

Curriculum Vitae

Name: Sandra Moreno, *PhD*

Date: November 2022

PRESENT POSITION:

Associate Professor,

Comparative Anatomy & Developmental Biology
Molecular Neurodevelopmental biology

Director,

Master Program in Human Applied Embryology

Group Leader,

Developmental Biology Lab, University Roma Tre
Developmental Neurobiology, Neurogenetics and Molecular
Neurobiology Lab, IRCCS Fondazione S. Lucia



CONTACTS:

Department of Science,
Roma Tre University
446 Viale G. Marconi
Rome 00146, Italy

Phone: +39 06 57336339

Fax: +39 06 57336321

Email: sandra.moreno@uniroma3.it

Website: https://en.wiki.topitalianscientists.org/Sandra_Moreno

EDUCATION

1994 *PhD* in "Cell Differentiation and Morphogenesis", with honors, University of L'Aquila, Italy

1991 *National Licensure* "Biology", La Sapienza University, Rome, Italy

1990 *BS/MS* in "Biological Sciences", with Honors, La Sapienza University, Rome, Italy

FACULTY APPOINTMENTS

2023-present *Special Member*, Graduate Faculty in the Neuroscience (NEUR) Graduate Program, Graduate School of Biomedical Sciences, University of Texas Medical Branch (UTMB), Galveston (TX, USA)

2020-present *Group Leader*, Laboratory of Neurodevelopmental Biology, Neurogenetics and Molecular Neurobiology, IRCCS Fondazione S. Lucia, Rome, Italy

2018-present *Director*, Master Program "Applied Human Embryology", Roma Tre University, Rome Italy

2017-present *Full Professor Qualified*, as per the National Scientific Qualification (ASN)

2017-present *Group Leader*, Laboratory of Developmental Biology, Department of Science, Roma Tre University, Rome, Italy

2014-present *Associate Professor*, Department of Biology, Roma Tre University, Rome Italy.

2001-2014 *Assistant Professor*, Department of Biology, Roma Tre University, Rome Italy.

RESEARCH POSITIONS

- Nov 2022** *Visiting Professor*, Mitchell Center for Neurodegenerative Diseases, UTMB, Galveston, TX, USA.
- Nov 2021** *Visiting Professor*, Mitchell Center for Neurodegenerative Diseases, UTMB, Galveston, TX, USA.
- Feb-Mar 2020** *Visiting Professor*, Mitchell Center for Neurodegenerative Diseases, UTMB, Galveston, TX, USA.
- Nov 2019** *Visiting Professor*, Mitchell Center for Neurodegenerative Diseases, UTMB, Galveston, TX, USA.
- Oct 2006** *Visiting Scientist*, Laboratorio de Neurobiología de la Audición, Salamanca, Spain.
- Nov 2005** *Visiting Scientist*, Department of Otolaryngology, West Virginia University, Morgantown, WV, USA.
- Oct 2005** *Visiting Scientist*, Department of Neuroscience, Northwestern University, Chicago, IL, USA.
- Oct-Nov 2003** *Visiting Scientist*, Department of Otolaryngology, West Virginia University, Morgantown, WV, USA.
- May 2002** *Visiting Scientist*, Department of Otolaryngology, West Virginia University, Morgantown, WV, USA.
- 1997 – 2001** *Research Technician*, Department of Biology, Roma Tre University, Rome, Italy
- 1995 – 1997** *Post-doctoral Fellow*, Department of Biology, University of L'Aquila, L'Aquila, Italy.
- Jan-Dec 1992** *PhD student*, Department of Biobehavioral Sciences, University of Connecticut, Storrs, CT, U.S.A.

