EUROPEAN CURRICULUM VITAE FORMAT



PERSONAL INFORMATION

Name

Address

Telephone

Fax

E-mail

Nationality

Date of birth

WORK EXPERIENCE

- Dates (from to)
- · Name and address of employer
 - · Type of business or sector
 - · Occupation or position held
- · Main activities and responsibilities
 - Dates (from to)
 - · Name and address of employer
 - Type of business or sector
 - Occupation or position held
- Occupation of position field
- Main activities and responsibilities
 - Dates (from to)
 - Name and address of employer
 - Type of business or sector
 - · Occupation or position held
- · Main activities and responsibilities

PIER GIORGIO MASTROBERARDINO



Italian

2010-present

Erasmus University Medical Center Rotterdam, the Netherlands

Department of Molecular Genetics

Academic hospital

Group leader

- Coordinator of research focused on mechanisms of neurodegeneration and Parkinson's disease.
- Supervisor of the bioenergetics Department facility, which operates with both research and diagnostic scopes.
- Teaching assistant in Cancer Genetics.

2010-present

University of Pittsburgh

Pittsburgh Institute for Neurodegenerative Diseases

University

Adjunct Assistant Professor

Research on Parkinson's disease

2005-2010

University of Pittsburgh, Pittsburgh, PA, USA

Department of Neurology

Pittsburgh Institute for Neurodegenerative Diseases

University

Post-doctoral associate

Research on Parkinson's disease

Dates (from – to)

2003-2005

· Name and address of employer

Emory University, Atlanta, GA, USA Center for Neurodegenerative Diseases

Department of Neurology

• Type of business or sector

University

· Occupation or position held

Post-doctoral fellow

· Main activities and responsibilities

Research on Parkinson's disease

EDUCATION AND TRAINING

• Dates (from - to)

2014-2016

 Name and type of organisation providing education and training Rotterdam School of Management, Erasmus University Rotterdam, the Netherlands

· Principal subjects/occupational skills covered **Business administration**

· Title of qualification awarded

Global Executive Master in Business Administration OneMBA

· Level in national classification

(if appropriate)

Dates (from – to)

2000-2004

· Name and type of organisation providing education and training University of Rome "Tor Vergata", Italy

· Principal subjects/occupational

Cellular and Molecular Biology

skills covered

· Title of qualification awarded

PhD

· Level in national classification

(if appropriate)

• Dates (from - to)

1994-2000

 Name and type of organisation providing education and training

University of Rome "Tor Vergata", Italy

· Principal subjects/occupational

Biology

skills covered · Title of qualification awarded

M.S. (Laurea) degree

PERSONAL SKILLS AND COMPETENCES

Acquired in the course of life and career but not necessarily covered by formal certificates and diplomas.

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

· Reading skills

· Writing skills

Verbal skills

ENGLISH Excellent

Excellent

Excellent

Reading skills

Writing skills

Verbal skills

GERMAN

Basic Basic

Basic

SOCIAL SKILLS

AND COMPETENCES

Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.

ORGANISATIONAL SKILLS AND COMPETENCES

Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.

TECHNICAL SKILLS AND COMPETENCES

With computers, specific kinds of equipment, machinery, etc.

Excellent skills to work in international teams gathered in more than fifteen years of experience in top level research groups, initially as member of the team and then as group leader. International exposure resulted in excellent skills to communicate and interact with workers of different cultural and ethnical background.

Excellent managerial and organizational skills acquired in the experience as group leader and as principal investigator of several grants awarded by prestigious international agencies. Please see GRANT SUPPORT section in Annex 1, page 1, for a detailed list of the awarded projects. Managerial and organizational skills have been further refined by obtaining a Global Executive Master in Business Administration.

