

## **Curriculum Vitae Palma Simoniello**

### **Education and training**

25/03/2003 Degree in Biology with 109/110 at the University Federico II of Naples with an experimental thesis on the block of mitochondrial apoptotic pathway in lizard ovarian follicle. The research work was carried in the laboratory of Silvana Filosa, Full Professor at the University of Naples Federico II.

2003-2005 Ph. D. in Advanced Biology at the University of Naples, Department of Biological Sciences. The research work was carried at the University of Naples Federico II and is aimed to study cadmium-toxicity in the lizard *Podarcis sicula* and in the teleost *Danio rerio*. Admitted to third year Ph D programm in Advanced Biology, and withdrew for a PhD fellowship. Dissertation Advisor: Prof. Silvana Filosa

2005-2008 Ph. D. fellowship in Advanced Biology at the University of Naples, Department of Biological Sciences. The research work was carried at the University of Naples Federico II and is aimed to study cadmium-induced morphologic and molecular alterations in the lizard *Podarcis sicula* during embryo development. Dissertation title: Alterazioni morfologiche e molecolari dello sviluppo embrionale di *Podarcis sicula* in seguito ad esposizione al cadmio. Dissertation Advisor: Prof. Silvana Filosa, Final Dissertation on 22/01/2009

23/05/2011 Achieved the perfectioning course in "Igiene alimentare nutrizione e benessere" at the Department of Biological Sciences of University Federico II in Naples.

17/11/2017 Achieved the habilitation for associate professor "Abilitazione Scientifica Nazionale in II fascia -Settore Concorsuale 05/B2 ANATOMIA COMPARATA E CITOLOGIA"

### **Work experience**

2010/2011 Awarded position as Adjunct Professor in "Cytology and Histology and Laboratory" for the Degree Course of General and Applied Biology of University Federico II in Naples

22/11/2010–22/03/2011 Awarded a research fellowship on " Applicazione di tecniche morfologiche e molecolari per lo studio del metabolismo del ferro in osteitti antartici" at the Department of Biological Sciences of University Federico II in Naples.

01/9/2011-30/09/2012 Awarded a PARTNER Research Project fellowship as Post Doc on "Clinical radiobiology of lung tumors" at the Biophysic Department of GSI Helmholtzzentrum für Schwerionenforschung Germany.

1/10/2012 -31/12/2015 Awarded a fellowship as Post Doc on:

-Late radiation effects in human tissues.

-Carbon- ions therapy for non-invasive cardiac arrhythmia ablation-Supported by Genetische Risiken und entzündungshemmende Wirkung von dicht-ionisierender Strahlung (GREWIS): "Vergleichende Untersuchungen zur Wirkung von Radon in Zell- und Tier-Modellen und in Radon-Patienten at the Biophysic Department of GSI Helmholtzzentrum für Schwerionenforschung Darmstadt Germany.

1/01/2016-31/12/2018 Awarded a fellowship as RTDb, s.s.d. BIO/06, on the project "Studio delle alterazioni morfo-funzionali e molecolari indotte da differenti tipi di stress nei vertebrati" at the Department of Science and Technology Parthenope - University - Naples.

2017 is associated to INFN of Naples

1/01/2019 Awarded position as Associate Professor, s.s.d. BIO/06, in Cytology and Comparative Anatomy at the Department of Science and Technology Parthenope University of Naples.

01/04 to 27/ 06 /2019 was Visiting Professor at the Biophysic Department of GSI on the project "Hibernation and radioprotection", "Immunogenic potential of carbon ions in combination with immunotherapeutic drugs tested in a mouse model "

### **Research experience**

During these years, Dr. Simoniello studied:

- 1) Follicular epithelium remodelling in the lizard *Podarcis sicula*.
- 2) Oogenesis in Teleosts adapted to different water temperatures.
- 3) Cadmium toxicity in reptilian and teleosts.
- 4) Carbon ions effects on normal tissue.
- 5) Abscopal Immunotherapy
- 6) Hibernation and radioprotection

The scientific research and activity carried out lead to:

the publication of 53 papers in extenso (in international journals with impact factor, chapters of international books, abstracts published in international journals) and 56 communications at national and international conferences.

**Honours and awards**

9/6/2006 Prize "Luigi Abbro" as young researcher for the best communication presented during the 52th Meeting of the Italian Embryological Group (GEI) Otranto 14/05/2009 Grant to participate to 26° ESCPB Congress. Innsbruck 6-9 September 2009

26/08/2010 Grant to participate to 27° ESCPB Congress. Alessandria 5-9 September

06/12/2017 Achieved the funding of basic research activities MIUR (art. 1, comma 295, della Legge 11 dicembre 2016 n. 232).

**Fellowships/Professional Activities in Foreign Universities** 12/07/-25/09/2007 University of Naples Federico II Fellow, to attend a perfecting activity in Foreign Research Institute, Developmental Biology Laboratory Biomedical Science, coordinator Prof. David Price, University of Edinburgh Hugh Robson Building.

**Collaborations:**

-Department of Biological Sciences of University Federico II in Naples, prof. Chiara Maria Motta and Rosaria Scudiero, on the project "Cadmium toxicity in zebrafish and in lizard Podarcis Sicula"

-Bio-inflammation group (prof. Claudia Fournier) and clinical radiobiological group (Walter Tinganelli) of Biophysic Department of GSI -Helmholtzzentrum für Schwerionenforschung Darmstadt Germany on the project Carbon ion therapy for non-invasive cardiac arrhythmia ablation, in collaboration with the Mayo Clinic Translational International Electrophysiology Laboratory, Mayo Clinic Rochester, MN, USA; and on the project "Abscopal immunotherapy" in collaboration with NIRS (National Institute of Radiological Sciences)

- TIFPA, Trento Institute for Fundamental Physics and Applications on the projects: -MoVeIT (Modeling and Verification for Ion Beam Treatment planning) Call INFN gruppo V in collaboration with CIBIO (Centre for Integrative Biology), LNS, and INFN of Naples

**Participation in Research Projects (national, international)**

2004/2006 Participation as co-investigator at the PRIN-MIUR (Progetto di Rilevante Interesse Nazionale- Ministero dell'Università e della Ricerca) Project ""Risposte molecolari di cellule embrionali, differenziate e tumorali ad intossicazione da cadmio".

2011/2012 Participation at the Particle Training Network for European Radiotherapy (EU PARTNER) Project FP7-PEOPLE-2007-1-1-ITN AGREEMENT 215840 year 2008

2012/2014 Participation at Genetische Risiken und entzündungshemmende Wirkung von dicht-ionisierender Strahlung (GREWIS)2012: Vergleichende Untersuchungen zur Wirkung von Radon in Zell- und Tier-Modellen und in Radon-Patienten.

2012/2015 Participation at Proton Therapy and Radiography (PANTERA).

2017/2018 Participation at MoVeIT (Modeling and Verification for Ion Beam Treatment planning) Call INFN gruppo V.

**Teaching experiences**

2009 to 2011 Adjunct Professor in "Cytology and Histology and Laboratory" for the Degree Course of General and Applied Biology of University Federico II in Naples.

2011-2015 Tutoring activity for Master students and PhD students (teaching experimental techniques, organizing experiments, writing thesis) at the Biophysics Department of GSI (Helmholtzzentrum für Schwerionenforschung) Darmstadt-Germany.

2016 up to now- Professor in "Developmental Biology and Animal Phylogenesis" and "Cytology and histology" for the Degree Course of Biology at University Parthenope in Naples.