SCIENTIFIC ACTIVITY

Dr. Moreno's scientific activity is documented by 84 peer-reviewed publications (total Impact Factor 270, h-Index 31, total citations 7326, according to Scopus) and numerous presentations at international meetings. Research interests, mostly in the neuroscience field, are as follows:

- *Role of peroxisomes in health and disease, including neurodevelopment and neurodegeneration.* Multiple molecular and morphological approaches are utilized to study peroxisome biogenesis and metabolism, in developing, adult, aging and degenerating central nervous system (CNS), with special reference to Alzheimer's disease (AD) and amyotrophic lateral sclerosis (ALS).
- *Cell death vs. survival pathways in CNS development and neurodegenerative processes.* The role of apoptosis, and autophagy in the nervous system is being investigated in *in vivo* and *in vitro* models of neurodegenerative diseases, including AD and ALS.
- *Involvement of antioxidant response in neurodegeneration and neuroresilience.* The regulatory role played by peroxisome proliferator activated receptors (PPARs) and their cofactor PGC1 α in brain oxidative stress management is studied with reference to energy metabolism pathways involving peroxisomes and mitochondria, in AD and in Non-Demented with Alzheimer's pathology individuals" (NDAN).
- *Study of pathomechanisms underlying rare neurodevelopmental disorders, by induced pluripotent stem cells (iPSCs) technology.* We focus on Riboflavin Transporter Deficiency (RTD) and PCHD19, which have severe neurological implications. Patient-specific iPSCs and derived motor neurons are being investigated, with special reference to cytoskeleton, mitochondria and peroxisome dysfunction, thanks to a collaborative effort with research groups based at Bambino Gesù Hospital.

For the above goals, combined neuromorphological and molecular approaches are utilized, including development of innovative strategies for ultrastructural investigation (e.g., FIB/SEM).

FINANCIAL SUPPORT

ACTIVE SUPPORT

- 2022-present Participant** to the project PNRR-MAD-2022-12375639, “Involvement of neuroprotective mechanism(s) of neuroglobin on aberrant functions related to chronic neurological diseases (988.800,00 €, funded by European Community and Health Ministry, according to the “National Recovery and Resilience Plan”).
- 2021-present Principal Investigator** of the project A0375-2020-36668 AMETISTA “Metabolic alterations in amyotrophic lateral sclerosis: identification of new diagnostic biomarkers and potential therapeutic target”, granted by LazioInnova (149.976,75 €, funded by Regione Lazio)
- 2020-present Principal Investigator** of the project Go for IT “Development of innovative therapeutic approaches against tau protein oligomers, biomarkers of Alzheimer's disease”, granted by Fondazione CRUI (30,000 €).
- 2018-present Participant** to “Excellence Departmental Project” on Antropocene, (Task 4: “Study of the mechanisms of neurodegeneration induced by pollutants in the atmosphere”).
- 2001-present Principal Investigator** of the project "Contribution to Laboratories and Research Activity" (CLAR) granted by Roma Tre University (2,500 €/year).

COMPLETED SUPPORT

- 2017 Annual Individual Financial Support** granted by MIUR on a national competitive basis (30% Associate Professors awarded) (3,000 Euros).
- 2017 Principal Investigator** of the project “International Research and Teaching Program for Doctoral Schools”, granted by Roma Tre University, for financing the Research Program on “Development of the Oesophageal Musculature”, in collaboration with Prof. Boris Kablar, MD, Ph.D. (Dalhousie School of Medicine, Halifax, Canada) (5,000 Euros).
- 2012-2013 Principal Investigator** of the project "Consequences of age-related genomic instability on peroxisomal metabolism: Role of oxidative stress", granted by Roma Tre University in the context of the International Research and Training Program (12,000 Euros).
- 2011 Principal Investigator** of the project “International Research and Teaching Program for Doctoral Schools”, granted by Roma Tre University, for financing the invitation and the scientific collaboration of Prof. Boris Kablar, MD, Ph.D. (Dalhousie School of Medicine, Halifax, Canada).
- 2007-2010 External collaborator** to the project “*SOD1-linked familial amyotrophic lateral sclerosis: novel strategies to rescue mitochondrial damage in motor neurons*” (P.I. Prof. Maria Teresa Carrì), granted by Telethon (N. GGP07018),
- 2005-2008 Participant** in the project “*Integrated Project to decipher the biological function of peroxisomes in health and disease*” (P.I. Johannes Berger; AnnaMaria Cimini), granted by the European Commission (Sixth Framework Programme, Contract No. PL512018).
- 2002-2004 Participant** in the project “*Effect of beta-amyloid on the production of nitric oxide (NO) constitutively generated in glial and neuronal cells in vitro*” (P.I. Prof. Hisanori Suzuki;

