Curriculum Vitae

Dati personali

Maria Grazia Alessandrì

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Istruzione e Formazione

1996
Specializzazione in Farmacologia
Università di Pisa

1990
Dottorato di ricerca in Pharmacologia e Tossicologia
Università di Torino

1983
Diploma di Laurea in Chimica e Tecnologia Farmacuetiche
Università di Pisa

2000, 2001
Esperienza lavorativa presso il Laboratory for Inherited Metabolic Diseases (Direttore Prof.ssa S. Stoeckler), Department of Pediatrics, University Hospital and General Hospital, Vienna, Austria.

1996
Esperienza di ricerca con tecniche di biologia molecolare nel laboratorio di Genetica Medica-DIBIT (Prof. A. Ballabio) dell'IRCCS San Raffaele (Milano)

1993
Visiting Fellow al National Insitute of Health (Bethesda, USA), Laboratory of Neurophysiology, NINDS (Chief Jeffery L. Barker, M.D.).

1992
Esperienza di ricerca al National Insitute of Health (Bethesda, USA), Laboratory of Molecular Biology, NINDS (Chief Jurgen Wess, Ph.D.)

1983-1986 Attività di ricerca presso l'Istituto di Farmacologia dell'Università di Pisa in qualità di borsista

Competenze personali

Lingua madre **Italiano**

Competenze tecniche

Inglese (B2)

Tecniche cromatografiche: HPLC, GC/MS, TLC, CE
Dosaggi enzimatici
Tecniche di base di biologia molecolare

Ambiti di interesse

Malattie neurodegenerative, Difetti Congeniti del metabolismo, Farmacocinetica

Pubblicazioni

- A. Molinaro, **MG. Alessandrì**, E. Putignano, V. Leuzzi, G. Cioni, L. Baroncelli, T. Pizzorusso. A Nervous System-Specific Model of Creatine Transporter Deficiency Recapitulates the Cognitive Endophenotype of the Disease: a Longitudinal Study. Sci Rep. 2019 Jan 11;9(1):62. doi: 10.1038/s41598-018-37303-1

- **M.G. Alessandrì**, R. Milone, C. Casalini, C. Nesti, G. Cioni, R. Battini. Four years follow up of ACY1 deficient patient and pedigree study. Brain Dev 2018, 40, 570-575.

- F. Mari, B. Berti, A. Romano, J. Baldacci, R. Rizzi, **M. G. Alessandrì**, A. Tessa, E. Procopio, A. Rubegni, C. Marques Lourençǫ, A. Simonati, R. Guerrini, F. M. Santorelli. Clinical and neuroimaging features of autosomal recessive spastic paraplegia 35 (SPG35): case reports, new mutations, and brief literature review. Neurogenetics 2018, https://doi.org/10.1007/s10048-018-0538-8

- R. Battini, **M.G. Alessandrì**, C. Casalini, M. Casarano, M. Tosetti, G. Cioni, Giovanni. Fifteen-year follow-up of Italian families affected by arginine glycine amidinotransferase deficiency. Orphanet J. Rare Diseases 2017,12:21

- L. Baroncelli, A. Molinaro, F. Cacciante, **M.G. Alessandrì**, D. Napoli, E. Putignano, J. Tola, V. Leuzzi, G. Cioni, T. Pizzorusso. A mouse model for creatine transporter deficiency reveals early onset cognitive impairment and neuropathology associated with brain aging. Hum Mol Genet 2016,25 (19), 4186-4200

- L. Baroncelli , **M. G. Alessandrì**, J.Tola , E. Putignano, M. Migliore, E. Amendola, C.Gross , V. Leuzzi, G. Cioni, T. Pizzorusso. A novel mouse model of creatine transporter deficiency. F1000Research 2014

- **M.G. Alessandrì**, M. Casarano, I. Pezzini, S. Doccini, C. Nesti, G. Cioni, R. Battini. Isolated mild intellectual disability expands the Aminoacylase 1 phenotype spectrum. 2014 JIMD Reports; 2:119-23.

