

## Pamela Imperadore



Born in Piedimonte Matese on 25/07/1985

Tel.: +39 081 5833281

e-mail: [pamela.imperadore@szn.it](mailto:pamela.imperadore@szn.it)

Skype: pamela.imperadore

### **Current Position:**

CTER VI and Manager of the Research Area Physiology and Behavior

### **Current Affiliation:**

Biology and Evolution of Marine Organisms, Stazione Zoologica Anton Dohrn, Napoli (Italy)

### **Education/Training/Experience**

| <b>Institute and Location</b>  | <b>Degree / Function</b>           | <b>Year</b>  | <b>Field of Study</b>                           |
|--|------------------------------------|--------------|---|
| Stazione Zoologica Anton Dohrn, Napoli, Italy  | CTER VI, Research Area Manager     | 2019         | Physiology and Behavior                         |
| Marine Biology Laboratories, Woods Hole, USA   | Working Group Memeber              | 2018-present | History, philosophy and science of regeneration |
| Stazione Zoologica Anton Dohrn, Napoli, Italy  | Post Doc                           | 2018-2019    | Animal biology, nociception                     |
| Stazione Zoologica Anton Dohrn, Napoli, Italy  | Post Doc                           | 2017-2018    | Animal biology, regeneration, imaging           |
| Università della Calabria - Arcavacata di Rende, Italy   | PhD                                | 2013-2017    | Animal biology, regeneration                    |
| The Scripps Research Institute, La Jolla, California   | International exchange PhD student | 2013-2014    | Animal biology, regeneration                    |
| Department of Pharmaceutical Chemistry and Technology - Università degli Studi di Napoli Federico II, Napoli, Italy. | Master Degree (Laurea)             | 2004-2011    | Pharmaceutical Chemistry and Technology         |

## Appointments and Awards

**2018 – Aldo Fasolo Prize** for young researchers, for the best 2018 publication –Stazione Zoologica Anton Dohrn, Napoli, Italy.

**2018 – The Company of Biologists – Journal of Experimental Biology** - Travel award to Universitätsklinikum Carl Gustav Carus Dresden, Germany. Project title “Label-free multiphoton microscopy as a tool for the investigation of developing and regenerating arms in the cephalopod mollusc *Octopus vulgaris*”. January 13-26, 2019. Dresden, Germany

**2018 - European Molecular Biology Organization (EMBO)** - Travel award for the participation to the EMBO conference “The Molecular & Cellular Basis of Regeneration and Tissue Repair”. Abstract selected for oral presentation. September 15-19, 2018. La Valletta, Malta.

**2016 CephsInAction Short Term Scientific Mission supported through the FA1301 COST Action.** Universitätsklinikum Carl Gustav Carus Dresden, Germany. Host supervisor: Prof. Matthias Kirsch. **STSM Title:** Label-free multiphoton microscopy as a tool for the investigation of nerve regeneration in the cephalopod mollusc *Octopus vulgaris*.

**2016 - International Society for Invertebrate Neurobiology** - Travel Grant for the participation to the Annual meeting of the Society for Neuroscience 2016. November 12-16, 2016. San Diego (CA) USA.

**2016 - The Malacological Society of London** - Travel Grant for the participation to the Annual meeting of the Society for Neuroscience 2016. November 12-16, 2016. San Diego (CA) USA.

**2016 - Scientific American Mind - Special Features:** The Art of Neuroscience, 27, 52–56. Image selected for publication

**2015 – CephsInAction Short Term Scientific Mission (STSM) supported through the FA1301 COST Action.** Institute of Marine Research (IMR, Havforskningssinstituttet), Storebø, Norway. Host supervisor: Dr. Lars Helge Stien. **STSM Title:** Contribution to the development of the Cephalopod Welfare Index

**2013 - Università della Calabria** – International Grant for a six months internship (October 21<sup>st</sup> 2013 –April 21<sup>st</sup> 2014) at The Scripps Research Institute San Diego (CA) USA.

**2002 –ASF ONLUS Intercultura** - Travel Grant for studying one year abroad (Ontario) Canada.

## Publications

**Imperadore P.,** Parazzoli D. Oldani A., Duebbert M., Büschges A. and Fiorito G. (2019). From injury to full repair: nerve regeneration and functional recovery in the common octopus, *Octopus vulgaris*. Journal of Experimental Biology, 222(19), jeb209965.

**Imperadore P.,** Lepore M. G., Ponte G., Pflüger H. J. and Fiorito G. (2019). Neural pathways in the pallial nerve and arm nerve cord revealed by neurobiotin backfilling in the cephalopod mollusk *Octopus vulgaris*. Invertebrate Neuroscience, 19(2), 5.

Zullo L., **Imperadore P.** (2019) Regeneration and Healing. In: Gestal C., Pascual S., Guerra Á., Fiorito G., Vieites J. (eds) Handbook of Pathogens and Diseases in Cephalopods. Springer, Cham.

**Imperadore P.**, Fiorito, G. (2018). Cephalopod Tissue Regeneration: consolidating over a century of knowledge. *Frontiers in Physiology*, 9: 593.