Prof. Marco Colasanti), granted by Italian Ministry of Education and Research (MIUR) (Prot. 2002063972_002).

1996-2000 Participant in the European Biomed Concerted Action "Peroxisomal Leukodystrophy"; Contract grant number: BMH4 CT96-1621 DGXII.

EDITORIAL POSITIONS AND REVIEWING ACTIVITY

Academic Editor

Oxidative Medicine and Cellular Longevity
Brain Sciences
RIVER - Research Innovation View Embryology Reproduction

Associate Editor

American Journal of Neurodegenerative Disease

Guest Editor

Current Alzheimer Research Mini-Thematic Issue "Signaling Molecules As Biomarkers And Therapeutic Targets For Alzheimer's Disease: A New Perspective" (2018)

Books Reviewer

McGraw-Hill (Milano), Andreuccetti et al. (2009) "Biologia dello Sviluppo"

Reviewer

Over 20 international journals

Ad Hoc Reviewer (Grants)

2015 University Tor Vergata. Consolidate the Foundations 2015. Research Proposal « Mitochondria and autophagy in degenerative synapses» (Code: 2225).

2015 University Tor Vergata. Consolidate the Foundations 2015. Research Proposal «Dissecting the molecular mechanisms of ER-stress» (Code: 1743).

2014 Katholieke Universiteit Leuven Research Council. Research Proposal «Peroxisomal Lipid and ROS signalling in mammalian cells» (OT/14/100).

2010 FRIA (Fonds pour la Formation à la Recherche dans l'Industrie et dans l'Agriculture), for PhD programs, Université Catholique de Louvain, Belgium.

ACADEMIC COMMITTEES AND ACTIVITIES

2019-present *Member of the Permanent Didactic Committee* for Biology BS and MS programs, Faculty of Sciences, Roma Tre University, Rome, Italy

2010-present *Member of the Committee* for Orientation in Biology, Faculty of Sciences, Roma Tre University, Rome, Italy

2007-present *Member of the Committee* of the PhD Program in Biology, Section "Biology Applied to Human Health", Faculty of Sciences, Roma Tre University, Rome, Italy

2011 *Member of the Committee* for the admittance to Biological Sciences course, Faculty of Sciences, Roma Tre University, Rome, Italy

1997-2001 *Chief of Technical Service* for the Dept. of Biology, Interdepartmental Laboratory (LIME), Faculty of Sciences, Roma Tre University, Rome, Italy

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

- Società Italiana Embriologia Riproduzione e Ricerca (SIERR) *Elected Member of the Scientific Committee* (<https://www.sierr.it/societa-embriologia-riproduzione-ricerca/organi-della-sierr.html>)
- Society for Neuroscience (SFN) *Regular Member*
- Federation of European Neuroscience Societies (FENS) *Regular Member*
- Società Italiana di Neuroscienze (SINS) *Regular Member*

- Gruppo Embriologico Italiano (GEI) *Regular Member, Member of the Scientific Committee and of the Organizer Committee for LXIII Meeting*, June 2017, Rome, Italy (<http://gei2017.uniroma2.it/>)

