

Monica DiLuca

Academic career

- Laurea cum laude in Chemistry and Pharmacology Technology, Faculty of Pharmacy, University of Milan - 110 lode/110 (1986)
- PhD in "Pharmacology", Faculty of Pharmacy, University of Milan (1992)
- PhD in Medical Sciences, School of Medicine, University of Utrecht (1993)

Professional experience

- Head of Laboratory of Pharmacology of neurodegeneration - DiSFeB Univ. of Milano
- Vice - Rector for International Strategies, University of Milano: 2014 - 2018
- Director of NeuroNest (Center of Neuroscience of University of Milano): 2014 - today
- Full Professor of Pharmacology - University of Milano (2011 - present)
- Associated Professor of Pharmacology - University of Milano (2000 - 2011)
- Assistant professor, Institute of Pharmacological Sciences University of Milano (1995 - 2000)

Honours and awards

- Laurea Honoris Causa Faculty of Medicine and Pharmacy, Univ. of Mons (Belgium) (March 2017)
- EMBO membership (2017)
- Visiting professor at Liaoning Normal University, Dalian (2017)
- "*Otto Creutzfeldt Lecture*", 12th Goettingen Meeting of the German Neuroscience Society (2017)
- ENCP Media Award (2013)
- EDAB, European Dana Alliance Invited Member (2008)
- Award for Neuroscience - Italian Society for Neuroscience (1997)
- Award of the Faculty of Pharmacy, University of Milano for "Studies on neuronal plasticity" (1994)

Learned Societies and Boards

- EBC - European Brain Council (Member of Advisory Board: 2003-2006; Vice-president: 2010-2016; President: 2017- 2019)
- IBRO, International Brain Organization (Chair of Western Europe Regional Committee: 2006-2010; Executive Director Inter-Regional activities, 2010-2014)
- FENS - Federation of European Neuroscience Societies (Member of Scientific Programme Committee: 1996-2000; General Secretary: 2000-2006; Member of Board Programme of European Neuroscience Schools, PENS: 2006-2010; President 2014 - 2016)
- Federation of European Neuroscience Societies Trust (President: 2006 – 2014)
- SfN - Society for Neuroscience (Member of Women in Neuroscience Committee: 2007 - 2010; Member of Professional Development Committee: 2009 - 2012)
- SINDEM - Società Italiana Neurologia delle Demenze (Board Member: 2012 - today)
- SINEG - Società Italiana di Neurogeriatria (Board Member 2005-2009)
- SINS - Società Italiana di Neuroscienze (Board Member 2001-2005)
- SIF - Società Italiana di Farmacologia (Coordinator for "Regione Lombardia": 2007-oggi; Coordinator Group of Neurodegenerative Diseases: 2012; Board Member: 2013-2017)
- Board of Full Professors of pharmacology, Secretary and treasurer, 2018
- Italian Interdisciplinary Network on Alzheimer Disease, ITINAD (Scientific Secretary: 1998-2001; Vice President: 2001-2009)
- Univ. of Milano - National Coordinator Working Group CRUI H2020: 2012
- Univ. of Milano - delegate at "The League of European Research Universities" (LERU) - 2015 - today

Revision Panels

- International Panel of Experts for Neuroscience - FCT Fundação para a Ciência e a Tecnologia, Ministério da Ciência e da Tecnologia - Portugal.
- Advisor for BBSRC (Biotechnology and biology Research Council) panel, UK

- AERES, Agence de l'Evaluation de la Recherche et des Etablissements d'Enseignement Supérieur, French Research Agency, Visiting Committee Ecole Normale Supérieure, Paris
- Member of Visiting Committee KU Leuven

Organizational activities

- 2017 6th European Synapse Meeting - Milano, 4/6 December
- 2017 Cajal Advanced Programme in Neuroscience: Synapse Course - Bordeaux, 02/21 July
- 2016 10th FENS Forum, Copenhagen
- 2014 9th FENS Forum – Milan
- 2013 SIF (Società Italiana di Farmacologia) - "Alzheimer Disease: which are the challenges we need to face?" From basic mechanisms to genetic and translational aspects - Milan
- 2011 "The Synapse: From physiology to pathology" - Stresa, 4/7 September, Satellite of International Society of Neurochemistry" (ISN)
- 2006 FENS Forum - Vienna, 11/15 July
- 2004 Vice chair EURESCO conference on Learning and Memory - Obernai
- 2004 FENS Forum - Paris, 13/17 July
- 2002 FENS Forum - Lisbona, 10/14 July
- 1999 FENS Summer School on "Neurodegeneration and Regeneration: from basic to disease" - Elba
- 1998 Official Satellite of European Neuroscience Forum "Synaptic plasticity learning and memory" - Berlin
- 1998 "Federation of European Neuroscience Societies (FENS) Forum " - Berlin
- 1997 Elba Summer School of Neuroscience (ENA): "Degeneration and regeneration in the Nervous System: mechanisms and disease"

Editorial Activities

- 1998 - 2004 *Editor*: Neuroscience Research Communication
- 2000 - 2006 *Member of Publication Committee*: European J. Neuroscience
- 2006 - 2016 *Editorial Board*: Neural Plasticity
- 2007 - *Editorial Board*: Pharmacological research
- 2007 - *Editorial Board*: European J Pharmacology
- 2009 - *Review Editor*: Frontiers in Synaptic Neuroscience
- 2009 - 2017 *Faculty 100* – Member Faculty Medicine – Alzheimer
- 2011 - 2016 *Editorial Board*: Synapse
- 2016 - *Editorial Board*: Neuroscience

Funding

- Italian Ministry of University and Research (PRIN2015, PRIN2010-11, FIRB2011, PRIN2008, FIRB2003)
- Italian Ministry of Health (Min.San. 2016, 2010, 2008, 2004, 2002, 2000)
- CNR (1999, 1998, 1995)
- JPco-fuND, STAD project 2016
- European Commission (H2020-MSCA-ITN-2015; FP7 SymbAD ITN; FP7 REPLACES Collaborative project; FP7 cPADS, IAPP project, FP6 SynScaff Collaborative projects)
- Foundations (Cariplo, IPSEN, Telethon, AlzOrg)

Patents

- European patent application EP 13196710.1 - 1456 (ADAM10 inhibition to treat Fragile X syndrome), registered on 11/12/2013.

Research interests

Monica DiLuca is the author of over 180 articles published in peer reviewed journals. Over the last ten years she has given over 60 invited lectures at international meetings or at universities in Europe, North America and Asia.

Monica DiLuca's primary research interest is related to brain and synaptic plasticity both in physiological

and pathological conditions, with the primary aim to apply her basic findings to the cure of neurodegenerative diseases as Alzheimer and Parkinson Disease. Monica DiLuca's group has made significant contributions to the understanding of the molecular mechanisms regulating the composition, the structural organization and the dynamic of the glutamatergic synapse.

Her group has identified a key role of glutamatergic synapse components in neurodegenerative diseases, particularly focusing on composition of NMDA receptors. Notably, Monica DiLuca's group identified pillars of amyloid cascade in the core of the glutamatergic synapse. These discoveries have radically changed the understanding of Alzheimer disease pathogenesis, with far reaching ramifications for neuronal plasticity and memory as well as neuroprotection. These findings open new avenues to identify novel molecules targeting early synaptic dysfunction for pharmacological interventions in the still unresolved need of neurodegenerative diseases' treatment.