

PERSONAL INFORMATION

Cinzia Cagnoli

📍 Fondazione IRCCS Istituto Neurologico Carlo Besta
UO Epilettologia Clinica e Sperimentale
Address Via Amadeo 42, 20133 Milano

✉ cinzia.cagnoli@istituto-besta.it

Gender: F | Nationality: Italian

ORCID: **0000-0001-6863-6687**

WORK EXPERIENCE

06/2020 – presente

Italian NHS Researcher

Fondazione IRCCS Istituto Neurologico Carlo Besta, Milan.

- Responsible of the projects studying pathogenetic mechanisms of Spinal Muscular Atrophy (SMA)
- Referent for the MALDI mass spectrometry facility

12/2016 - 06/2020

Contract Researcher

Fondazione IRCCS Istituto Neurologico Carlo Besta, Milan.

- Responsible of the projects studying pathogenetic mechanisms of Spinal Muscular Atrophy (SMA)

01/2016 - 06/2017

Faculty Member and Vocational School Teacher

Scuola d'Arte Fantoni, Azienda Bergamasca Formazione, Istituto Scolastico Sistema, Bergamo

- Applied Chemistry and Applied Biology courses for the Restoration Technician School.
- Cosmetology; Hygiene, physiology and chemistry courses in Vocational Schools.

11/2012 - 08/2015

Researcher

Fondazione Filarete for Biosciences and Innovation, Milan

- Referent for Cell Model Systems Technology Platform (research, technology transfer, scientific and technical support to customer)

11/2011 - 10/2012

Researcher

University of Milan, Department of Medical Biotechnology and Translational Medicine, Milan

- Responsible of a project on CNS molecular mechanisms of a commercial herbal remedy for menopausal symptoms (laboratory of Prof. F. Scaglione)

12/2004 - 10/2011

Researcher

University of Milan, Department of Medical Biotechnology and Translational Medicine, Milan

- Technical and scientific assistance to the different projects of the laboratory led by Prof. M. Matteoli
- Main topics: Communication between neuronal and non-neuronal cells in CNS; Secretory pathways in non-neuronal CNS cells and their involvement in neuropathology.

01/2000 - 07/2004

Pharmacist

Farmacia Dr. Guerra, Verdellino (BG).

- Dispensation of prescription medications, provision of OTC medications and dietary supplements, patient health monitoring and advice.

09/1996 - 12/1999

Post-doctoral position

Swiss Federal Institute of Technology (ETH), Institute of Biochemistry, Zurich (CH).

- Responsible of the project: Isolation and identification of phosphorylated proteins in brain contactin/F11 signal transduction pathway (laboratory of Prof. K. Winterhalter)
- Responsible for training of undergraduate and PhD students

02/1994 - 07/1996

Research Fellow

Allegheny Singer Research Institute (ASRI), Neuroscience Research Center, Allegheny Campus of the Medical College of Pennsylvania, Pittsburgh PA (USA)

- Main project: Molecular mechanisms of apoptosis in *in-vitro* neurotoxicity models (lab of Dr. H. Manev)

EDUCATION AND TRAINING

- 11/1991 - 11/1995 **PhD degree**
University of Milan, Department of Pharmacy, Milan
- Neuropharmacology, neurotoxicology, biochemistry and cellular biology techniques, cell culture.
 - Dissertation on "Role of apoptosis and protein kinase inhibition by isoquinolinsulfonamides in *in-vitro* models of neurotoxicity".
- 11/1992 **Scientific qualification for the practice of the pharmacist profession**
University of Milan, Department of Pharmacy, Milan
- Pharmacology, pharmaceutical technology and legislation
- 03/1992-06/1992 **Post-graduate Pathology Course**
University of Milan, Department of Pharmacy, Milan
- Immunology, oncology, infective diseases, cardiovascular pathologies.
- 10/1985 - 07/1991 **Master's degree in Pharmaceutical Chemistry and Technology**
University of Milan, Department of Pharmacy, Milan
- Chemistry, Biochemistry, Anatomy, Physiology, Pharmacology and Molecular pharmacology, Mathematics, Physics, Pharmaceutical technology and industry, Pharmaceutical legislation

ACHIEVEMENTS AND AWARD

- Grants**
- 2017-2022: Annual donations from Girotondo Onlus SMA patient organization for research projects on pathogenetic mechanisms Spinal Muscular Atrophy) Amount founded: € 20.000/year for 2017-2020; € 15.000/year for 2021-2022. Role: Co-PI
 - 2020-2021: Research Grant 2019 /R-single/065 from AISM-FISM. Title: The role of T-helper-released extracellular DNAs (THREDS) in autoimmune inflammation and neurodegeneration of the central nervous system. Duration: March 2020-October 2021. Amount funded: € 75,000. Role: Collaborator
 - 2017: Grant GPP13081 Fondazione Telethon. Title: Relevance of the axonal SMN protein (a-SMN) for spinal muscular atrophy: novel cell models, transgenic mice and therapeutic approaches. Duration: December 2014- December 2016 extended to October 2017. Amount funded: € 166,500. Role: Co-PI
 - 1995: ASRI Intramural Grant. Title: c-myc and neuronal apoptosis. Duration: 1year. Amount funded: \$ 10,000. Role: PI
- Patents**
- "Proteins and/or peptides for prevention and/or cure of neurodegenerative diseases". Referent in FINCB

TECHNICAL SKILLS

Biochemistry/molecular biology: subcellular fractionation, synaptosomal and PSD purification. 1D-/2D-PAGE, WB analysis, ELISA. Immunoprecipitation/co-immunoprecipitation; Protein-protein interaction study. DNA/RNA extraction, RT-PCR. Cloning and DNA sequencing. In vitro transcription/translation experiments.

Mass spectroscopy: MALDI MS of proteins and peptides, MALDI MS imaging on fresh frozen and FFPE tissues.

Cell culture and cell biology: immortalized cell culture; primary cultures of murine neuronal and glial cells; transient transfection with liposomes, Ca-phosphate, nucleofection.

Microscopy: IHC/IF, confocal microscopy, 3D-reconstruction of dendrites and axons, video microscopy, single cell calcium imaging.

Animal handling and surgical procedures: transgenic colonies management, drug administration, functional tests, aortic perfusion and dissection of murine tissues (cerebral and spinal areas).

Competent with programs for: Image analysis (ImageJ), stat analysis (Origin, Prism), protein analysis (swiss-Prot, Expasy, Mascott), MALDI mass spectrometry and imaging (FlexControl, FlexAnalysis, FlexImaging, SCiLS).

Project/lab management; training, teaching and supervision of undergraduate and PhD students.