Neurodegenerative disorders of aging and Parkinson's disease

- Genetic and toxicological modelling of neurodegenerative disorders in cell cultures, organotypic tissue slices, zebrafish, and in rodents
- Redox systems and their alterations in health and disease
- Role of DNA damage and genomic instability in neurodegenerative disorders
- Proteomic techniques to study oxidative modifications
- Iron homeostasis
- Development of new biomarkers
- Development of experimental therapeutics

Mitochondrial function and electron transport enzymes in the brain Imaging

Development of new imaging techniques based on confocal microscopy to detect oxidative

Use of fluorescent resonance energy transfer (FRET) to study protein oxidation and proteinprotein interactions

Development of redox sensors for in vivo studies.

OTHER SKILLS AND COMPETENCES

Competences not mentioned above.

Excellent editorial skills acquiring acting as Editor for international, peer-reviewed, indexed journals as well as reviewer of research grants and manuscripts. For further details, please **see the EDITORIAL SERVICE section in Annex 1**, page 3.

Teaching and supervising skills acquired lecturing and mentoring individuals from the bachelor to the post-doctoral level. For further details, please **see the TEACHING EXPERIENCE section** in **Annex 1**, page 5.

Page 3 - Curriculum vitae of PIER GIORGIO MASTROBERARDINO, PhD, MBA

Excellent writing and communication skills as demonstrated by many original articles published in high quality, international journals. For a complete list of publications, please **see the PUBLICATIONS section in Annex 1**, page 8.

Excellent communication skills as demonstrated by many invited seminars in prestigious international Institutions. For a complete list of selected seminars, please **see the INVITED SEMINARS section in Annex 1**, page 6.

Technology transfer skills, as exemplified by the patent application "*Method of labeling biological samples*" – Patent Number(s): WO2009129472-A2; WO2009129472-A3; US2011039277-A1.

ANNEXES

The attached Annex 1 provide further and more detailed information on PGM activities.

Pier Giorgio Mastroberardino, PhD, MBA

Curriculum Vitae European Format

ANNEX 1

ACADEMIC EXPERIENCE

Group Leader, Department of Genetics

February 1st,

Chair. Jan H. Hoeijmakers

2010- present

Erasmus University Medical Center, Rotterdam, The Netherlands

Adjunct Assistant Professor of Neurology, Department of Neurology,

February 1st,

Pittsburgh Institute for Neurodegenerative Diseases

2010- present

Director. J. Timothy Greenamyre

University of Pittsburgh, Pittsburgh, PA, USA

Post-doctoral associate, Department of Neurology

2005-2010

Pittsburgh Institute for Neurodegenerative Diseases

University of Pittsburgh, Pittsburgh, PA, USA

Advisor. J. Timothy Greenamyre

Focus: Pathological molecular mechanisms in Parkinson's, and

Huntington's disease

2003-2005

Post-doctoral fellow, Department of Neurology

Center for Neurodegenerative Diseases Emory University, Atlanta, GA, USA

Advisor. J. Timothy Greenamyre

Focus: Pathological molecular mechanisms in Parkinson's and Huntington's

disease

Other Professional Experience

Training in mass spectrometry applied to biological sciences

2002

Universiteit Gent, Belgium

Supervisor. Joseph van Beeumen

1998-2000

Training in cellular and developmental biology University of Rome "Tor Vergata", Italy

Supervisor. Mauro Piacentini

GRANT SUPPORT

Active

- ➤ The Michael J. Fox Foundation for Parkinson's Research "Transferrin Receptor 2 as a target to halt nigral neurons iron overload in Parkinson's disease" (PI);
 US\$ 250.000 2015-2016
- Stichting Alkemade-Keuls "Molecular markers of skin fibroblasts of Parkinson's disease" (co-PI)
 EUR 80.000
 2015-2016

> Ri.MED Foundation – "Zebrafish as a redox-sensitive vertebrate model to study redox homeostasis and to identify new potential treatments for PD" (PI and supervisor); EUR 195.000 2014-2016

Completed

> Erasmus MC Pilot grant MRACE "Cancer Cachexia in Surgical Oncology - Mechanisms and Interventions" (co-project leader);

EUR 56.100

2014-2015

> "Dorpmans-Wigmans Stichting" Foundation for Parkinson's and Alzheimer research Subsidy to purchase a Seahorse Extracellular Flux Analyzer (PI); EUR 53'105 2011

