



Maria Meringolo

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WORK EXPERIENCE

[01/10/2022 – Current] **Researcher SSD BIO/16 (RTDA)**

Saint Camillus International University of Health and Medical Sciences - Unicamillus

City: Rome

Country: Italy

Main activities and responsibilities:

Human Anatomy Lecturer

Degree in medicine and surgery

Degree in dentistry and dental prosthetics

[2022 – 2022] **University Lecturer**

Saint Camillus International University of Health and Medical Sciences - Unicamillus

City: Rome

Country: Italy

Main activities and responsibilities:

Human Anatomy Lecturer

Degree in Dentistry and Dental Prosthetics

[2020 – 2022] **Research biologist**

Santa Lucia Foundation IRCCS

City: Rome

Country: Italy

[2021 – 2021] **Secondary school teacher**

Italian Minister of Public Education

City: Rome

Country: Italy

[2018 – 2020] **Research fellowship**

University of Rome Tor Vergata, Dept of Systems Medicine

City: Rome

Country: Italy

Main activities and responsibilities:

Project title "studio delle connessioni striatopallidali in un modello di dystonia DYT1".

[2017 – 2018] **Postgraduate scholarships**

Santa Lucia Foundation IRCCS

City: Rome

Country: Italy

Main activities and responsibilities:

Project title: "Valutazione dell'efficacia di nuovi approcci terapeutici in distonia, mediante tecniche di elettrofisiologia, biochimica e biologia molecolare".

[2016 – 2017] Postgraduate scholarships

University of Rome Tor Vergata, Dept of Systems Medicine

City: Rome

Country: Italy

Main activities and responsibilities:

Project title: "Evaluation of the effects of a novel nicotinic agonist, AZD1446, on neurochemical and electrophysiologic endpoints in DYT1 mouse models".

[2015 – 2016] Postgraduate scholarships

University of Rome Tor Vergata, Dept of Systems Medicine

City: Rome

Country: Italy

Main activities and responsibilities:

Project title: "Assessing the role of dopaminergic signal transduction pathway in primary dystonia".

[2015] Postgraduate scholarships

Santa Lucia Foundation IRCCS

City: Rome

Country: Italy

Main activities and responsibilities:

Project title: "In pursuit of novel neuroprotective strategies for Parkinson's disease: understanding the role of PINK1 in regulating autophagy and apoptosis".

[2012 – 2014] Visiting fellowship

Laboratory of Neuronal Ensembles, University of Sussex

City: Brighton

Country: United Kingdom

EDUCATION AND TRAINING

[2016 – 2017] 2nd level master in "Sviluppo preclinico e clinico del farmaco: aspetti tecnico-scientifici, regolatori ed etici".

Università Cattolica del Sacro Cuore

Address: Rome, Italy

[2014 – 2015] License to practice as a biologist

University of Rome Tor Vergata

Address: Rome, Italy

[2010 – 2015] Ph.D. in Pharmacology and Toxicology

University "La Sapienza" of Rome

Address: Rome, Italy

Thesis: Titolo della tesi: "In vitro and in vivo characterization of a new recreational drug: Benzydamine"

[2007 – 2010] Master degree in Neurobiology

University "La Sapienza" of Rome

Address: Rome, Italy

Final grade: 110/110 cum laude

Thesis: Titolo della tesi: "Environmental modulation of ketamine self-administration in an animal model of drug addiction"

[2004 – 2008] **Bachelor degree in Biological Sciences**

Università della Calabria

Address: Cosenza, Italy

Final grade: 110/110 cum laude

Thesis: Titolo della tesi: "Genetic aspects of the X-fragile syndrome"

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

DIGITAL SKILLS

My Digital Skills

Padronanza del Pacchetto Office (Word Excel PowerPoint ecc)

HONOURS AND AWARDS

[2018] **Travel Grant for young Italian neuroscientists Awarding institution:** SINS (Italian Society of Neuroscience)

Travel Grant for young Italian neuroscientists, assigned by SINS (Italian Society of Neuroscience) for FENS forum of Neuroscience 2018 (Berlin, 7-11 of July, 2018)

[2018] **Lia Vassena Young Investigator award Awarding institution:** AIRA (Italian association Research on Autism)

[2011] **Ministerial doctoral fellowship Awarding institution:** Ministry for Education, University and Research

Member of SINS Awarding institution: SINS (Italian Society of Neuroscience)

CONFERENCES AND SEMINARS

[25/03/2018 – 26/03/2018]

"Impairment of corticostriatal long-term synaptic depression is partially rescued by activation of cannabinoid CB1 receptors in the R451C-neurologin 3 mouse model"

CNR, Roma

Oral presentation at III° Congresso Nazionale AIRA

[06/07/2018 – 10/07/2018]

"Impairment of striatal long-term synaptic depression is partially rescued by activation of cannabinoid CB1 receptors in the neurologin-3 R451C knock-in mouse model of autism"

Berlino

Poster presentation at the "forum for Neuroscience", FENS

[30/09/2017 – 03/10/2017] **Enhancement of Mor-dependent opioid transmission in a model of DYT1 dystonia** Lacco Ameno, Ischia.

Poster presentation at the XVII Congresso Nazionale SINS

[17/09/2017 – 18/09/2017] **Evaluation of a novel nicotinic agonist, AZD1446, in DYT1 Dystonia** Nobile Collegio Farmaceutico, Roma

Poster presentation at the biennial conference on Dystonia and Parkinson's disease, VII edition

[02/10/2013 – 04/10/2013]

Self-administration of the anti-inflammatory drug benzidamine in the rat: electrophysiological evidence of central glutamatergic mechanism of action

Roma

Poster presentation at the 15° National conference of Italian Society of Neuroscience

PUBLICATIONS

[2021]

Vesicular Acetylcholine Transporter Alters Cholinergic Tone and Synaptic Plasticity in DYT1 Dystonia

Reference: doi: 10.1002/mds.28698

Movement Disorders.

