

Curriculum Vitae

Milena Pinto

PROFESSIONAL EXPERIENCE

Sr. Research Associate

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Università degli studi di Trieste, Italy	Ms.D	2005	Medical Biotechnology
International School for Advanced Studies, Trieste, Italy	Ph.D.	2009	Neurobiology

A. Personal Statement

Overall I have ten years of research experience on neurodegenerative disorders, in particular on Parkinson's and Alzheimer's disease. During my Masters and PhD studies, I extensively worked on drug-induced and genetically modified animal models of Parkinson's disease as well as on cellular models of dopaminergic neurons. More recently, since I joined Dr. Moraes lab in 2010 for my postdoctoral training, I have been involved in understanding the possible neuronal-specific role of mitochondrial dysfunctions and mitochondrial DNA deletions and depletion in mouse models of neurodegenerative disorders, in particular of Parkinson's and Alzheimer's diseases. My PhD background and my recent experience in Dr. Moraes lab confer me a specific and deep knowledge in both fields of neurology and mitochondria metabolism. I also had contributed in the training of graduate students, presented my work in scientific meetings and participated in mitochondrial group seminars. My expertise in the field, motivation and academic environment will assure the successful completion of this research project.

B. Positions and Honors.

Apr 2015-present Sr. Research Associate at neurology department in University of Miami

Apr 2010-apr 2015 Postdoctoral associate at neurology department in University of Miami

Nov-Feb 2009 Temporary Research Fellow, International School for Advanced Studies, Trieste, Italy

Nov-2014 ISSNAF Award for young Investigators, Special Mention, Bio-Medicine and Cognitive Sciences

April-2013 UMDF, Mitochondrial Medicine 2013 Abstract Cash Award

March-2013 Medical Faculty Association Travel Award from the Margaret Whelan fundation

C. Recent Posters and Presentations.

- Euromit 2014 in Tampere, Finland
Poster presentation: Lack of Parkin accelerates neurodegeneration in a mouse model of PD
- Miami 2014 Winter Symposium: The Molecular Basis of Brain disorders
Poster presentation: Endogenous Parkin mitigates mitochondrial damage in dopaminergic neurons and ameliorates associated motor phenotypes
- NHLBI Mitochondrial Biology Symposium 2013
Poster presentation: Mitochondrial DNA damage in a mouse model of Alzheimer's disease decreases A β plaque formation
- Miami 2013 Winter Symposium: The Molecular Basis of Metabolism and Nutrition
Poster presentation: Induced mitochondrial DNA damage in a mouse model of Alzheimer's disease decreases Ab plaque formation

- UMDF 2013
Oral presentation: The Role of Parkin in the Clearance of Defective Mitochondria with Deleted mtDNA. A New Mouse Model of Parkinson's Disease
- Society for Neuroscience, Neuroscience 2011
Poster presentation: Characterization of a new mouse model to study the role of oxidative phosphorylation deficits in Parkinson's disease

C. Selected peer-reviewed publications (in chronological order).

Pinto M., Moraes CT

Mechanisms linking mtDNA damage and aging

Free Radic Biol Med. 2015 Aug;85:250-8. [PMID: 25979659]

Sandra R. Bacman, Sion L. Williams, **Milena Pinto** and Carlos T. Moraes *The use of mitochondria-targeted endonucleases to manipulate mtDNA* Methods Enzymol. 2014;547:373-97 [PMID: 25416366]

Pinto M., Moraes CT.

Mitochondrial genome changes and neurodegenerative diseases.

Biochim Biophys Acta. 2013 Nov 16. [PMID: 24252612]

Bacman SR, Williams SL, **Pinto M.**, Peralta S, Moraes CT.

Specific elimination of mutant mitochondrial genomes in patient-derived cells by mitoTALENs.

Nat Med. 2013 Sep;19(9) [PMID: 23913125]

Wang X, Pickrell AM, Rossi SG, **Pinto M.**, Dillon LM, Hida A, Rotundo RL, Moraes CT.

Transient systemic mtDNA damage leads to muscle wasting by reducing the satellite cell pool.

Hum Mol Genet. 2013 Oct 1;22(19):3976-86 [PMID: 23760083]

Pinto M., Pickrell AM, Fukui H, Moraes CT.