Search Committees

- 2021** *Member of the Examining Committee* for a Researcher position, Biology Department, University of Naples “Federico II”, Italy
- 2008, 2011, 2015, 2017, 2019, 2022** *Member of the Examining Committee* for the admittance to Roma Tre University PhD programs (Molecular, Cellular and Environmental Biology, Biology Applied to Human Health), Rome, Italy.
- 2008** *Member of the Examining Committee* for an Assistant Professor position, Faculty of Biotechnologies, University of L’Aquila, Italy.
- 2007** *Member of the Examining Committee* for the evaluation of research and teaching activity of Dr. Andrea Di Giulio as an Assistant Professor for confirmation of his tenure position.
- 2007** *Member of the Examining Committee* for an Assistant Professor position, Faculty of Sciences, “Tor Vergata” University, Rome, Italy
- 2004** *Member of the National Committee* for the PhD final examination in Cellular and Molecular Biology, Faculty of Sciences, University of L’Aquila.
- 2001** *Member of the Examining Committee* for an Assistant Professor position, Faculty of Sciences, University of Milan, Italy.

TEACHING AND MENTORING ACTIVITIES

Teaching

- 2020-present** *Co-Course Leader* for the undergraduate Course in *Cell Biology & Genetics*, Dept. of Science, Roma Tre University, Rome, Italy.
- 2018-present** *Course Leader* for the graduate Course in *Laboratory of Neuroscience*, Dept. of Science, Roma Tre University, Rome, Italy.
- 2014-present** *Course Leader* for the graduate Course in *Neurodevelopmental Biology*, Dept. of Science, Roma Tre University, Rome, Italy.
- 2012-present** *Course Leader* for the undergraduate Course in *Comparative Anatomy and Developmental Biology*, Dept. of Science, Roma Tre University, Rome, Italy.
- 2015-2019** *Course Leader* for the graduate Course in *Laboratory of Electron Microscopy*, Dept. of Science, Roma Tre University, Rome, Italy.
- 2007-2015** *Course Leader* for the graduate Course in *Molecular Mechanisms in Developmental Biology*, Faculty of Sciences, Roma Tre University, Rome, Italy.
- 2001-2014** *Collaborator* for the undergraduate course in *Cytology and Histology*, Faculty of Sciences, Roma Tre University, Rome, Italy.
- 2006-2012** *Course Leader* for the undergraduate Course in *Comparative Anatomy and Embriology*, Faculty of Sciences, Roma Tre University, Rome, Italy.
- 2003-2007** *Course Leader* for the graduate Course in *Developmental Biology*, Faculty of Sciences, Roma Tre University, Rome, Italy.
- 2001-2006** *Course Leader* for the undergraduate Course in *Embryology*, Faculty of Sciences, Roma Tre University, Rome, Italy.
- 1997-2001:** *Member of the examining Committee* for the undergraduate course in *Developmental Biology*, Faculty of Sciences, Roma Tre University, Rome, Italy.
- 1993-1997:** *Teaching Assistant* for the undergraduate course in *General Biology with elements of Genetics*, Istituto Superiore di Educazione Fisica, Cassino, Italy.

Thesis Advisor for

23 BS Students

19 MS/BS Students

PhD Students supervisor

2022-current Martina Terricola
2019-current Chiara Marioli
2017-2020 Fiorella Colasuonno
2016-2020 Rossella Borghi
2016-2019 Alessia Niceforo
2014-2017 Pamela Rosso, Chiara Scopa
2013-2016 Anna Fracassi
2012-2015 Barbara D'Orio, Luana Barone
2009-2012 Franco Capozza
2008-2011 Sara Sepe
2008-2011 Francesca Fanelli
2007-2010 Angela Lanciotti
2002-2005 Valentina Imbroglini

Post-docs

2021-current Maurizio Muzzi
2020-current Rachel Price
2019-2020 Fiorella Colasuonno
2016-2017 Anna Fracassi
2015-2016 Luana Barone

