

Curriculum Vitae

Dr Ornella Cappellari

Personal details

Name: Ornella Cappellari

Date and place of birth: March 17, 1984, Varese, Italy.

Current Place of Work: Department of Pharmacy - Drug Sciences, University of Bari "Aldo Moro", Italy

Current Position: Lecturer in Pharmacology

E-mail: Ornella.cappellari@uniba.it

Education

- Doctor of Philosophy, (PhD), Sapienza University of Rome (2008-2011)
- MsC, University of Milan, Biology Applied to Biomedical Research (2006-2008)
- BsC University of Milan in Biological Science (2003-2006)
- Home office Personal License Holder (1-4) 70/24250
- ThLI course, teaching in higher education
- IATA certification (July 2021)

Professional Experience

- **May 2020-October 2020** Maternity leave
- **November 2019-present**

Lecturer in pharmacology, Department of Pharmacy - Drug Sciences, *University of Bari "Aldo Moro", Italy*

Prof Annamaria De Luca– ***In vitro* development of an artificial 3D muscle using optogenetic.** In vitro artificial muscle has already been developed but so far they lack of proper characteristic of terminal muscle differentiation. I am developing a 3D artificial muscle by using optogenetic technique for muscle differentiation. The project is joint between the two Universities and funded by a fellowship from Duchenne Parent Project Netherlands.

- **April 2018- October 2018** Maternity leave
- **Jul 2017- November 2018**

Senior post doc research associate, *Royal Veterinary College, London*

Prof Caroline Wheeler-Jones – ***In vitro* development of 3D culture with specific focus on establishing a stable vascular network.** Development of specific 3D assay to study the behavior of metabolic drugs on vascular development. Using Human derived vascular cells (Umbilical cord, Brain microvasculature, Lung microvasculature) we aim to reproduce a functional vascular network in 3D to assess the effect of drugs acting on the metabolism.

- **Feb 2013- Jul 2017**

Senior post doc research associate, *Royal Veterinary College, London*

Prof Dominic Wells - **Developing new strategies for Muscular Dystrophy therapies /Optogenetic fine control of fast locomotion in different mouse models**

Development of new potential treatments for muscular dystrophy, based on combination of drugs and gene therapy. We investigated new drug treatments, combination of different therapies or already approved drugs. We used a mouse model of DMD, the MDX mouse. Moreover, we worked on Optogenetics, in order to elucidate the control of locomotion by manipulating nerve impulses through light manipulation. In addition, I participated in improving the 3Rs by collaborating actively with BSU staff and by refining microsurgery techniques.

- **Dec 2011- Feb 2013**

Post doc research Associate University College London, London

Prof Giulio Cossu - **Pericyte regulatory genes and their developmental function/Cell therapy for muscular dystrophy**

Project aimed to understand in depth pericyte origins and the role exerted by Notch signalling in their fate decision. Moreover, I started investigating genes expressed by pericytes only, under Notch signalling modulation. Through my PhD work I was able to develop a system that allowed me to isolate pericyte genes in order to identify them more easily and then better characterize them for future studies. In addition, I participated in several projects which aimed to establish a cell based therapy for muscular dystrophy, following the natural history of the lab. I developed different microsurgeries including intra-arterial delivery of stem cell.

Peer-Reviewed activity:

The researcher has been reviewer for the following international journal: *Embo Journal*, *Plos current*, *Scientific report*, and has been chosen as reviewer for the ERC starting grant (2014-2015)

Teaching Activities:

From 2019 - today, Annual courses addressed to undergraduate students in Pharmacy, "Toxicology", "Pharmacology II and Chemotherapy" and "Pharmacognosy" Department of Pharmacy - Drug Sciences of the University of Bari

From 2020 – today, Committee Member of the Doctorate School in Pharmacology mentor of PhD students.

Moreover, the early join of the candidate to the Royal Veterinary college staff let her to progressively acquire expertise in teaching activities at different levels as follows:

Lectures: "The use of genetically modified animal in research" 2nd year BVet med students
Undergraduate teaching at the Royal Veterinary College: Statistic and Experimental design (2012-onwards)

Prizes and scholarships:

- Student travel grant ISSRC 2009
- Marie Curie Seal of Excellence 2019

Grants awarded

- Duchenne Parent Project Netherlands, Small Research Grant with the project “Optogenetic engineered artificial muscle to enhance preclinical studies in DMD” 25.000€, Principal Investigator
- Brains to the south, Fondazione con il sud, “Optogenetic engineered artificial muscle to enhance preclinical studies in DMD” 250.000€ grant number: 2018-PDR-00351, Principal Investigator

Invited presentation or poster presenter:

Selected speaker at SIF virtual international conference, March 2021, Italy
 Selected speaker at SIF international conference, Florence, November 2019, Italy
 Invited speaker for a seminar at Temple University, October 2015, Philadelphia, USA
 Selected for short talk at OPTOGEN 2015, Lecce (Italy)
 Poster presenter: SFN Neuroscience meeting, October 2015, *Chicago USA*.
 Poster presenter: ABCD PhD meeting, October 2011, *Gubbio (Italy)*
 Poster presenter: EMBO Conference, “The molecular and cellular mechanism regulating skeletal muscle development and regeneration”, May 2011, *Wiesbaden (Germany)*.
 Poster presenter: FASEB Summer research conference “Skeletal muscle satellite and stem cells”, July 2010, *Carefree USA*.
 Poster presenter: hSR Scientific Retreat, February 2010, *Stresa (Italy)*.
 Poster presenter: ISSCR, July 2009, *Barcelona (Spain)*.
 Poster presenter: hSR Scientific Retreat, February 2009, *Stresa (Italy)*.

Membership of professional societies

SFN Society of neuroscience 2015-onwards
 ISSRC International society for stem cell research 2009-2011
 SIF Italian society of Pharmacology 2018-onwards

Scientific Collaborations

Prof Giulio Cossu, Division of Cell Matrix Biology & Regenerative Medicine Faculty of Biology, Medicine and Health, University of Manchester.
 Prof. Dominic Wells, Comparative Biological Science, Neuromuscular Unit, Royal Veterinary College, London
 Prof. Andrew Spence, Department of Bioengineering College of Engineering Temple University

Languages

- Italian, Mother tongue
- English, Full proficient
- French, basic conversational

Voluntary Activity

- Voluntary work for Italian Red Cross 2002-2006
- Voluntary tuition for children with language difficulties (Government assignment), 2015-2016, London, UK

Leisure Activity

- Master swimmer participating at different national and international competitions
- Charity half-marathon runner (Telethon half marathon, Cancer research UK, Get the Kids Going)
- Columnist for MegsMenopause charity