> Dutch Center for Cancer Genomics, Junior Group Leader subsidy (NGI/NWO 05040202) (PI): EUR 650'000

2010-2014

- > FP7-Fission-2011, Proposal N° 295552, "CEREBRAD—Cognitive and Cerebrovascular Effects Induced by Low Dose Ionizing Radiation" (work-package leader); EUR 374'000 2011-2015
- > Marie Curie Reintegration Grant (FP7) Proposal N° 247918 "The synergistic effect of DNA damage and oxidative stress in the aging brain" (PI) 2009-2013 EUR 25'000/year - 4 years - EUR 100'000 total
- > NIH Pathway to Independence Award K99/R00, ES016352, "Oxidative modification of brain proteins in pesticide intoxication" (PI).
 - R00 phase: 2009-2012, \$249'000/year 3 years \$747'000 total; upon acceptance of a tenure-track faculty position in the United States; funds for the R00 phase were returned to the Agency upon relocation to Europe.
- > Ri.MED Foundation "Zebrafish as a redox sensitive vertebrate model to study oxidative damage in brain" (PI and supervisor); EUR 120'000

2011-2012

> K99 supplement under the American Recovery and Reinvestment Act of 2009 (PI); \$89'758

2009-2010

> NIH Pathway to Independence Award K99/R00, ES016352, "Oxidative modification of brain proteins in pesticide intoxication" (PI).

K99 phase: \$90'000/year – 2 years - \$180'000 total

2007-2009

2004-2005

> Michael J. Fox Foundation Post Doctoral Fellowship

2002

European Science Foundation short-term fellowship

> European Science Foundation Scholarship

2002

University of Rome "Tor Vergata", grant for young researchers

2001

Other awards

> International Bioiron Society Travel Bursary

2009

2014

PATENTS

"Method of labeling biological samples" – Patent Number(s): WO2009129472-A2;
 WO2009129472-A3; US2011039277-A1.

RESEARCH FOCUS

- Neurodegenerative disorders of aging and Parkinson's disease
 - Genetic and toxicological modelling of neurodegenerative disorders in cell cultures, organotypic tissue slices, zebrafish, and in rodents
 - Redox systems and their alterations in health and disease
 - Role of DNA damage and genomic instability in neurodegenerative disorders
 - Proteomic techniques to study oxidative modifications
 - Iron homeostasis
 - Development of new biomarkers
 - · Development of experimental therapeutics
- > Mitochondrial function and electron transport enzymes in the brain
- Imaging
 - Development of new imaging techniques based on confocal microscopy to detect oxidative damage
 - Use of fluorescent resonance energy transfer (FRET) to study protein oxidation and protein-protein interactions
 - Development of redox sensors for in vivo studies

EDITORIAL SERVICE

Associate Editor

Frontiers in Cellular Neuroscience

2015-present

Editorial Board

Neurobiology of Disease (Elsevier)

2010-present

Guest Editor

Neurobiology of Disease - Guest Editor for the special issue "Metals, the Brain, and Neurodegeneration" (2015)

Frontiers in Cellular Neuroscience – Guest Editor for the Special Issue "Neuronal self-defense: compensatory mechanisms in neurodegenerative disorders" (2014)

Antioxidant & Redox Signaling – Guest Editor for the special issue "Peripheral Neuropathies" (published in volume 4, issue 2, August 2014)

International Journal of Cell Biology - Guest Editor for the special issue "Redox Status and Bioenergetics Liaison in Cancer and Neurodegeneration" (2012)

Ad Hoc Reviewer (selected)

Cell Death and Differentiation
The Journal of Neurochemistry
Neurobiology of Disease
Neurochemical Research
The Journal of Neuroscience
Neurobiology of Aging
Nature Neuroscience
Nature
Biochimie
Movement Disorders

Nature Medicine
Cell Metabolism
The Journal of Cell Biology
Brain
Free Radical Biology and Medicine
Antioxidant & Redox Signaling
EMBO Molecular Medicine
Experimental Neurology
Neuropharmacology
Oncotarget