INVITED SEMINARS

- *“Cellule staminali pluripotenti umane: alla ricerca di base alle applicazioni biomediche”*. 11 maggio 2022, Dipartimento di Bioscienze e Territorio, Università del Molise, Pesche (IS).
- *“Stem cells: an overview”*. Master di II livello in Biologia e Biotecnologie delle Riproduzione: Dalla Ricerca alla Clinica, 3 febbraio 2022 Università di Pavia.
- *“Peroxisomes in health and disease: A role in neurodegeneration”*. Department of Neurology, University of Texas Medical Branch (UTMB), Galveston (TX, USA), 27 ottobre 2019.
- *“Early neurodegeneration in a mouse model of Alzheimer’s disease: role of caspase 3 and involvement of peroxisomes”*. Erasmus Medical Center, Rotterdam, NL, February 14, 2011.
- *Presentation of the Faculty of Sciences of Roma Tre University*. Liceo “Giulio Cesare”, Roma, February 2, 2011.
- *“Cell death processes: from morphology to biochemical mechanisms”*. Pathological Anatomy Department, San Filippo Neri Hospital, Roma, February 22, 2010.
- *“Abnormal cerebral development in an Apaf1 mouse mutant”*. University of L’Aquila, June 22, 2006.
- *“Role of the apoptosome in CNS development: a neuromorphological study of an Apaf1 mutant mouse model”*. Institute of Neuroscience, Northwestern University, Chicago, IL, USA, 13 ottobre 2005.
- *“Neuronal death in a mouse model of Huntington’s chorea”*, Roma Tre University, March 17, 2004.
- *“Five years of biological research at the LIME: transmission electron Microscopy”*, Roma Tre University, December 4, 2003.
- *“Neurodegeneration in a transgenic mouse model of Huntington’s disease”*. Dept. of Otolaryngology, West Virginia University, Morgantown, WV, USA, May 29, 2002.
- *“Neurodegeneration in a mouse model of Huntington’s chorea: Role of tissue transglutaminase”*. University of L’Aquila, October 23, 2002.

CONFERENCE PANELS AND MEETING ORGANIZATION

- 2022** *Chairperson* for the Meeting *XVI Giornate di andrologia e medicina della riproduzione*. October 6-7, Sabaudia (LT), Italy.
- 2021** *Chairperson* for the Meeting *XV Giornate di andrologia e medicina della riproduzione*. October 7-8, Sabaudia (LT), Italy.
- 2021** *Chairperson* for the workshop “*To be embryologist*”. July 9, Ferrara, Italy.
- 2020** *Discussant* for the Meeting *XIV Giornate di andrologia e medicina della riproduzione*. October 15-16, Sabaudia (LT), Italy.
- 2019** *Discussant* for the Meeting *XIII Giornate di andrologia e medicina della riproduzione*. October 3-4, Sabaudia (LT), Italy.
- 2018** *Chairperson* for the Meeting *XII Giornate di andrologia e medicina della riproduzione*. October 4-5, Sabaudia (LT), Italy.
- 2017** *Organizer* of the *LXIII GEI Meeting*, June 12-15, Rome, Italy
- 2008** *Organizer* of the PhD student Meeting “*Muscolar Differentiation in normal e pathological conditions*” (Speakers: Proff. M.T. Carri, “Tor Vergata” University, Rome, Italy; B. Kablar, Dalhousie University, Halifax, Canada; F. Protasi, Chieti University, Italy). Roma Tre University, Rome, Italy.
- 1999** *Coordinator* of the “*Course of Professional Training in Electron Microscopy*”, granted by Tecnofarmaci company, LIME, Roma Tre University, Rome, Italy.
- 1998** *Coordinator* of the “*Course of Immunohistochemical and Immunoelectron microscopic Techniques*” for the PhD program in Biology, LIME, Roma Tre University, Rome, Italy.