- Casarano M., **Alessandrì MG**., Salomons G.S., Moretti E., Jakobs C., Gibson K. M., Cioni G., Battini R. Efficacy of Vigabatrin intervention in a mild phenotypic expression of succinic semialdehyde dehydrogenase deficiency. JIMD Rep, 2: 119-23, 2012, DOI 10.1007/8904_2011_60

- Battini R, Chilosi AM, Casarano M, Moro F, Comparini A, **Alessandrì MG**, Leuzzi V, Tosetti M, Cioni G. Language disorder with mild intellectual disability in a child affected by a novel mutation of SLC6A8 gene. Mol Genet Metab. 2011 Feb;102(2):153-6

- Chilosi A, Leuzzi V, Battini R, Tosetti M, Ferretti G, Comparini A, Casarano M, Moretti E, **Alessandri MG**, Bianchi MC, Cioni G. Treatment with L-arginine improves neuropsychological disorders in a child with creatine transporter defect. Neurocase. 14(2):151-61; 2008.

- Leuzzi V, **Alessandrì MG**, Casarano M, Battini R, Cioni G. Arginine and Glycine stimulate creatine synthesis in creatine transporter 1-deficient lymphoblasts. Anal. Biochem. 375(1): 153-5, 2008

- Battini R, Chilosi A, Mei D, Casarano M, **Alessandrì MG**, Leuzzi V, Ferretti G, Tosetti M, Bianchi MC, Cioni G. Mental retardation and verbal dyspraxia in a new patient with de novo creatine transporter

(SLC6A8) mutation. Am J Med Genet A. 143(15):1771-4, 2007.

- Bianchi MC, Tosetti M, Battini R, Leuzzi V, **Alessandri' MG**, Carducci C, Antonozzi I, Cioni G. Treatment monitoring of brain creatine deficiency syndromes: a ^{1}H- and ^{31}P-MR spectroscopy study. Am J Neuroradiol. 28(3), 548-54, 2007.

- Battini R., **Alessandrì MG**, Leuzzi V., Moro F., Tosetti M., Bianchi MC., Cioni G. AGAT deficiency in a newborn: Early Treatment can prevent the phenotypic expression of the disease. J Pediatr. 148(6), 828-30, 2006

- **Alessandri' M.G.,** Celati L., Battini R., Casarano M, Cioni G. Gas chromatography/mass spectrometry assay for arginine:glycine-amidinotransferase deficiency. Anal Biochem 343, 356-358, 2005.

- **Alessandri' M.G.,** Celati L., Battini R., Baldinotti F., Item C., Leuzzi V., Cioni G. HPLC assay for Guanidinoacetate methyltransferase. Anal Biochem 331, 189-191, 2004.

- Gesi M., Ferrucci M., Giusiani M., Lenzi P., Lazzeri G., **Alessandrì M.G.,** Salvadorini A., Fulceri F., Pellegrini A., Fornai F., Paparelli A. Loud noise enhances nigrostriatal dopamine toxicity induced by MDMA in mice. Microsc Res Tech 64 (4), 297-303, 2004.

- Bianchi M.C., Leuzzi V., Tosetti M., Battini R., **Alessandri' M.G.,** Canapicchi R., Cioni G. GAMT vs. AGAT Brain creatine depletion: clinical, biochemical, brain magnetic resonance imaging and proton spectroscopy features. In: Creatine kinase and brain energy metabolism. T. Kekelidze and D. Holtzman (eds), IOS Press. pp.135-143. 2003.

- Giorgi F.S., Ferrucci M, Lazzeri G, Pizzanelli C, Lenzi P, **Alessandri' M.G.**, Murri L, Fornai F. A damage to locus coeruleus neurons converts sporadic seizures into self-sustaining limbic status epilepticus. Eur J Neurosci 17(12), 2593-601, 2003.