OTHER SERVICE

Ad hoc grant reviewer European Commission Research Executive Agency (REA) – Marie Skłodowska-Curie Research and Innovation Staff Exchange (RISE)		May 2017
Ad hoc grant reviewer for the Association of British Neurologists		Jan 2016
Ad hoc grant reviewer and member of the Review Committee for the Michael J. Fox Foundation Target Advancement Fall 2015 program		Sept 2015
Chair of the study section for the evaluation of the project grants "Senior Researchers" by the Italian Ministry of Health		June 2015
Contributed to formulate the Italian Ministry of Health grant reviewers' guidelines to be followed in the evaluation of the projects in the "Ricerca Finalizzata" and "Giovani Ricercatori" Calls.		May 2013
Representative for the Netherlands in the Management Committee of the European intergovernmental framework COST CM1001 "Chemistry of non-enzymatic protein modification - modulation of protein structure and function"		2012 - 2015
Ad hoc grant reviewer for the Michael J. Fox Foundation for Parkinson's Research	· · · V -	Aug 2011
Ad hoc grant reviewer for the Italian Telethon Foundation		Spring 2011
Ad hoc grant reviewer for the Italian Ministry of Health projects "Ricerca Finalizzata" and "Giovani Ricercatori"		2011 - present
Member of the review study section for the evaluation of the project grants "Giovani Ricercatori" by the Italian Ministry of Health		2011 and 2012

Participated to the *WhyWeAge* workshop and final summit conference to define research priorities in the aging field. The topics were reported in the document "*A European road map for molecular biogerontology*", which constituted a reference for the European Commission to plan future funding strategies, in particular in Eight Framework Program (Horizon 2020).

Mar-May 2010

Abstract Reviewer for the 17th Annual Meeting of the Society for Free Radical Biology and Medicine (SFRBM), a joint meeting with the Society for Free Radical Research International.

Oct 2010

TEACHING EXPERIENCE

Research supervisor

2002-present

- University of Rome: one undergraduate (Valentina Spina) and one graduate student (Irene Viti)
- Emory University: one graduate student (Adam Orr)
- University of Pittsburgh: one graduate student (Maxx Horowitz), two technicians (Hye Mee Na, Xiaoping Hu), and two junior post-doctoral fellows (Roberto Di Maio, Chiara Milanese)
- Erasmus Medical Centre: three visiting graduate student (Sara Sepe and Luana Barone, from Università Roma Tre, Italy, Giulia Ambrosi, from Università di Pavia, Italy), two technicians (Humaira Yousaf, Sylvia Gabriels), five postdoctoral fellows (Sara Sepe, Chiara Milanese, Cintia Bombardieri, Marshall Huston, Manuela D'Eletto), six undergraduate students (Casper Ouwerkerk, Marco Nigro, Robin de Jong, Leander Vermeer, Kawita Dihalu, Ronnie de Bor). Co-tutor in the European PhD of Luana Barone (Università Roma Tre, Italy,)

Teaching

Teaching Assistant, Histology
University of Rome
Lectured twice/week to 30 undergraduate students in biology
Taught for 3 semesters
Oral Examiner and member of exam board in Histology

2001-2003

2001-2003

University of Rome Examined three times/year 50 undergraduate students in biology

2007-2009

Invited Panelist, "K99/R00 Career Development Award Workshop" University of Pittsburgh

2011-2016

Office of Academic Career Development

Teaching Assistant, Genetics
Erasmus University Medical Center
Lectured twice/week to 50 undergraduate students in Medicine

Taught for 5 semesters

Participation in Doctoral Dissertation Committees

Candidate	Institution	Title of the thesis	Date
Alessia Buso	University of Udine	Mitochondrial oxidative phosphorylation	30 May 2017
		plasticity/adaptation triggered by disturbances and stresses and	
Luana Barone	University "Roma Tre", Rome, Italy	targeted by therapies Alterations in peroxisomal function induced by genomic instabilityand their relevance for	17 Feb 2016
Nada Samari	Vrije Univestiteit Brussel and Studiumcentrum voor Kernenergie, Belgium	aging Molecular and morphological changes induced by ionizing radiation on maturing neurons	21 Feb 2013
Sara Sepe	University "Roma Tre", Rome, Italy	Role of AMBRA1 in nervous tissue homeostasis and in neurodegeneration	19 Dec 2011