PUBLICATIONS

1. **Moreno S.**, Stefanini S., Di Biagio P., Hassan G. (1991) Interleukin-1 producing plasma cells in chronic active liver diseases and in kidney and liver grafts. *Eur. J. Cell Biol.* **55**: 49. **IF 1993: 2.545.**
2. Cerù M.P., Giorgi M., **Moreno S.**, Cimini A.M. (1992) Developmental pattern of peroxisomal enzymes in rat neuronal and glial cells. *Neurosci. Lett.* **43**: S24. **IF 1993: 2.645.**
3. Cimini A.M., Giorgi M., Sulli A., **Moreno S.**, Cerù M.P. (1993) Catalase activity in human neuroectodermal cell lines and in rat brain astroglial cells in culture. *Biol. Cell* **77** (1): 18a. **IF1993: 1.175.**
4. Cimini A.M., Giorgi M., Sulli A., **Moreno S.**, Cerù M.P. (1993) Characterization of peroxisomes purified from the brains of 14-day-old rats. *Biol. Cell* **77**: 21a. **IF 1993: 1.175.**
5. Cimini A., **Moreno S.**, Giorgi M., Serafini B., Cerù M.P. (1993) Purification of peroxisomal fraction from rat brain. *Neurochem. Int.* **23**: 249-260. **IF 1993: 1.518.**
6. Cimini A.M., Giorgi M., Sulli A., **Moreno S.**, Serafini B., Cerù M.P. (1993) Effects of di(2-ethylhexyl)phthalate on peroxisomes in different organs of adult lactating and suckling rats. *Biol. Cell* **77**: 31a. **IF 1993: 1.175.**
7. Harris J., **Moreno S.**, Shaw G., Mugnaini E. (1993) Unusual neurofilament composition in cerebellar unipolar brush neurons. *J. Neurocytol.* **22**: 1039-1059. **IF 1993: 2.384.**
8. Cimini A.M., Sulli A., Stefanini S., Serafini B., **Moreno S.**, Rossi L., Giorgi M., Cerù M.P. (1994) Effects of di(2-ethylhexyl)phthalate on peroxisomes of liver, kidney and brain of lactating rats and their pups. *Cell. Mol. Biol.* **40**: 1063-1076. **IF 1994: 0.914.**
9. **Moreno S.**, Cimini A., Giorgi M., Cerù M.P. (1994) Immunocytochemical localization of Cu,Zn-superoxide dismutase in rat brain. *Cell Biol. Int.* **18**: 520. **IF 1994: 1.042.**
10. Stefanini S., Sartori C., Rossi L., **Moreno S.**, Nardacci R., Pajalunga D., Cerù M.P. (1995) Effects of ciprofibrate on liver, kidney and brain peroxisomes in lactating rats and their pups. *Eur. J. Cell Biol.* **70**. **IF 1995: 2.80.**
11. **Moreno S.**, Mugnaini E., Cerù M.P. (1995) Immunocytochemical localization of catalase in the central nervous system of the rat. *J. Histochem. Cytochem.* **43**: 1253-1267. **IF 1995: 3.427.**
12. Stefanini S., Serafini B., Nardacci R., Farioli Vecchioli S., **Moreno S.**, Sartori C. (1995) Morphometric analysis of liver and kidney peroxisomes in lactating rats and their pups after treatment with the peroxisomal proliferator di-(2-ethylhexyl)phthalate. *Biol. Cell* **85**: 167-176. **IF 1995: 1.073.**
13. Hassan G., **Moreno S.**, Massimi M., Di Biagio P., Stefanini S. (1997) Interleukin-1-producing plasma cells in close contact with hepatocytes in patients with chronic active hepatitis. *J. Hepatol.* **27**: 6-17. **IF 1997: 3.409.**
14. **Moreno S.**, Nardacci R., Cerù M.P. (1997) Regional and ultrastructural immunolocalization of copper-zinc superoxide dismutase in rat central nervous system. *J. Histochem. Cytochem.* **45**: 1611-1622. **IF 1997: 2.776.**
15. **Moreno S.**, Nardacci R., Cimini A., Cerù M.P. (1999) Immunocytochemical localization of D-amino acid oxidase in rat brain. *J. Neurocytol.* **28**: 169-185. **IF 1999: 1.860.**
16. Iannicola C., **Moreno S.**, Oliverio S., Nardacci R., Ciofi-Luzzatto A., Piacentini M. (2000) Early alterations in gene expression and cell morphology in a mouse model of Huntington's disease. *J. Neurochem.* **75**: 830-839. **IF 2000: 4.906.**
17. Farioli-Vecchioli S., **Moreno S.**, Cerù M.P. (2000) Distribution of the peroxisome proliferator-activated receptors (PPARs) in rat brain. *Eur J Neurosci* **12**: 469. **IF 3.881.**
18. Farioli-Vecchioli S., **Moreno S.**, Cerù M.P. (2001) Immunocytochemical localization of acyl-CoA oxidase in the rat central nervous system. *J Neurocytol.* **30**: 21-33. **IF 2001: 1.776.**

