

# CURRICULUM VITAE

## PERSONAL INFORMATION

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First Name/Surname: Carla Bertapelle

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## EDUCATION AND TRAINING

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- May 2015      **PhD in Biology**, funded by the Italian Ministry of Education, University and Research. Department of Biology, University of Naples Federico II, Italy.  
Final thesis: "*Octopus vulgaris* brain as a model to study adult neurogenesis",  
Tutor: Prof. Anna Di Cosmo
- February 2013      **professional qualification as Biologist**, University of Sannio, in Benevento, Italy.
- March 2011      Laurea Specialistica (**Master Degree**) in **Biology**. Faculty of Biology, University of Naples Federico II, Italy.  
Final thesis on "Development of an ultrasonic approach for the assessment of sexual maturity in *Octopus vulgaris*"  
Tutor: Prof. Anna Di Cosmo  
Final mark: 110 out of 110 cum laude
- July 2008      Laurea (**Bachelor's Degree**) in **Biology**. Faculty of Biology, University of Naples "Federico II", Italy.  
Final thesis on "Distribution of GnRH in nervous system of *Sepia officinalis*"  
Tutor: Prof. Anna Di Cosmo  
Final mark: 102 out of 110
- July 2003      Diploma in Liceo Scientifico "Salvatore Cantone" (Secondary School Focusing on Sciences), Pomigliano d'Arco, Naples, Italy.  
Final mark: 100 out of 100.



## **TECHNICAL SKILLS AND COMPETENCES**

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Good knowledge of molecular biology techniques, including cloning, PCR and Real Time PCR, in situ hybridization, nucleic acid extraction, retrotranscription.

Good knowledge of histological techniques, including microtome and cryostat cutting, histological staining, recognition of tissues and cell types.

Good knowledge of immunohistochemistry, immunocytochemistry and immunofluorescence techniques.

Good knowledge of biochemical techniques, such as protein extraction, western blotting, dot blot.

Good knowledge of optical, confocal and two-photon microscopy.

Good knowledge of cell cultures techniques, especially referring to nervous primary cell culture.

Good knowledge of microbiology techniques, including bacterial cultures, bacterial induction, bacterial growth curves, Kirby-Bauer assay.

Good knowledge of statistical analysis of biological data.

Good knowledge of flow-cytometry.

Good experience in design behavioral experiment and ethological studies, including statistical analysis.

## **COMPUTER SKILLS AND COMPETENCES**

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Excellent ability to use Operating System (Windows, MS-DOS, Mac), excellent knowledge of Office packages (Word, Excel, PowerPoint, Outlook), Internet browsers, good ability to use biostatistic software (SigmaPlot, SYSTAT, GraphPad), imaging software (ImageJ) and microscopy software (Nis-Element Nikon).

## **ORGANISATIONAL SKILLS AND COMPETENCES**

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Good capability to organize my work and the one of my collaborators in all practical laboratory activity, to work and cooperate with people from different fields, to manage my time, to organize and manage a research team.

Good capability to elaborate project, to design experiments and to validate methods and protocols independently.

I face with passion and enthusiasm new projects, pushed by a constant desire to improve myself, professionally and culturally, and to acquire new skills.

## **OTHER SCIENTIFIC ACTIVITIES**

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She attended the **Schmid Training Course at Station Biologique de Roscoff, in Roscoff (France), Université Pierre et Marie Curie (UPCM)**, about marine organisms as conventional and non-conventional model organisms, studying the Evo-Devo question, its functional approaches and tools for molecular and cellular analyses. May 2013.

She attended the **IN Cell Analyzer** course, “Introduction -IN Cell Analyzer 2200 Acquisition, Introduction -IN Cell Investigator Level 1 and Level 2”, **at Department of Biology, University of Naples Federico II, Italy**, May 2014.

She is a member of **Italian Zoological Union (UZI)**.

## PRESENTATIONS IN SCIENTIFIC MEETINGS

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### POSTERS

**Bertapelle C.**, Polese G., Porcellini A. and Di Cosmo A. First attempt to measure adult neurogenesis in a lophotrochozoan (*Octopus vulgaris*) brain using flow-cytometry technique. 77° Congresso Nazionale dell'Unione Zoologica italiana. Milano (Italy). Aug 31th - Sept 3rd 2016.

**Bertapelle C.**, Polese G. and Di Cosmo A. *Octopus vulgaris* nervous system as a model to study adult neurogenesis. 76° Congresso Nazionale dell'Unione Zoologica italiana. Viterbo (Italy). Sept 15th – 18th 2015.