COURSES (selected)

Biological Basis of Neuropsychiatric Disorders University of Pittsburgh		2008
Course in Scientific Management and Leadership University of Pittsburgh		2008
"IV course on proteomics" University of Siena, Italy and Amersham Pharmacia		2001

SOCIETY MEMBERSHIPS

- Society for Neuroscience (2003-present)
- Nitric Oxide Society (2014)
- The New York Academy of Science (2007)
- Society of Toxicology (2008)
- Society for Free Radical Biology and Medicine (2004)

INVITED SEMINARS (selected)

- Aug 2016 Benzon Symposium no.62 Genome Instability and Neurodegeneration
- May 2016 Istituto Superiore di Sanità, Rome, Italy
- Dec 2015 University of Cologne, Cologne, Germany
- June 2015 Seahorse Biosciences User Group Meeting 2015, Amsterdam, the Netherlands, June 2-4 2015, *invited speaker*
- Sept 2014 Society for Free Radical Research-Europe, 2014 Meeting, Paris, France, invited speaker
- June 2014 Nitric Oxide Nitrite/Nitrate Conference, Cleveland, OH, USA, invited speaker
- June 2014 University of Pittsburgh, Pittsburgh, PA, USA
- May 2014 Universitá degli Studi di Chieti "G.D'Annunzio"
- May 2014 4th Dutch Huntington's Disease Research Network (DHDRN) Symposium, Amsterdam, the Netherlands, Keynote Lecture
- Jan 2014 University of Rome, Tor Vergata, Department of Biology, Italy

- May 2013 Helmholtz Zentrum München, Institute for Radiation Biology, in the "TIETO: Non-cancer effects of low dose ionizing radiation Course", invited speaker
- Apr 2013 Gordon Research Conference "Oxidative Stress And Disease", invited speaker
- Sept 2012- Neurological Institute "C.Mondino", Pavia, Italy, in the "XXIII OTTORINO ROSSI AWARD", invited speaker
- Jun 2012 A. I. Virtanen Institute for Molecular Sciences- University of Eastern Finland, in the "Mitochondria and oxidative stress in the nervous system Course", invited speaker
- Dec 2012 University of Rome "Roma Tre", Rome, Italy
- Jan 2011 Institute for Ageing and Health, Newcastle University, UK, in the "Academic Ageing Seminar Programme"
- Nov 2010 Institut Curie à Orsay, Centre Universitaire Paris-Sud 11, France
- May 2010 A. I. Virtanen Institute, University of Eastern Finland Kuopio, Finland
- March 2009 Dept. of Physiology, University of Texas San Antonio Health Science Center, San Antonio, TX, USA
- October 2008 Hillman Cancer Center, University of Pittsburgh, PA, USA
- October 2008 Erasmus Medical Center, Rotterdam, The Netherlands
- October 2007 Buck Institute for Age Research, Novato, CA, USA
- March 2007 Institute L. Spallanzani, Rome, Italy

December 2013 - selected for oral presentation

February 2007 – University of Rome, Tor Vergata, Italy

Abstracts (selected)

Sepe S, Milanese C, Gabriels S, Derks K, Payan-Gomez C, van IJcken W, Battaglia G, van Jul 2015 Cappellen G, Niggs A, Blandini F, Hoeijmakers JH, and **Mastroberardino PG**Inefficient DNA repair is an aging-related modifier of Parkinson disease
Gordon Research Conference "Parkinson disease", Colby-Sawyer College, NH, USA

Sepe S, Milanese C, Gabriels S, Derks K, Payan-Gomez C, van IJcken W, Battaglia G, van Cappellen G, Niggs A, Blandini F, Hoeijmakers JH, and **Mastroberardino PG**Aging-related mild genomic instability perturbs the dopaminergic system and elicits salient pathogenic features of Parkinson's disease pathology

