sciences, Catania	Italy

Address of institution of lead PI

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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 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

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