Tassone A, Martella G, Meringolo M, Vanni V, Sciamanna G, Ponterio G, Imbriani P, Bonsi P, Pisani A.

[2020] **The neuroligins and the synaptic pathway in Autism Spectrum Disorder**

Reference: doi: 10.1016/j.neubiorev.2020.09.017

Neurosci Biobehav Rev

Trobiani L*, Meringolo M*, Diamanti T, Bourne Y, Marchot P, Martella G, Dini L, Pisani A, De Jaco A, Bonsi P.

*co-first authors

[2020]

Excess Lipin enzyme activity contributes to TOR1A recessive disease and DYT-TOR1A dystonia

Reference: doi: 10.1093/brain/awaa139. PMID: 32516804.

Brain.

Cascalho A, Foroozandeh J, Hennebel L, Swerts J, Klein C, Rous S, Dominguez Gonzalez B, Pisani A, Meringolo M, Gallego SF, Verstreken P, Seibler P, Goodchild RE.

[2020]

Optogenetic Activation of Striatopallidal Neurons Reveals Altered HCN Gating in DYT1 Dystonia

Reference: doi: 10.1016/j.celrep.2020.107644. PMID: 32433955.

Cell Report.

Sciamanna G, Ponterio G, Vanni V, Laricchiuta D, Martella G, Bonsi P, Meringolo M, Tassone A, Mercuri NB, Pisani A.

[2019] **Loss of Non-Apoptotic Role of Caspase-3 in the PINK1 Mouse Model of Parkinson's Disease**

Reference: doi: 10.3390/ijms20143407. PMID: 31336695; PMCID: PMC6678522.

International Journal of Molecular Sciences

Imbriani P, Tassone A, Meringolo M, Ponterio G, Madeo G, Pisani A, Bonsi P, Martella G.

[2019]

Heroin versus cocaine: opposite choice as a function of context but not of drug history in the rat

Reference: doi: 10.1007/s00213-018-5115-1.

Psychopharmacology (Berl).

De Luca MT, Montanari C, Meringolo M, Contu L, Celentano M, Badiani A.

[2019] **RGS9-2 rescues dopamine D2 receptor levels and signaling in DYT1 dystonia mouse models**

Reference: doi: 10.15252/emmm.201809283.

EMBO Molecular Medicine

Bonsi P, Ponterio G, Vanni V, Tassone A, Sciamanna G, Migliarini S, Martella G, Meringolo M, Dehay B, Doudnikoff E, Zachariou V, Goodchild RE, Mercuri NB, D'Amelio M, Pasqualetti M, Bezard E, Pisani A.

[2018] **Dystonia: Are animal models relevant in therapeutics?**

Reference: doi: 10.1016/j.neurol.2018.07.003.

Rev Neurol (Paris).

Meringolo M, Tassone A, Imbriani P, Ponterio G, Pisani A.

[2018] **Centrality of Early Synaptopathy in Parkinson's Disease**

Reference: doi: 10.3389/fneur.2018.00103.

Frontiers in Neurology

Imbriani P, Schirinzi T, Meringolo M, Mercuri NB, Pisani A.

[2018]

The neurobiological bases of autism spectrum disorders: the R451C-neuroligin 3 mutation hampers the expression of long-term synaptic depression in the dorsal striatum

Reference: doi: 10.1111/ejn.13705.

European Journal of Neuroscience

Martella G*, Meringolo M*, Trobiani L, De Jaco A, Pisani A, Bonsi P.

*co-first authors

[2018]

Intravenous self-administration of benzydamine, a non-steroidal anti- inflammatory drug with a central cannabinoidergic mechanism of action

Reference: doi: 10.1111/adb.12516.

Addiction biology

Avvisati R, Meringolo M, Stendardo E, Malavasi E, Marinelli S, Badiani A.

[2018]

Enhanced mu opioid receptor-dependent opioidergic modulation of striatal cholinergic transmission in DYT1 dystonia

Reference: doi: 10.1002/mds.27212.

Movement disorder

Ponterio G, Tassone A, Sciamanna G, Vanni V, Meringolo M, Santoro M, Mercuri NB, Bonsi P, Pisani A.

[2017] **Evaluation of AZD1446 as a Therapeutic in DYT1 Dystonia**

Reference: doi: 10.3389/fnsys.2017.00043.

Frontiers System in Neuroscience

Zimmerman CN, Eskow Jaunarajs KL, Meringolo M, Rizzo FR, Santoro M, Standaert DG, Pisani A.

[2015]

Differential vulnerability to relapse into heroin versus cocaine-seeking as a function of setting

Reference: doi: 10.1007/s00213-015-3877-2.

Psychopharmacology

Montanari C, Stendardo E, De Luca MT, Meringolo M, Contu L, Badiani A.

[2012] **Induction of morphine-6-glucuronide synthesis by heroin self- administration in the rat**

Reference: doi: 10.1007/s00213-011-2534-7.

Psychopharmacology

Meringolo M, Brusadin V, De Luca MT, Montanari C, Antonilli L, Nencini P, Badiani A.

[2012] **The role of setting for ketamine abuse: clinical and preclinical evidence**

Reference: doi: 10.1515/revneuro-2012-0078.

Rev Neurosci.

De Luca MT, Meringolo M, Spagnolo PA, Badiani A.