

Gianluca Polese PhD

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ACADEMIC AND PROFESSIONAL POSITIONS:

2020 – up to date	Associate professor for Zoology, Parasitology and Scientific Diving at the Department of Biology of the University of Napoli "Federico II".
2007 – 2020	Researcher of Zoology and assistant professor for Zoology and Parasitology at the Department of Biology of the University of Napoli "Federico II".
2007 (February – July)	Fellow to study "The presence and distribution of Mast Cell Population in Frog's brain" – Department of Biologia Strutturale e Funzionale - Federico II di Napoli – Prof. Rakesh K. Rastogi.
2004 – 2006	Postdoctoral Research Associate, Zoology Department, Michigan State University, East Lansing, MI
2003 – 2004	Teaching Assistant, Department of Zoology, SICS (Interuniversity School to Teaching of Campania), Italy
2000 – 2004	Research Assistant, Department of Zoology, University of Naples "Federico II", Italy

EDUCATION

- Postdoctoral fellow in Neurobiology – Department of Zoology – Michigan State University. (May 2004 – December 2006) – PI: Heather Eisten
- PhD Evolutionary Biology – University of Napoli "Federico II" 2004
- MD Natural Science – Thesis in Zoology – University of Napoli "Federico II" 2000

SPECIALIZATIONS

Ethological analysis
Electrophysiology
Surgical manipulation
Hormonal treatment
Tracer application
Immunocytochemistry
Istochemistry
Microscopy
Techniques for fauna census and management

MAIN ANIMAL MODELS: Amphibians, Fish, and Mollusks

HONORS:

2006	Polak Young Investigator Award. Association for Chemoreception Sciences. Hyatt Sarasota, FL, USA. 26-30 Aprile, 2006
2000 – 2004	Doctoral Fellow from European Union, Evolutionary and Comparative Biology Department, University of Naples "Federico II", Italy
1999 – 2000	Fellow from Regione Campania; Aquaculture Techniques, EFSA, Naples, Italy

N.A.S.O. (Neuroethological Approaches to Study Olfaction)

My central interest is in the evolution of neural structures and their role in behaviour. My research focuses on changes in the olfactory system over the course of vertebrate and invertebrate evolution working on different model (Cephalopod, Fish, Amphibian, Reptile and Mammalian). I am investigating chemosensory-guided behaviour. This includes studies of chemical signalling in courtship and mating behaviour, parental care and examining the role of chemical senses in foraging behaviour as well as attempts to isolate the compounds involved. I am using electrophysiological, immunohistochemical and molecular biology techniques to examine the function and odour response properties of olfactory system with the goal of determining whether different portions of the olfactory system carry different types of information or function in different behavioural contexts. I am examining the developmental origin of the olfactory organs and their targets in the central nervous system. Students in the lab are exposed to a wide variety of concepts and techniques from behavioural biology, neurophysiology, neuroanatomy, and experimental embryology. I hope that by taking a broad, integrative approach to these problems, we will gain a better understanding of how chemoreception evolved in different taxa, and how it mediates behaviour.