

Monica Di Luca

Academic career

- Laurea cum laude in Chemistry and Pharmacology Technology, Faculty of Pharmacy, University of Milan - 110 cum laude/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

- Full Professor and Head of Lab 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 – 2019)
- Associated Professor of Pharmacology - University of Milano (2000 - 2011)
- Assistant professor, Institute of Pharmacological Sciences University of Milano (1995 - 2000)

Honours and awards, selected

- Doctor Honoris Causa University of Bordeaux (France) (Oct 2019)
- 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)
- ENCP Media Award (2013)
- EDAB, European Dana Alliance Invited Member (2008)
- Award for Neuroscience - Italian Society for Neuroscience (1997)

Learned Societies and Boards

- ALBA Network (FENS) Steering Committee (2018-)
- EBC - European Brain Council (Member of Advisory Board: 2003-2006; Vice-president: 2010-2016; President: 2017- 2021)
- 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)
- IBRO, International Brain Organization (Chair of Western Europe Regional Committee: 2006-2010)
- SfN - Society for Neuroscience (Member of Women in Neuroscience Committee: 2007 - 2010; Member of Professional Development Committee: 2009 - 2012)
- SINS - Società Italiana di Neuroscienze (Board Member 2001-2005)
- SIF - Società Italiana di Farmacologia (Board Member: 2013-2017)

Revision Panels, selected

MDL has served as member of several panels for the European Commission Framework Programmes 7 and H2020. In addition:

- 2000-2004 International Panel of Experts for Neuroscience - FCT Fundação para a Ciência e a Tecnologia, Ministério da Ciência e da Tecnologia – Portugal
- 2006 Advisor for BBSRC (Biotechnology and biology Research Council) panel, UK
- 2009 -2010 AERES, Agence de l'Evaluation de la Recherche et des Etablissements d'Enseignement Supérieur, French Research Agency,
- 2014-2016 - Eric Kandel Young Neuroscientists Prize
- 2012-2016 - FENS EJM Awards Evaluation Committee
- 2014 -2016 - IBRO-Kemali Prize
- 2014-2018 - DANA awards
- 2019-2021 - Member of Lundbeckfonden's Grants & Prizes panel
- 2019-2022 - Member of DZNE Senate
- 2019-2021 - SfN Julius Axelrod Prize Selection Committee

Organizational activities

MDL served as Secretary General of FENS from 2000 to 2006; in this frame she has been involved in the organization of all FENS Forum (2002 Paris, 2004 Lisbon, 2006 Vienna) as well as all ancillary scientific activities of FENS. In addition, MDL served as Chair of Western Europe Chapter of IBRO (2006-2010) and as such she has been active member of the FENS-IBRO School Committee (PENS), responsible for organization of shared Higher Education Programmes in Europe.

Below a list of selected organizing activities:

- 2017 6th European Synapse Meeting - Milano, 4/6 December -
- 2017 Course Director Cajal Advanced Programme in Neuroscience: Synapse Course - Bordeaux, 02/21 July
- 2011 "The Synapse: From physiology to pathology" - Stresa, 4/7 September, Satellite of International Society of Neurochemistry" (ISN)
- 2004 Vice chair EURESCO conference on Learning and Memory - Obernai
- 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
- 1997 Elba Summer School of Neuroscience (ENA): "Degeneration and regeneration in the Nervous System: mechanisms and disease"

Supervision of graduate students and PostDoctoral Fellows

Throughout her career MDL has made it a priority to mentor young scientists including women. Her mentees have gone on to rich careers in both academia, in Italy and abroad, and other areas, including private sector as Pharma companies and publishing area. From 1994 to 2019 she mentored 20 post docs and more than 30 PhD students. A very large proportion of Post Docs went on to excellent careers, including many in academic research. Examples of her successful trainees include Camilla Bellone (Professor at Univ. of Geneva), Daniela Mauceri (Faculty in Heidelberg), Fabrizio Gardoni (Full Professor Univ. of Milano) Elena Marcello (Associate Professor Univ of Milano) Piera Pasinelli (Professor Thomas Jefferson University), Jennifer Stanic (Marie Curie fellow, Univ of Bordeaux) to name a few.

Among other more general contributions to training and mentorship MDL devoted great attention to higher education in neuroscience in Europe, starting the tradition of FENS Summer school in 1999, and giving continuous support in the development of advanced education contributing in structuring the Cajal Advanced Neuroscience Programme. Special attention has been given activities meaningful to young women and development of their career, both at individual level through mentoring seminars around Europe, and at institutional level through participation to relevant committee (ALBA-FENS; Women in Neuroscience Committee and Professional Development Committee – SfN).

Editorial Activities

- 2000 - 2006 *Member of Publication Committee:* European J. Neuroscience
- 2006 - 2016 *Editorial Board:* Neural Plasticity
- 2009 - 2015 *Review Editor:* Frontiers in Synaptic Neuroscience
- 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)
- European Commission (H2020-MSCA-ITN-2015; JPco-fuND, STAD project 2016; FP7 SymbAD ITN; FP7 REPLACES Collaborative project; FP7 cPADS, IAPP project, FP6 SynScaff Collaborative projects)
- Foundations (Cariplo, IPSEN, Telethon, AlzOrg)

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.