

## Curriculum Vitae

### Personal informations:

Name Surname: Giovanna D'Arcangelo  
E-mail: giovanna.darcangelo@uniroma2.it  
Italian nationality  
Date and place of birth: 11/23/1960, Rome  
Marital status: married with 2 children

### Work and study experiences:

**2014-18** University of Rome Tor Vergata, Secretary of the Degree Course in Sciences and Techniques of Preventive and Adapted Motory Activity  
**2012-18** University of Rome Tor Vergata, Assistant Professor representative in the Board of the Department of Systems Medicine  
**2012-18** University of Rome Tor Vergata, Assistant Professor representative in the Board of Faculty of Medicine and Surgery Council  
**2009-12** University of Rome Tor Vergata, Assistant Professor representative in the Faculty of Medicine and Surgery Council  
**2007** University of Genoa, Faculty of Medicine and Surgery, Institute of Physiology directed by Prof. Fabio Benfenati invited speaker on: Role of the limbic system in the genesis and maintenance of neuronal hyperexcitability in models of "in vitro" epilepsy.  
**2007** University of Rome Tor Vergata, confirms in the role of Assistant Professor  
**2004 to date** University of Rome Tor Vergata, Assistant Professor, BIO / 09 Physiology, Department of Systems Medicine, Faculty of Medicine and Surgery  
**2001** Humboldt University, Berlin, Institute of Physiology directed by Prof. Uwe Heinemann, Charité Campus, "visiting professor" invited speaker on: Neuronal network function visualized by infrared microscopy.  
**1998** Montreal Neurological Institute, Mc Gill University "visiting scientist"  
**1996** Max-Planck Institute of Psychiatry, Munich, Laboratory of Neuropharmacology, "visiting scientist"  
**1993-95** Max-Planck Institute of Psychiatry, Munich, Neuropharmacology Laboratory directed by Prof. W. Zieglgänsberger, Assistant Professor LIPHA fellowship.  
**1990** University of Rome Tor Vergata, permanent position of Assistant Research, Department of Experimental Medicine and Biochemical Sciences, Faculty of Medicine and Surgery  
**1989** Rome, Ministry of Health, General Practitioner  
**1989** University of Rome "La Sapienza" graduated with full marks and honors as MD  
**1982-90** University of Rome Tor Vergata, Faculty of Medicine and Surgery, Dept. of Experimental Medicine and Biochemical Sciences, Section of Physiology, Assistant Research supported by CNR fellowship

**Mother Language** Italian

**Other Languages** English

### Teaching activity

#### One-cycle degree courses

**2005-2018** University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Human Physiology, Master's Degree in Medicine and Surgery

#### Specialist Degree Courses

**2005-2018** University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Neurophysiology of Synaptic Plasticity, Master's Degree in Sciences and Techniques of Preventive and Adapted Motory Activity  
**2006-2018** University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Physiology, Specialized Degree Course in Science of Health Professions Diagnostic Techniques

### **Three-year degree courses**

<b>2015-2018</b>	University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Physiology of the Cardiovascular System, Degree Course Techniques of Cardiocirculatory Physiopathology and Cardiovascular Perfusion
<b>2015-2018</b>	University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Physiology of the stomatognathic apparatus, Degree Course in Dental Hygienist.
<b>2009-2013</b>	University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Cardiovascular Physiology, Degree Course Techniques of Cardiocirculatory Physiopathology and Cardiovascular Perfusion
<b>2006-2007</b>	University of Rome "Tor Vergata", Faculty of Engineering, Physiology 1, Degree Course in Medical Engineering
<b>2005-2006</b>	University of Rome "Tor Vergata", Faculty of Engineering, Physiology 2, Degree Course in Medical Engineering
<b>2004-2013</b>	University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Physiology, Degree Course in Podology
<b>2004-2009</b>	University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Physiology of the Respiratory System , Degree Course in Cardiocirculatory Physiopathology and Cardiovascular Perfusion
<b>2004-2007</b>	University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Physiology, Degree Course in Physiotherapy
<b>2001-2013</b>	University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Physiology, Degree course in Dietetics
<b>2001-2013</b>	University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Physiology, Degree Course in Dental Hygienist
<b>2001-2013</b>	University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Physiology, Degree Course in Radiology, Diagnostic Imaging and Radiotherapy Techniques
<b>2001-2013</b>	University of Rome "Tor Vergata", Faculty of Medicine and Surgery, Physiology, Degree Course in Diagnostic Techniques of Neurophysiopathology

### **San Raffaele Telematic University**

<b>2017-2018</b>	Physio-biological nutraceuticals , Specialized Degree Course in Human Nutrition Sciences Curriculum Nutraceutica
<b>2014-2018</b>	Nutrition at the level of the organism: tissues, organs and functions , Specialized Degree Course in Human Nutrition Sciences

