Maria Teresa Carrì

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1981 - Rome - University “La Sapienza” - Doctor in Biology (110/110 cum laude)
1981 - 1986 - Rome - University “La Sapienza” – Research fellow
1983 - Basel - Biozentrum – EMBO Fellow
1986 - 1996 : University of Rome “Tor Vergata” - Assistant Professor of Biochemistry
1997 - today : Fondazione S.Lucia, IRCCS, Rome – Head, lab. of Neurochemistry
2001 - 2006 : University of Rome “Tor Vergata” - Associate Professor of Biochemistry
2004 - 2008 : Member of the Commission for Amyotrophic Lateral Sclerosis of the Italian Ministry of Health.
2005 - today : Elected Member of the Scientific Board, “Centro Interuniversitario di Ricerca sulle Basi Molecolari delle Malattie Neurodegenerative”.
2007 - today : University of Rome “Tor Vergata” – Full Professor of Biochemistry

Research topics:
1. DNA replication and supercoiled loop organization of the eukaryotic genome (1981-1986)
2. Identification and characterization of small nuclear RNAs (1983)
3. Structure and mechanisms of wild-type and mutant SOD1 (1986-1996)
4. Regulation of the expression of SOD1; cell response to copper stress (1991-1994)
5. Human mutant SOD1 and amyotrophic lateral sclerosis; oxidative stress and neurodegeneration (1994-today)
6. Mechanisms of cell death in neurodegeneration (ALS, Alzheimer’s disease, Parkinson’s disease, ageing) (2001-today)

Current projects:
Rescue of mitochondrial damage in ALS through genetic manipulations
Interception of mutant SOD1 aggregation
Calcium trafficking in models for neurodegeneration
Cell stress and RNA splicing in ALS

Grants *(active in 2009)*:
Telethon (Italy); ALS Association (USA) ; Era-NET Neuron (EU) ; Fondation Thierry Latran (France) ; Fondazione Cariplo (Italy); AISLA Foundation (Italy); Compagnia San Paolo (Italy)

Reviewer for the following International funding agencies:
AFM - Association Française Contre les Myopathies
The Prinses Beatrix Fonds, Netherlands
ARS – Association pour la Recherche sur la Sclérose latérale amyotrophique, France
ALS Society of Canada - the Bernice Ramsay Discovery Grants

International collaborations *(active in 2009):*

Prof. B. Keller –Gottingen, Germany
Prof. M.G. Medeiros –São Paulo, Brazil
Prof. M.B. Youdim - Haifa, Israel
Dr. T. Achsel - Leuven, Belgium
Dr. J. Grosskreutz - Jena, Germany
Dr. L. W. Klomp - Utrecht, The Netherlands

Publications (10 selected in the last 5 years)

1. Cozzolino M, Pesaresi MG, Amori I, Crosio C, Ferri A, Nencini M, Carrì MT. Oligomerization of mutant SOD1 in mitochondria of motoneuronal cells drives mitochondrial damage and cell toxicity. Antioxid Redox Signal. 2009 Apr 3. [Epub ahead of print]
2. Carrì MT. Minocycline for patients with ALS. Lancet Neurol. 2008 Feb;7(2):118-9
3. Cozzolino M, Amori I, Pesaresi MG, Ferri A, Nencini M, Carrì MT. Cysteine 111 affects aggregation and cytotoxicity of mutant Cu,Zn-superoxide dismutase associated with familial amyotrophic lateral sclerosis. J Biol Chem. 2008 Jan 11;283(2):866-74.
4. Iaccarino C, Crosio C, Vitale C, Sanna G, Carrì MT, Barone P. Apoptotic mechanisms in mutant LRRK2-mediated cell death. Hum Mol Genet. 2007 Jun 1;16(11):1319-26.
5. Ferri A, Cozzolino M, Crosio C, Nencini M, Casciati A, Gralla EB, Rotilio G, Valentine JS, Carrì MT. Familial ALS-superoxide dismutases associate with mitochondria and shift their redox potentials. Proc Natl Acad Sci U S A. 2006 Sep 12;103(37):13860-5.
6. Crosio C, Casciati A, Iaccarino C, Rotilio G, Carrì MT. Bcl2a1 serves as a switch in death of motor neurons in amyotrophic lateral sclerosis. Cell Death Differ. 2006 Dec;13(12):2150-3.
7. Cozzolino M, Ferri A, Ferraro E, Rotilio G, Cecconi F, Carrì MT. Apaf1 mediates apoptosis and mitochondrial damage induced by mutant human SOD1s typical of familial amyotrophic lateral sclerosis. Neurobiol Dis. 2006 Jan;21(1):69-79.
8. Bendotti C, Carrì MT. Lessons from models of SOD1-linked familial ALS. Trends Mol Med. 2004 Aug;10(8):393-400.
9. Cozzolino M, Ferraro E, Ferri A, Rigamonti D, Quondamatteo F, Ding H, Xu ZS, Ferrari F, Angelini DF, Rotilio G, Cattaneo E, Carrì MT, Cecconi F. Apoptosome inactivation rescues proneural and neural cells from neurodegeneration. Cell Death Differ. 2004 Nov;11(11):1179-91.
10. Ferri A, Nencini M, Casciati A, Cozzolino M, Angelini DF, Longone P, Spalloni A, Rotilio G, Carrì MT. Cell death in amyotrophic lateral sclerosis: interplay between neuronal and glial cells. FASEB J. 2004 Aug;18(11):1261-3.