

Education:

- 2017:** **Dr. rer. Nat. (Ph.D.).** Humboldt-Universität zu Berlin (*magna cum laude*).
Supervisor: Prof. Dr. Gerhard Scholtz
Reviewers: Prof. Dr. Steffen Harzsch and Prof. Dr. Alessandro Minelli
Title of the thesis: "Comparative studies in the development of the nervous system in malacostracan crustaceans"
- 2006-2010:** **Ph.D. research project.** Humboldt-Universität zu Berlin.
6th Framework Programme Marie Curie Host Fellowships for Early Stage Research Training, MOLMORPH.
Supervisor: Prof. Dr. Gerhard Scholtz
Topic: "Cleavage and gastrulation in tardigrades"
- 2006:** **Master degree in Natural Science.** Università degli studi di Padova (*110/110 et laude*).
Supervisors: Prof. Dr. Alessandro Minelli and Prof. Dr. Gerhard Scholtz
Title of the thesis: "Cleavage and gastrulation in the shrimp *Penaeus monodon* (Malacostraca, Decapoda, Dendrobranchiata)"
- 2004:** **Bachelor degree in Natural Science.** Università degli studi di Padova (*110/110*).
Supervisor: Prof. Dr. Giuseppe Fusco
Title of the thesis: "The segmentation of the second antennae in the embryonic development of *Asellus aquaticus* (Crustacea, Isopoda)"
- 1996-2001:** **Study of Medicine and Surgery.** Università degli studi di Padova.

Teaching and training activities:

- 2010-2017:** **Research associate.** Vergleichende Zoologie, Humboldt-Universität zu Berlin.
- 06/2008-2010:** **Assistant** in the master module "Comparative developmental biology of arthropods". Humboldt-Universität zu Berlin.
Supervisor: Dr. Carsten Wolff
- 07/2008-2009:** **Training** in field collection and rearing *Meganyctiphanes norvegica*, embryos and larvae collection. Kristineberg Marine Research Station Fiskebäckskil, Sweden.
- 08-09/2008:** **Training** in rearing *Penaeus monodon*, embryos and larvae collection. CSIRO Marine Research Station Cleveland, Brisbane, Australia.
Supervisors: Dr. Greg Coman and Dr. Melony Sellars
- 05/2007:** **Training** in field collection and rearing tardigrades (*Echiniscus* sp.). Università degli studi di Modena.
Supervisor: Prof. Dr. Roberto Bertolani
- 03/2007:** **Training** in the course "Molecular phylogeny: creating and analysing gene sequence data". University of Vienna.
Supervisor: Prof. Dr. Gerhard Steiner
- 02/2007:** **Assistant** in the course "Comparative morphology and phylogeny of Metazoa". Humboldt-Universität zu Berlin.
Supervisor: Prof. Dr. Gerhard Scholtz
- 10/2006:** **Assistant** in the lab course "Fluorescence labelling and digital 3D reconstruction of nervous and muscle systems in marine invertebrates". University of Copenhagen.
Supervisor: Prof. Dr. Andreas Wanninger
- 09/2006:** **Training** in field collection and rearing tardigrades. University of Copenhagen.
Supervisor: Prof. Dr. Reinhardt Møbjerg Kristensen

Contributions and awards:

Biffis C, Scholtz G: "The development of the medulla terminalis in malacostracan crustaceans: a new look at the 'lateral protocerebrum". 4th International Congress on Invertebrate Morphology. 2017. Moscow, Russia.

Biffis C, Ponomarenko E, Wolff C, Scholtz G: "The first sense of the nauplius". 4th International Congress on Invertebrate Morphology. 2017. Moscow, Russia.

Awarded: 2nd Prize in the Student Poster Presentation Competition

Biffis C, Scholtz G: "The development of the medulla terminalis in malacostracan crustaceans: a new look at the *lateral protocerebrum*". 18th Crustaceologentagung. 2017. Berlin, Germany.

Biffis C, Scholtz G: "Aspects of nervous system development in the nauplius larva of Malacostraca". 2nd International Congress on Invertebrate Morphology. 2011. Cambridge, MA, USA.

Biffis C, Scholtz G: "Aspects of the nervous system development in the naupliar stages of the euphausiacean *Meganyctiphanes norvegica* (Crustacea, Malacostraca)". 15th Crustaceologentagung. 2011. Regensburg, Germany.

Awarded: 2nd Prize for the Best Oral Presentation

Biffis C, Scholtz G: "Cleavage and gastrulation of the dendrobranchiate shrimp *Penaeus monodon* (Crustacea, Malacostraca, Decapoda)". 14th Crustaceologentagung. 2009. Rostock, Germany.

Awarded: 1st Prize for the Best Oral Presentation

Alwes F, **Biffis C**, Scholtz G: "Cell lineage studies of the early development of the Crustacea: a comparative approach". Meeting of the European Society for Evolutionary Developmental Biology. 2008. Ghent, Belgium.

Biffis C, Scholtz G: "Aspects of early development of tardigrades". Joint meeting of Molmorph and Zoonet. 2007. Barcelona, Spain.

Laboratory skills:

- Field collection of fresh water and marine crustaceans (Malacostraca), and of tardigrades (Eu- and Heterotardigrada)
- Rearing embryos and larvae of *Meganyctiphanes norvegica* (Euphausiacea), *Penaeus monodon* (Decapoda) and adults of *Asellus aquaticus* (Isopoda) and *Procambarus fallax f. virginalis* (Decapoda)
- Micro-dissection of embryos and nauplius larvae
- Primary fixation techniques
- Light microscopy and digital imaging (Zeiss AxioVision)
- Fluorescence microscopy
- Confocal laser scanning microscopy
- Scanning electron microscopy
- 4D microscopy
- Nuclear stainings
- Immunocytochemistry
- Histological sectioning and staining techniques
- In vivo labelling
- Computer-based 3D reconstruction, image editing and movie processing (Imaris, Amira)
- Cell lineage tracing from 4D data set (SIMI°BioCell)
- Basic molecular biology methods (DNA extraction, PCR), genes alignment (BioEdit) and phylogenetic analyses (Treefinder)

Languages:

- Italian: native speaker
- English: fluent
- German: good command
- Spanish: basic communication skills