

ALESSANDRA LAURA GIULIA PEDROCCHI

EDUCATION

1991 Degree of Classic high school scuola FAES Monforte Milano

1997 Laurea con laude (100/100 laude) in Electrical Engineering, POLIMI(POLIMI)

2001 Defense of the PhD thesis - Supervisor: Prof. Giancarlo Ferrigno Final evaluation: excellent.

POST DOCTORAL TRAINING

1997- 2003: Research Fellow at the Bioengineering Center POLIMI and the Fnd Don C. Gnocchi IRCCS ONLUS)

2002- 2007: Post-doctoral fellow at the Bioengineering Dept. POLIMI

FACULTY APPOINTMENTS

2015 - present Associate Professor in Electronics, Informatics and Bioengineering Dept-. POLIMI

2008-2015 Assistant Professor in Bioengineering Electronics, Informatics and Bioengineering Dept- POLIMI

Summer 2017 Visiting Professor at University of Southern California- Los Angeles (USA)

RESEARCH ACTIVITY

I'm one of the founders of the NeuroEngineering And medical Robotics laboratory (www.nearlab.polimi.it), started in 2008 at the POLIMI and I'm currently responsible of the Neuroengineering section. My research interest is neuroengineering, including biomechanics in motor control, neurorobotics, design of bioartificial interfaces to in-vitro neurons and new technologies for neurorehabilitation, with a special emphasis on neuroprostheses and the study of the correlation between brain plasticity and functional recovery.

Funded research projects (since 2012)

-2017-2021 Scientific investigator for POLIMI of the project EMPATIA@Lecco cofunded by Regione Lombardia and Cariplo Foundation

-2015-2020 PI for POLIMI of NIH funded project "Multicenter clinical trial of augmented sensory Feedback in children with Dyskinetic CP" Grant 61430868 PA 13-302.

- 2015-18 Scientific coordinator of the whole project and PI for POLIMI of the H2020 IA project: RETRAINER "REaching and grasping Training based on Robotic hybrid Assistance for Neurological patients: End users Real life evaluation" H2020- ICT-2014-1 ICT-23-2014IA (<http://www.retrainer.eu/>)

- 2016-2018 PI of the project funded by Telethon "USEFUL: User-centred assistive System for arm Functions in neuromuscular subjects" Telethon-UILDm call: 2015 - Application No: GUP15021

- 2016-2018 PI for POLIMI of the grant by Foundation FORST for the project "Biofeedback Scuba suit to promote Physical Activity at SPAs"

- 2014-2015 PI of the project "SHRINK and MOVE SHORT and BLIND (SMSB)" funded by the Italian Space Agency (ASI) - VUS program

- 2014-2015 PI for DEIB of the project "ABILITY - Telerehabilitation: Integrated platform Enabling the Remote Delivery and control of physical and cognitive Rehabilitation, and Self Management" Funded by Regione Lombardia - program Smart Cities and Communities

- 2013-2015 PI for POLIMI of the project "Fall risk estimation and prevention in the elderly using a quantitative multifactorial approach" PRIN 2010 (funded by the National Ministry of Research and University)

- 2012-2014 PI for POLIMI of the EU funded program "European MSc in Advanced Rehabilitation Technologies" (527790-LLP-1-2012-1-UK-ERASMUS-EMCR)

- 2011-2013 PI for POLIMI of the EU project REALNET Realistic Real-time Networks: computation dynamics in the cerebellum FP7-ICT-2009-6 (<http://www.realnet-fp7.eu/>)

- 2010-2012 Program manager of the EU project MUNDUS Multimodal Neuroprosthesis for Daily Upper limb Support FP7 ICT-4-7.2 Accessible and Assistive ICT (<http://www.mundus-project.eu>)

Publications records

The complete list of papers is available on the Nearlab website. H-index=18; Number of publications: 150; 1100 total citations (Source: Scopus; Jan 2018 -ORCID orcid.org/0000-0001-9957-2786)

TEACHING

Since 2004, I've been professor at the Graduate school of Biomedical Engineering at the POLIMI of NEUROENGINEERING (5 ECTS) and since 2014/15 I'm giving the class of BIOMEDICAL INSTRUMENTATION to Biomedical Engineering Bachelor Students. I've been supervisor of 10 Ph.D. student

SCHOOL COMMITTEES

2012 – 2017 Member of the Committee of PhD School in Bioengineering - POLIMI

2012-present Member of the Commission in charge of Students Transfers for the Graduate and Undergraduate Course in Biomedical Engineering Politecnico di Milano

PARTICIPATION TO ACADEMIC AND SCIENTIFIC SOCIETIES

2005-present: Member of the Society for Neuroscience

2013- present: Member of the International Federation of Medical and Biological Engineering

2015- present: IEEE senior member