- Ferrari A.R., Guerrini R, Gatti G, **Alessandri' M.G.,** Bonanni P, Perucca E. Influence of dosage, age, and co-medication on plasma topiramate concentrations in children and adults with severe epilepsy and preliminary observations on correlations with clinical response. Ther. Drug Monit. 25(6), 700-8, 2003.

- Fornai F, Lenzi P, Gesi M, Ferrucci M, Lazzeri G, Busceti CI, Ruffoli R, Soldani P, Ruggieri S, **Alessandri' M.G.,** Paparelli A. Fine structure and biochemical mechanisms underlying nigrostriatal inclusions and cell death after proteasome inhibition. J. Neurosci. 23 (26), 8955-66, 2003.

- Schluter O.M., Fornai F., **Alessandri' M.G.,** Takamori S., Geppert M., Jahn R., Sudhof T.C. Role of alpha-synuclein in 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced parkinsonism in mice. Neuroscience 118 (4), 985-1002, 2003.

- **Alessandri' M.G.,** De Vito G., Fornai F. Increased prevalence of pervasive developmental disorders in children with slight arylsulfatase A deficiency. Brain Dev. 24 (7), 688-692, 2002

- Gesi M., Lenzi P., **Alessandrì M.G.,** Ferrucci M., Fornai F., Paparelli A. Brief and repeated noise exposure produces different morphological and biochemical effects in noradrenaline and adrenaline cells of adrenal medulla. J. Anat. 200, 159-168, 2002.

- Item C.B., Stockler-Ipsiroglu S., Stroemberger C., Muhl A., **Alessandri' M.G.,** Bianchi Mc, Tosetti M, Fornai F, Cioni G. Arginine:glycine amidinotransferase deficiency: the third inborn error of creatine metabolism in humans. Am J Hum Genet 69, 1127-1133, 2001.

- Fornai F., Giorgi F.S., Gesi M., Chen K., **Alessandri' M.G.,** Shih J.C. Biochemical effects of the monoamine neurotoxins DSP-4 and MDMA in specific brain regions of MAO-B deficient mice. Synapse 39, 213-221, 2001.

- Bianchi C., Tosetti M., Fornai F., **Alessandri' M.G.,** Cipriani P., De Vito G., Canapicchi R. Reversible brain creatine deficiency in two sisters with normal blood creatine level. Ann. Neurol. 47, 511-513, 2000.

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- Fornai F., Chen K., Giorgi F.S., Gesi M., **Alessandri' M.G**., Shih J.C. Striatal Dopamine Metabolism in Monoamine Oxidase B-Deficient Mice: A Brain Dialysis Study. J. Neurochem. 73, 2434-2440, 1999.

- Fornai F., Giorgi F.S., **Alessandri' M.G.,** Giusiani M., Corsini G.U. Effects of pretreatment with N-(2-Chloroethyl)-N-Ethyl-2-Bromobenzylamine (DSP-4) on Methamphetamine Pharmacokinetics and Striatal Dopamine Losses. J. Neurochem. 72, 777-784, 1999.

- Fornai F., **Alessandri' M.G.,** Torracca M.T., Bassi L., Scalori V., Corsini G.U. Noradrenergic modulation of methamphetamine-induced striatal dopamine depletion. Ann. N.Y. Acad. Sci. 844, 166-177,1998.

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- Fornai F., **Alessandri' M.G.,** Fascetti F., Vaglini F., Bassi L., Torracca M.T., Corsini G.U. Clonidine prevents 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced reduction of striatal dopamine in C57/Bl mice. Pol. J. Pharmacol. 46,294-295, 1994

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- **Alessandri' M.G.,** Ducci M.,Scalori V., Danesi R., Del Tacca M., Bernardini C., Mazzanti L. The pharmacokinetic profile of clofoctol in rat plasma and tissues after oral and rectal administration. Drugs Exptl. Clin. Res. XII, 343-347, 1986.