XX World Congress on Parkinson's Disease and Related Disorders, Geneva, Switzerland, 8-11

Sepe S, Milanese C, Gabriels S, Derks K, Payan-Gomez C, van IJcken W, Battaglia G, van Sept 2013 Cappellen G, Niggs A, Blandini F, Hoeijmakers JH, and **Mastroberardino PG**Aging-related mild genomic instability perturbs the dopaminergic system and elicits salient pathogenic features of Parkinson's disease

The 5th EMBO meeting, Amsterdam, the Netherlands

➤ Sara Sepe received an EMBO travel fellowship and the abstract has been selected for an oral presentation

Milanese C, Sepe S, Shiva S, Gladwin MT, and Mastroberardino PG

Nitrite administration ameliorates mitochondrial bioenergetics and is neuroprotective in cellular and vertebrate models of Parkinson's disease

The 5th EMBO meeting, Amsterdam, the Netherlands

Chiara Milanese received an EMBO travel fellowship and the abstract has been selected for a flash talk

Bombardieri C, Sepe S, Payan Gomez C, Wamelink M, de Wit A, Leen R, van Kuilenburg ABP, Hoeijmakers JH, and **Mastroberardino PG**DNA damage-induced transcription arrest elicits allosteric redesign of metabolism and activation of longevity pathways

Gordon Research Conference "Biology of Aging", Il Ciocco, Italy

Bombardieri C, Sepe S, Hoeijmakers J, and **Mastroberardino PG**The nucleotide pool integrates genomic stability, metabolism, and redox homeostasis

Gordon Research Conference "Thiol-based redox regulation & signaling", Bates College, ME, USA

Aug 2012

Horowitz M, Milanese C, Di Maio R, Hu X, Montero LM, Tapias V, Burton EA, Greenamyre, JT, and Mastroberardino PG

Sept 2010

Single-cell Redox Imaging Demonstrates a Peculiar Response of Dopaminergic Neurons to Oxidative Insults

2nd World Parkinson Congress, Glasgow, Scotland

Horowitz M, Milanese C, Di Maio R, Hu X, Montero LM, Tapias V, Burton EA, Greenamyre, JT, and Mastroberardino PG

Aug 2010

Single-cell redox imaging to determine variations in oxidative tolerance of dopaminergic neurons during aging

Gordon Research Conference "Biology of Aging" Les Diablerets, Switzerland

Horowitz M, Milanese C, Di Maio R, Hu X, Montero LM, Tapias V, Burton EA, Greenamyre, JT, and Mastroberardino PG

May 2010

Single-cell redox imaging demonstrates a distinctive response of dopaminergic neurons to oxidative insults

Gordon Research Conference "Thiol-based redox regulation & signaling", Il Ciocco, Italy

Mastroberardino PG, Horowitz MP, Betarbet R, Gutekunst CA, Gearing M, Trojanowski JQ, Anderson M, Chu CT, Peng J and Greenamyre JT

Jun 2009

A novel transferrin/TfR2-mediated mitochondrial iron transport system is disrupted in Parkinson's disease

International Biolron Society 2009 Annual Meeting

Mastroberardino PG, Hoffman EH, Horowitz MP, Na HM, Chu CT, Gearing M, Greenamyre JT

A novel transferrin/TfR2-mediated mitochondrial iron transport system is disrupted in

Parkinson's disease

38th annual meeting of the Society for Neuroscience, Washington, DC.

Mastroberardino PG, Betarbet R, Uechi G, Chu CT, Gearing M, Greenamyre JT

A novel transferrin/TfR2-mediated mitochondrial iron transport system is sensitive to thiol oxidation and is disrupted in Parkinson's disease

Gordon Research Conference "Thiol-based redox regulation & signaling", Il Ciocco, Italy

May 2008

Mastroberardino PG, McComrack AL, Di Monte DA, Miller GW, Greenamyre JT Characterization of the differences in the oxidative events in two different pesticide models of Parkinson's disease 47th annual meeting of the Society of Toxicology meeting, Seattle, WA. Mar 2008

Mastroberardino PG, Hoffman EH, Horowitz MP, Na HM, Chu CT, Gearing M, Greenamyre JT

A novel transferrin/TfR2-mediated mitochondrial iron transport system is disrupted in

Parkinson's disease

37th annual meeting of the Society for Neuroscience, Washington, DC.