19. **Moreno S.**, Ferraro E., Eckert S., Cecconi F. (2002) Apaf1 reduced expression levels generate a mutant phenotype in adult brain and skeleton. *Cell Death Differ.* **9**: 340-342. **IF 2002: 8.027.**
20. Corvaro M, **Moreno S.**, Wagner M, Cecconi F (2002) Apaf1 role in neural cell death and proliferation during development. *Differentiation* **70**: 7. **IF 2002: 2.183.**
21. Mastroberardino P.G., Iannicola C., Nardacci R., Bernassola F., De Laurenzi V., Melino G., **Moreno S.**, Oliverio S., Fesus L., Piacentini M. (2002) “Tissue” transglutaminase ablation reduces neuronal death and prolongs survival in a mouse model of Huntington’s disease. *Cell Death Differ.* **9**: 873-880. **IF 2002: 8.027.**
22. Cona A., Cenci F., Cervelli M., Federico R., Mariottini P., **Moreno S.**, Angelini R. (2003) Polyamine oxidase, a hydrogen peroxide-producing enzyme, is up-regulated by light and down-regulated by auxin in the outer tissues of the maize mesocotyl. *Plant Physiol.* **131**: 803-813. **IF 2003: 5.634.**
23. **Moreno S.**, Farioli-Vecchioli S., Cerù M.P. (2004) Immunolocalization of peroxisome proliferator-activated receptors and retinoid X receptors in the adult rat CNS. *Neuroscience* **123**:131-145. **IF 2004: 3.456.**
24. Nardacci R., Falciatori I., **Moreno S.**, Stefanini S. (2004) Immunohistochemical localization of peroxisomal enzymes during rat embryonic development. *J. Histochem. Cytochem.* **52**: 423-36. **IF 2004: 2.513.**
25. Cona A.*, **Moreno S.***, Cenci F., Federico R., Angelini R. (2005) Cellular re-distribution of flavin-containing polyamine oxidase in differentiating root and mesocotyl of *Zea mays* L. seedlings. *Planta* **221**: 265–276. **IF 2005: 3.108. *pari contributo.**
26. Cristiano L., Cimini A., **Moreno S.**, Ragnelli A.M., Cerù M.P. (2005) Peroxisome proliferator-activated receptors (PPARs) and related transcription factors in differentiating astrocyte cultures. *Neuroscience* **131**: 577-587. **IF 2005: 3.410.**
27. Persichini T., Mazzone V., Polticelli F., **Moreno S.**, Venturini G., Clementi E., Colasanti M. (2005) Mitochondrial type I nitric oxide synthase physically interacts with cytochrome *c* oxidase. *Neurosci. Lett.* **384**: 254-259. **IF 2005: 1.898.**
28. **Moreno S.**, Imbroglini V., Ferraro E., Bernardi C., Romagnoli A., Berrebi A.S., Cecconi F. (2006) Apoptosome impairment during development results in activation of an autophagy program in cerebral cortex. *Apoptosis* **11**: 1595-1602. **IF 2006: 4.497.**
29. Galluzzo P., Caiazza F., **Moreno S.**, Marino M. (2007) Role of ER α palmitoylation in the inhibition of human colon cancer cell proliferation. *Endocr. Relat. Cancer* **14**: 153-167. **IF 2007: 5.193.**
30. Stella L., Pallottini V., **Moreno S.**, Leoni S., De Maria F., Turella P., Federici G., Fabrini R., Dawood K. F., Lo Bello M., Pedersen J. Z., Ricci G. (2007) Electrostatic association of glutathione transferase to the nuclear membrane. Evidence of an enzyme defense barrier at the nuclear envelope. *J. Biol. Chem.* **282**: 6372-6379. **IF 2007: 5.581.**
31. Ferri A., Nencini M., Cozzolino M., Carrara P., **Moreno S.**, Carrì M.T. (2008) Inflammatory cytokines increase mitochondrial damage in motoneuronal cells expressing mutant SOD1. *Neurobiol. Dis.* **32**: 454–460. **IF 2008: 4.852.**
32. Cimini A.*, **Moreno S.***, D’Amelio M., Cristiano L., D’Angelo B., Falone S., Benedetti E., Carrara P., Fanelli F., Cecconi F., Amicarelli F., Cerù M.P. (2009) Early biochemical and morphological modifications in the brain of a transgenic mouse model of Alzheimer disease. A role for peroxisomes. *J. Alzh. Dis.* **18**: 935–952. **IF 2008: 3.832. *equal contribution.**
33. Fazi B., Biancolella M., Mehdaawy B, Corazzari M., Minella D., Blandini F, **Moreno S.**, Nardacci R., Nisticò R., Sepe S., Novelli G., Piacentini M., Di Sano F. (2010) Characterization of gene expression induced by RTN-1C in human neuroblastoma cells and in mouse brain. *Neurobiol. Dis.* **40**: 634-644. **IF 2010: 5.121.**