Mitochondrial DNA damage in a mouse model of Alzheimer's disease decreases amyloid beta plaque formation.

Neurobiol Aging. 2013 Oct;34(10):2399-407 [PMID: 23702344]

Pinto M., Pickrell AM, Moraes CT.

Regional susceptibilities to mitochondrial dysfunctions in the CNS.

Biol Chem. 2012 Apr;393(4):275-81. [PMID: 23029655]

Pickrell AM, **Pinto M.**, Moraes CT.

Mouse models of Parkinson's disease associated with mitochondrial dysfunction.

Mol Cell Neurosci. 2012 Aug 11 [PMID: 22954895]

Vilotti S, Codrich M, Dal Ferro M, **Pinto M.**, Ferrer I, Collavin L, Gustincich S, Zucchelli S.

Parkinson's disease DJ-1 L166P alters rRNA biogenesis by exclusion of TTRAP from the nucleolus and

sequestration into cytoplasmic aggregates via TRAF6.

PLoS One. 2012;7(4):e35051 [PMID: 22532838]

Milena Pinto(*), Alicia Pickrell(*), Aline Hida, Carlos Moraes (*) **co-authorship**

Striatal dysfunctions associated with mtDNA damage in dopaminergic neurons of a mouse model of PD

J Neurosci. 2011 Nov 30;31(48):17649-58 [PMID: 22131425]

Alicia Pickrell, Hirokazu Fukui, Xiao Wang, **Milena Pinto**, and Carlos Moraes

The Striatum is Highly Susceptible to Mitochondrial Oxidative Phosphorylation Dysfunctions

J Neurosci. 2011 Jul 6;31(27):9895-904 [PMID: 21734281]

Zucchelli S., Marcuzzi F., Codrich M., Agostoni E., Vilotti S., Biagioli M., **Pinto M.**, Carnemolla A., Santoro C., Gustincich S. and Persichetti F.

Tumor Necrosis factor receptor associated factor 6 (TRAF6) associates with huntingtin protein and promotes its atypical ubiquitination to enhance aggregate formation

J Biol Chem. 2011 Jul 15;286(28):25108-17 [PMID: 21454471]

Zucchelli S., Codrich M, Marcuzzi F, **Pinto M**, Vilotti S., Biagioli M, Ferrer I, Gustincich S.

TRAF6 promotes atypical ubiquitination of mutant DJ-1 and alpha-synuclein and is localized to Lewy bodies in sporadic Parkinson's disease brains.

Hum Mol Genet. 2010 Jul 14 [PMID: 20634198]

Milena Pinto(*), Marta Biagioli (*), Daniela Cesselli, Marta Zaninello, Dejan Lazarevic, Roberto Simone, Christina Vlachouli, Charles Plessy, Nicolas Bertin, Antonio Beltrami, Kazuto Kobayashi, Vittorio Gallo, Isidro Ferrer, Claudio Santoro, Stefano Rivella, Carlo Alberto Beltrami, Piero Carninci, Elio Raviola and Stefano Gustincich. (*) **co-authorship**

Unexpected expression of α - and β -globin in mesencephalic dopaminergic neurons and glial cells PNAS, 2009 Sep. vol.106 no.36 [PMID: 19717439]

Zucchelli S, Vilotti S, Calligaris R, Lavina ZS, Biagioli M, Foti R, De Maso L, **Pinto M**, Gorza M, Speretta E, Casseler C, Tell G, Del Sal G, Gustincich S.

Aggresome-forming TTRAP mediates pro-apoptotic properties of Parkinson's disease-associated DJ-1 missense mutations.

Cell Death and Differentiation 2009 Mar;16(3):428-38 [PMID 19023331]

C. Research Support

Postdoctoral Fellowship to Milena Pinto 07/2013 – 07/2014 Parkinson's Disease Foundation

"The role of Parkin in the clearance of defective mitochondria with deleted mtDNA. A new mouse model of Parkinson's disease."

Role: Postdoctoral Research Fellow

Research Grant to Moraes, Carlos 09/15/2010 - 09/14/2013 Muscular Dystrophy Association

"Increased mitochondrial biogenesis as a therapy to mitochondrial disorders"

The objective of this project is to study the effect of PGC-1 α in mitochondrial myopathies. Role: Postdoctoral Research Fellow