Campoli L., **Bertapelle C.**, Ardizio P., Polese G. and Di Cosmo A. First survey of meiofaunal communities in Porto Paone, Nisida. 75° Congresso Nazionale dell'Unione Zoologica italiana. Bari (Italy). Sept 22nd - 25th 2014.

**Bertapelle C.**, Troncone L., Polese G. e Di Cosmo A. Il sistema nervoso di *Octopus vulgaris* come modello di studio della neurogenesi adulta. 74° Congresso Nazionale dell'Unione Zoologica italiana. Modena (Italy). Sept30th – Oct3rd 2013.

Polese G., Troncone L., **Bertapelle C.** e Di Cosmo A. Controllo multipetidergico dell'olfatto in *Octopus vulgaris*. 74° Congresso Nazionale dell'Unione Zoologica italiana. Modena (Italy). Sept 30th – Oct 3rd 2013.

**Bertapelle C.**, Troncone L., Moroz L.L., Polese G. and Di Cosmo A. Neuropeptides analysis of *Octopus vulgaris* Transcriptome: Oct-Pedal Peptide expression in CNS lobes involved in motor coordination. Cephalopod International Advisory Council (CIAC) 2012. Florianopolis, Santa Caterina; Brazil. Oct 27th - Nov 2nd 2012.

Polese G., Ulloa Severino F. P., Troncone L., **Bertapelle C.** and Di Cosmo A. Topology, morphology and function of olfactory organ in *Octopus vulgaris*. Molluscan Neuroscience in the Genomic Era: From Gastropods to Cephalopods. Scripps, Florida (USA). May15th - 19th 2012.

Troncone L., **Bertapelle C.**, Ulloa Severino F.P., Ciccarelli I., Ciccarelli N., Polese G. and Di Cosmo A. Research on Cephalopods: Past, Present and Future Perspectives. EuroCeph 2012. VicoEquense (Napoli), Italy. Apr 19th -23th 2012



## ORAL COMUNICATIONS

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*Octopus vulgaris* brain as a model to study adult neurogenesis. 6th YOUMARES. Bremen (Germany). Sept 16th – 18th 2015.

Il sistema nervoso di *Octopus vulgaris* come modello di studio della neurogenesi adulta. 2° Convegno Intermedio Progetto MODO (Model Organism). Napoli (Italy). July 14th 2014.

Il sistema nervoso di *Octopus vulgaris* come modello di studio della neurogenesi adulta. 74° Congresso Nazionale dell'Unione Zoologica italiana. Modena (Italy). September 30th – Oct 3rd 2013.

Il sistema nervoso di *Octopus vulgaris* come modello di studio della neurogenesi adulta. 1° Convegno Intermedio Progetto MODO (Model Organism). Napoli (Italy). June 27th 2013.

## AWARDS

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Biologia a Monte S. Angelo 10 anni dopo. "Problem solving" and "play-like" in *Octopus vulgaris*: from behavior to genes. Dipartimento di Biologia/Department of Biology, University of Naples Federico II, Italy. June 5th 2015.

UZI AWARD 2014. **Bertapelle C.**, Troncone L., Polese G. e Di Cosmo A. "Il sistema nervoso di *Octopus vulgaris* come modello di studio della neurogenesi adulta", included among best ten posters. 74° Congresso Nazionale dell'Unione Zoologica italiana. Modena (Italy). Sept 30th – Oct 3rd 2013.

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## PUBLICATIONS

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**Bertapelle C.**, Polese G. and Di Cosmo A. Enriched environment increases PCNA and PARP1 levels in *Octopus vulgaris* central nervous system, first evidence of adult neurogenesis in Lophotrochozoa. Journal of experimental Zoology B. (under revision).

Polese G., **Bertapelle C.** and Di Cosmo A. Olfactory organ of *Octopus vulgaris*: morphology, plasticity, turnover and sensory characterization. Biology open 5(5):611-9. 2016.

Di Cosmo A., Polese G., **Bertapelle C.**, Palumbo A., Zullo L. Benessere ed animal care dell'animale da laboratorio. Le Point Veterinaire Italie. Milan. Cap. 5 Housing e management. Par. 5.6 Cefalopodi. 2015.

Polese G., **Bertapelle C.** and Di Cosmo A. Role of olfaction in *Octopus vulgaris* reproduction. General and Comparative Endocrinology. Vol 210, 2015, 55–62. 2014.

Troncone L., De Lisa E., **Bertapelle C.**, Porcellini A., Laccetti P., Polese G. and Di Cosmo A. Morphofunctional characterization and antibacterial activity of Haemocytes from *Octopus vulgaris*. . Journal of Natural History. 1-20. 2014.

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Napoli, 13/01/2017  
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