

Antonio Pisani

Personal Statement (MAX 600 chars.)

Briefly indicate the overall goals of the project and responsibilities of the key person identified on the Biographical Sketch

Dr. Pisani is a physician-scientist with a long standing interest in the basic and clinical aspects of basal ganglia dysfunction, with a specific interest in dystonia and Parkinson's disease. His lab provided the first detailed characterization of striatal long-term synaptic plasticity and started to unravel the reciprocal interactions between projection neurons and interneurons. More recently, he contributed to characterize the alterations of striatal synaptic plasticity in different mouse models of monogenic parkinsonisms, such as DJ-1, PINK1, LRRK2, Parkin. Primary aim in this context is to extend such observations to the rodent model described in this proposal, which might more closely resemble the human condition.

His long-term commitment to this field of research is witnessed by the number of peer-review publications in the recent past (2005-2011). As Head of the Neurophysiology and Plasticity laboratory at Fondazione Santa Lucia, in Rome, he will provide guidance in the planning and execution of the experiments.

Positions (max 15 rows)

Institution	Division	Location	Position	From Year	To Year
1996 – 2006: Assistant Professor of Neurology, Dept. Neuroscience, University Tor Vergata, Rome, Italy					
2007- Present: Associate Professor of Neurology; Head of Neurophysiology laboratory at Dept. Neuroscience, University "Tor Vergata" and at Fondazione Santa Lucia, European Brain Research Institute, Rome, Italy					
2009-present: Medical and Scientific Advisory Council, Dystonia Medical Research Foundation					
2009-present: Scientific Advisory Board, Bachmann Strauss Dystonia and Parkinson's Foundation					

Awards and Honors (max 600 chars)

1990: Glaxo Prize for Neuropharmacology

1995: Prize "Azione Parkinson" for best original basic science work on Parkinson's disease

2006: Member PhD committee, University of Bordeaux, France

2007-present: Member of AERES committee (Inserm Experts, Dept. de l'Evaluation Scientifique), France

2011: Member PhD committee, University of Manchester, UK

2011- present: Management Committee Member, COST BM1101 European Project on dystonia syndromes.

2012. "Stanley Fahn Award", Dystonia Medical Research Foundation.

Official H index: 44 (Web of Science 2013)

Selected reference up 2008

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5: Pisani V, Stefani A, Pierantozzi M, Natoli S, Stanzione P, Franciotta D, Pisani A. Increased blood-cerebrospinal fluid transfer of albumin in advanced Parkinson's disease. *J Neuroinflammation*. 2012 Aug 8;9:188. doi: 10.1186/1742-2094-9-188. PubMed PMID: 22870899; PubMed Central PMCID: PMC3441323.

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7: Grundmann K, Glöckle N, Martella G, Sciamanna G, Hauser TK, Yu L, Castaneda S, Pichler B, Fehrenbacher B, Schaller M, Nuscher B, Haass C, Hettich J, Yue Z, Nguyen HP, Pisani A, Riess O, Ott T. Generation of a novel rodent model for DYT1 dystonia. *Neurobiol Dis*. 2012 Jul;47(1):61-74. doi: 10.1016/j.nbd.2012.03.024. Epub 2012 Mar 26. PubMed PMID: 22472189.

8: Sciamanna G, Tassone A, Martella G, Mandolesi G, Puglisi F, Cuomo D, Madeo G, Ponterio G, Standaert DG, Bonsi P, Pisani A. Developmental profile of the aberrant dopamine D2 receptor response in striatal cholinergic interneurons in DYT1 dystonia. *PLoS One*. 2011;6(9):e24261. doi: 10.1371/journal.pone.0024261. Epub 2011 Sep 2. PubMed PMID: 21912682; PubMed Central PMCID: PMC3166312.

- 9: Tassone A, Sciamanna G, Bonsi P, Martella G, Pisani A. Experimental models of dystonia. *Int Rev Neurobiol.* 2011;98:551-72. doi: 10.1016/B978-0-12-381328-2.00020-1. Review. PubMed PMID: 21907100.
- 10: Madeo G, Martella G, Schirinzi T, Ponterio G, Shen J, Bonsi P, Pisani A. Aberrant striatal synaptic plasticity in monogenic parkinsonisms. *Neuroscience.* 2012 Jun 1;211:126-35. doi: 10.1016/j.neuroscience.2011.07.065. Epub 2011 Aug 2. Review. PubMed PMID: 21839811.
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- 12: Pisani V, Madeo G, Tassone A, Sciamanna G, Maccarrone M, Stanzione P, Pisani A. Homeostatic changes of the endocannabinoid system in Parkinson's disease. *Mov Disord.* 2011 Feb 1;26(2):216-22. doi: 10.1002/mds.23457. Epub 2010 Dec 13. Review. PubMed PMID: 21412829.
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- 16: Quartarone A, Pisani A. Abnormal plasticity in dystonia: Disruption of synaptic homeostasis. *Neurobiol Dis.* 2011 May;42(2):162-70. doi: 10.1016/j.nbd.2010.12.011. Epub 2010 Dec 16. Review. PubMed PMID: 21168494.
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