Mastroberardino PG, Hoffman EH, Na HM, Gearing M, Chu CT, Greenamyre JT

Transferrin(Tf) Transferrin Receptor 2 (TfR2) mediate a redox sensitive pathway for iron delivery to mitochondria

Academy conference on Mitochondria and Oxidative Stress in Neurodegenerative

Sep 2007

Academy conference on Mitochondria and Oxidative Stress in Neurodegenerative Disorders; The New York Academy of Science, New York

Mastroberardino PG, Orr AL, Li XJ, Panov A, Shalbuyeva N, Greenamyre JT Mitochondrial aspartate aminotransferase interacts with huntingtin in HD Hereditary Disease Foundation (CAG)_n meeting, Boston, MA. Aug 2006

PUBLICATIONS

Manuscripts in preparation

Bombardieri CR, Sepe S, Payán-Goméz C, Wamelink MM, de Wit AS, Leen R, Hamilton B, van Kuilenburg ABP, Hoeijmakers JH, and Mastroberardino PG DNA damage-induced transcription arrest elicits allosteric redesign of metabolism and activation of longevity pathways

Submitted manuscripts (as 25 June 2017)

Milanese C, Victor Tapias Molina, Sylvia Gabriels, Silvia Cerri, Giovanna Levandis, Fabio Blandini, Sruti Shiva, J. Timothy Greenamyre, Mark T. Gladwin, and Pier G. Mastroberardino S-nitrosation by inorganic nitrite ameliorates complex I dysfunction and is neuroprotective in Parkinson's disease

Peer Reviewed Book Chapters

Chiara Milanese and Mastroberardino PG Genes, Aging, and Parkinson's Disease in Oxidative Stress and Redox Signalling in Parkinson's Disease, published by The Royal Society of Chemistry, in press

Peer Reviewed Articles

- P.G. Mastroberardino has published 42 articles in international peer-reviewed scientific journals and 1 book chapter. His work has been cited more than 1500 times in total. His hindex is 20 based on Scopus.
- 42 Zambetti NA, Ping Z, Chen S, Kenswil KJG, Mylona MA, Sanders MA, Hoogenboezem RM, Bindels EMJ, Adisty MN, Van Strien PMH, van der Leije CS, Westers TM, Cremers EMP, Milanese C, Mastroberardino PG, van Leeuwen JPTM, van der Eerden BCJ, Touw IP, Kuijpers TW, Kanaar R, van de Loosdrecht AA, Vogl T and Raaijmakers MHGP Oncogenic niche signaling in human leukemia predisposition syndromes Cell Stem Cell, 2016 Nov 3;19(5):613-627. doi: 10.1016/j.stem.2016.08.021
- 41 Sepe S, Milanese C, Gabriels S, Derks K, Payán-Goméz C, van IJcken W, Rijksen YMA, Niggs A, Moreno S, Cerri S, Blandini F, Hoeijmakers JH, and Mastroberardino PG Inefficient DNA repair is an aging-related modifier deranging the dopaminergic system and predisposing to Parkinson's disease Cell Reports 2016 May 31;15(9):1866-75. doi: 10.1016/j.celrep.2016.04.071.
- 40 Karapiperis C, Kempf SJ, Quintens R, Azimzadeh O, Vidal VL, Pazzaglia S, Bazyka D, Mastroberardino PG, Scouras ZG, Tapio S, Benotmane MA, Ouzounis CA. Brain Radiation Information Data Exchange (BRIDE): integration of experimental data from low-dose ionising radiation research for pathway discovery.
 BMC Bioinformatics. 2016 May 11;17(1):212. doi: 10.1186/s12859-016-1068-8.
- 39 Parlato R, **Mastroberardino PG**.

