



UNIVERSITA' DEGLI STUDI DI MESSINA
*Dipartimento di Scienze Biomediche, Odontoiatriche e delle Immagini
Morfologiche e Funzionali*

Corso di Laurea in Biotecnologie Mediche (Classe LM-9)

MOLECULAR NEUROSCIENCES

Docente: Prof. Francesco Pisani

COURSE PROGRAM

- Cellular and animal models in neurosciences.
- Molecular basis of hereditary and acquired neurological disorders.
- Molecular basis of Muscular dystrophies, Congenital Myopathies, Metabolic Myopathies: pathophysiology and molecular diagnostic strategies.
- Innovative Molecular therapies in muscular dystrophies and other neuromuscular disorders.
- Mitochondrial genetics and the main methods of molecular diagnostics in mitochondrial disorders.
- Hereditary ataxias and Spastic Paraplegia: diagnostic algorithms to guide the molecular diagnostics.
- Neurodegenerative monogenic diseases (familial Parkinson, dementia, genetic prion diseases): pathogenesis and molecular biomarkers.
- Huntington Disease and trinucleotide repeat disorders.
- Molecular basis of Hereditary Neuropathies and ALS.
- New Methods of molecular diagnostics for the identification of new disease genes in the context of neurological diseases.