**Imperadore P.**, Uckermann O., Galli R., Steiner G., Kirsch M., Fiorito G. (2018). Nerve regeneration in the cephalopod mollusc *Octopus vulgaris*: label-free multiphoton microscopy as a tool for investigation. *Journal of the Royal Society Interface*, 15: e 20170889.

**Imperadore P.**, Shah S. B., Makarenkova H. P., Fiorito G. (2017). Nerve degeneration and regeneration in the cephalopod mollusc *Octopus vulgaris*: the case of the pallial nerve. *Scientific Reports*, 7 e 46564.

Zullo L., Fossati S. M., **Imperadore P.**, Nödl M. T. (2017). Molecular determinants of Cephalopod muscles and their implication in muscle regeneration. *Frontiers in Cell and Developmental Biology*, 5.

Lopes V.M, Sampaio E., Roubledakis K., Tanaka N. K., Carulla L., Gambús G., Woo T., Martins C. P. P., Penicaud V., Gibbings C., Eberle J., Tedesco P., Fernández I., Rodríguez-González T., **Imperadore P.**, Ponte G., Fiorito G. (2017). Cephalopod biology and care, a COST FA1301 (CephsInAction) training school: anaesthesia and scientific procedures. *Invertebrate Neuroscience*, 17: 8.

**Imperadore P.**, Fiorito G. (2015). *Octopus vulgaris* nerve regeneration. *Regenerative Medicine*, 10: 7s. [Proceedings]

Makarenkova H.P., **Imperadore P.**, Zoukhri D., Shestopalov V. (2014). Differential roles of Pannexin-1 mediated signaling in the regulation of lacrimal gland morphogenesis and inflammation. *Investigative ophthalmology and visual science*, 55: 13. [Proceedings]

### **Talks at conferences**

**Imperadore P.**, Fiorito G. Imaging regeneration: exploring the unseen in the adult common octopus, *Octopus vulgaris*. Cephalopod International Advisory Council Conference 2018. November 12-16, 2018. St Petersburg, USA.

Di Cristina G., **Imperadore P.**, Ponte G., Fiorito G. Mapping putative nociceptors in *Octopus vulgaris* arm. Cephalopod International Advisory Council Conference 2018. November 12-16, 2018. St Petersburg, USA.

**Imperadore P.**, Fiorito G. Nerve regeneration in *Octopus vulgaris*: imaging structural and functional recovery. 2018 ISHPSSB Off-Year Workshop "Regeneration Across Complex Living Systems: From Regenerating Microbiomes to Ecosystems Resiliency". October 22-23, 2018. Woods Hole, USA.

**Imperadore P.**, Fiorito G. Tracing regeneration in *Octopus vulgaris*: neural re-wiring for complete recovering after injury. EMBO conference "The Molecular & Cellular Basis of Regeneration and Tissue Repair". September 15-19, 2018. La Valletta, Malta.

**Imperadore P.**, Orellana K., Fiorito G. Nerve regeneration in the cephalopod mollusc *Octopus vulgaris*: from images to discoveries. 6° Meeting Neapolitan Brain Group, (December 14, 2017) - Stazione Zoologica Anton Dohrn, Napoli, Italy

### **Poster presentations**

**Imperadore P.**, Uckermann O., Galli R., Kirsch M., Fiorito G. Regeneration in *Octopus vulgaris*: imaging tools for healing and rewiring. 50th annual meeting of the Society for Neuroscience 2019 (Chicago 19-23, 2019) - Chicago, IL, USA [poster - dynamic poster]

**Imperadore P.**, Fiorito G. Tissue regeneration: cephalopod contribution over more than a century. 50th annual meeting of the Society for Neuroscience 2019 (Chicago 19-23, 2019) - Chicago, IL, USA.

**Imperadore P.**, Fiorito G. Nerve regeneration in the cephalopod mollusc *Octopus vulgaris*: a journey into morphological, cellular and molecular changes. Nature Conferences: Regeneration (November 16-18, 2017) - Ospedale San Raffaele, Milan, Italy

**Imperadore P.**, Fiorito G. Nerve regeneration in *Octopus vulgaris*: possible involvement of stem progenitor cells and epigenetic regulation. 46th annual meeting of the Society for Neuroscience 2016 (November 12-16, 2016) - San Diego, CA, USA [poster - dynamic poster]

**Imperadore P.**, Fiorito G. Active mitosis and stem progenitor cells in Octopus nerve regeneration. 10th FENS Forum of Neuroscience (July 2-6, 2016) - Copenhagen, DK

**Imperadore P.**, Fiorito G. *Octopus vulgaris* nerve regeneration. World conference on Regenerative Medicine (October 21- 23, 2015) - Leipzig, DE

**Imperadore P.**, Fiorito G. Pallial nerve regeneration. 5th Mediterranean Neuroscience Society; 2015 June 12-15; Cagliari, IT

**Imperadore P.**, Fiorito G. A short overview on the historical contribution of cephalopods to the Regeneration 'Game' in the animal kingdom. Cephalopods as Models for Tissue Regeneration; 2013 September 25-26; Napoli, Italy [oral]