 Editorial: Neuronal Self-Defense: Compensatory Mechanisms in Neurodegenerative Disorders.

 Front Cell Neurosci. 2016 Jan 5:9:499.
- 38 Kempf SJ, Sepe S, von Toerne C, Janik D, Neff F, Hauck SM, Atkinson MJ, Mastroberardino PG, Tapio S.
 Neonatal Irradiation Leads to Persistent Proteome Alterations Involved in Synaptic Plasticity in the Mouse Hippocampus and Cortex.
 J Proteome Res. 2015 Nov 6;14(11):4674-86.
- 37 Birket MJ, Ribeiro MC, Kosmidis G, Ward D, Leitoguinho AR, van de Pol V, Dambrot C, Devalla HD, **Mastroberardino PG**, Atsma D, Passier R, Mummery CL Contractile defect caused by mutation in MYBPC3 revealed under conditions optimized for human PSC-cardiomyocyte function

 Cell Reports 2015 Oct 27;13(4):733-45.
- 36 Aizenman E and Mastroberardino PG.

 Metals in Neurodegeneration

 Neurobiol Dis. In press

- 35 Cervellati C, Sticozzi C, Romani A, Belmonte G, De Rasmo D, Signorile A, Cervellati F, Milanese C, Mastroberardino PG, Pecorelli A, Savelli V, Forman HJ, Hayek J, Valacchi G. Impaired enzymatic defensive activity, mitochondrial dysfunction and proteasome activation are involved in RTT cell oxidative damage.
 Biochim Biophys Acta 2015 Jul 17. pii: S0925-4439(15)00206-9. doi: 10.1016/j.bbadis.2015.07.014.
- van den Beukel JC, Grefhorst A, Hoogduijn MJ, Steenbergen J, Mastroberardino PG, Dor FJ, Themmen AP.
 Women have more potential to induce browning of perirenal adipose tissue than men.
 Obesity (Silver Spring) 2015 Aug;23(8):1671-9. doi: 10.1002/oby.21166.
- Kempf SJ, Moertl S, Sepe S, von Toerne C, Hauck SM, Atkinson MJ, Mastroberardino PG, Tapio S.
 Low-dose ionizing radiation rapidly affects mitochondrial and synaptic signaling pathways in murine hippocampus and cortex.
 J Proteome Res. 2015 May 1;14(5):2055-64. doi: 10.1021/acs.jproteome.5b00114.
- 32 Altuntas S, D'Eletto M, Rossin F, Hidalgo LD, Farrace MG, Falasca L, Piredda L, Cocco S, Mastroberardino PG, Piacentini M, Campanella M. Type 2 Transglutaminase, mitochondria and Huntington's disease: menage a trois.
 Mitochondrion 2014 Nov;19 Pt A:97-104. doi: 10.1016/j.mito.2014.09.008.
- van den Beukel JC, Grefhorst A, Quarta C, Steenbergen J, **Mastroberardino PG**, Lombès M, Delhanty PJ, Mazza R, Pagotto U, van der Lely AJ, Themmen APN Direct activating effects of adrenocorticotrophin hormone (ACTH) on brown adipose tissue are attenuated by corticosterone **FASEB J**. 2014 Aug 1. pii: fj.14-254839.
- Rossin F, D'Eletto M, Falasca L, Sepe S, Cocco S, Fimia GM, Campanella M, Mastroberardino PG, Farrace MG, Piacentini M
 Transglutaminase 2 ablation leads to mitophagy impairment associated with a metabolic shift towards aerobic glycolysis
 Cell Death Differ. 2015 Mar;22(3):408-18. doi: 10.1038/cdd.2014.106.
- 29 Sanders LH, McCoy J, Hu X, Mastroberardino PG, Dickinson BC, Chang CJ, Chu CT, Van Houten B, Timothy Greenamyre J Mitochondrial DNA damage: molecular marker of vulnerable nigral neurons in Parkinson's disease Neurobiol Dis. 2014 Jun 27
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 Co-corresponding author and equal contribution with FB
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