34. Ferri A., Fiorenzo P., Nencini M., Cozzolino M., Pesaresi M.G., Valle C., Sepe S., **Moreno S.**, Carrì M.T. (2010) Glutaredoxin 2 prevents aggregation of mutant SOD1 in mitochondria and abolishes its toxicity. *Hum. Mol. Genet.* **19**: 4529-4542. **IF 2010: 8.058.**
35. D'Amelio M., Cavallucci V., Middei S., Pacioni S., Marchetti C., Ferri A., Diamantini A., De Zio D., Carrara P., Battistini L., **Moreno S.**, Marie H., Bacci A., Ammassari-Teule M., Cecconi F. (2011) Caspase-3 triggers dendritic spine loss at the onset of cognitive decline in a mouse model of Alzheimer's disease. *Nature Neurosci.* **14**: 69-76. **IF 2011: 15.531.**
36. Tisi A., Federico R., **Moreno S.**, Lucretti S., Moschou P.N., Roubelakis-Angelakis K.A., Angelini R., Cona A. (2011) Perturbation of polyamine catabolism can strongly affect root development and xylem differentiation. *Plant Physiol.* **157**: 200–215. **IF 2011: 6.535.**
37. Trapani L., Melli L., Segatto M., Trezza V., Campolongo P., Jozwiak A., Swiezewska E., Pucillo L.P., **Moreno S.**, Fanelli F., Linari M., Pallottini V. (2011) Effects of myosin heavy chain (MHC) plasticity induced by HMGCoA-reductase inhibition on skeletal muscle functions. *FASEB J.* **25**: 4037-4047. **IF 2011: 5.712.**
38. Cacchi S., Caponetti E., Casadei M.A., Di Giulio A., Fabrizi G., Forte G., Goggiamani A., **Moreno S.**, Paolicelli P., Petrucci F., Prastaro A., Saladino M.L. (2012) Suzuki-Miyaura cross-coupling of arenediazonium salts catalyzed by alginate/gellan-stabilized palladium nanoparticles under aerobic conditions in water. *Green Chem.*, **14**, 317-320. **IF 2012: 6.828.**
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