### **University Diploma Courses, "Tor Vergata" University of Rome**

<b>1997-2000</b>	Human Physiology for the University Diploma for Nursing
<b>1997-2000</b>	Human Physiology for the University Diploma for Physiotherapists
<b>1997-2000</b>	Human Physiology for the University Diploma for Dental Hygienist
<b>1997-2000</b>	Human Physiology for the University Diploma for Biomedical Laboratory Techniques
<b>1997-2000</b>	Physiology for the University Diploma for Dietetics
<b>1997-2000</b>	Physiology for the University Diploma for Radiologists Technicians

### **University Specialization Schools, "Tor Vergata" University of Rome**

<b>2016-2018</b>	Human Physiology at Specialization School in Health Physics
<b>2003-2014</b>	Human Physiology, Specialization School in Health Physics

### **PhD, University of Rome "Tor Vergata"**

<b>2010-2015</b>	Advanced sciences in rehabilitation medicine and sport.
<b>2007-2010</b>	Sports Sciences.

Dr. D'Arcangelo has been a speaker and co-supervisor of numerous degree theses and has participated in intership of Erasmus students

## SCIENTIFIC ACTIVITY

**Study** of the mechanisms involved in the genesis, propagation and modulation of neuronal hyper-excitability in the hippocampus-entorhinal cortex of rodent in different experimental models (knockout for Synapsin I and Synapsin II, model of 4 aminopyridine, model of epilepsy drug resistant by pilocarpine )

**Study** of the pathophysiological mechanisms of neurological changes in neurodegenerative diseases

**Functional analysis** of synaptic transmission and neuronal plasticity and their modulation by neuro protective and antioxidant substances.

**Electrophysiological analysis** in SMA mice

**Study** of the effects of membrane lipid modulation in an experimental model of Niemann-Pick type C disease

**Study** of neurodegeneration mechanisms mediated by excitotoxicity in the mouse model of Niemann-Pick type C disease

**Study** of the effects of different training protocols in healthy and affected mice by Niemann Pick type C disease on synaptic and muscular plasticity

**Study** of microgravity effects on muscle cells and human bones

**Study** of the neurotoxic action of calcitonin oligomers

Dr. D'Arcangelo is a member of the following societies:

- Italian Society of Neuroscience
- Federation of European Neuroscience Societies

Dr. D'Arcangelo carries out her own research activity in the Physiology laboratory, Department of Systems Medicine, University of Rome "Tor Vergata", directing a research group consisting of students and scholarship holders

Dr. D'Arcangelo has been referee of many scientific papers for international journals.

Dr. D'Arcangelo is author of 35 works published in international journals, has participated in over 100 national and international conferences, and is also author of articles in Italian journals and book chapters.

## RESEARCH GRANTS

Dr. D'Arcangelo has collaborated and collaborates in several national and international research projects:

- 2016-2019** Finalized Research Project: Calcitonin oligomers as a model to study the amyloid neurotoxicity: the focus role played by lipid rafts in the prevention and care.
- 2015-2017** University Projects: Consolidate the Foundations 2015: "Consolidate the Foundations" of Vitamin D in Bone-Muscle Crosstalk and aging
- 2014-2016** University Projects: Uncovering Excellence 2014 entitled: Implications of GDF11 and PARP1 in counteracting age-related decline by training
- 2014-2016** Italian Space Agency Research Project: research on biomedicine and biotechnology in space, "Multidisciplinary Study of the Effects of Microgravity on Bone Cells" -SMEMCO. Grant number: 2013-082-R-O
- 2010-2014** Research projects ISS-US Institutions: Mechanisms of Neuronal Death in Niemann-Pick C Disease: From Molecules To Clinic.
- 2008-2010** Ministry of health: in vivo characterization of expression markers for the detection of doping by IGF.
- 2007-2012** Rare Diseases Research Project, US-Italy NIH 7PR1 dossier entitled "A novel pharmacological approach and identification of peripheral cellular biomarkers in Niemann-Pick disease patients."
- 2006-2011** University Loans ex 60%.
- 2006-2008** Ministry of health: Evaluation of the likely harmful effects of high doses of amino acids contained in food supplements: sociological, neurophysiological and bio-temporal aspects.
- 2005-2006** Contribution by the AIAS no-profit organization: Hypoxia and neuronal damage: in vitro experimental study.
- 2004-2005** FIRB Project: "Transgenic animals in Alzheimer's disease: a new model for the development of preventive and curative therapies"
- 2003-2004** Cofin Project 2003: "Epilepsy and pharmacoresistance: cellular, molecular mechanisms and clinical equivalent". Research Unit: "Physiopathogenetic mechanisms responsible for endocrine resistance in vitro, in rats treated with pilocarpine: a model of Mesial Temporal Epilepsy"
- 2002-2003** Funding from UCB Pharma for a research project on the control of neuronal hyperexcitability.
- 2001-2002** owner of the research project "Young researchers", funded by the University of Rome "Tor Vergata", entitled: "Modulatory action of neurosteroids on long-term potentiation in the neocortex".