Curriculum vitae et studiorum

Stefano Piraino

Associate Professor, Zoology & Evolutionary Biology University of Salento, Lecce (Italy) Department of Biological and Environmental Sciences and Technologies (DISTEBA) via per Monteroni, 73100 Lecce, Italy Tel: +390832298616 (office); +393475368380 (mobile) Email: <u>stefano.piraino@unisalento.it</u> ORCID ID: 0000-0002-8752-9390

Google Scholar (H index 28, 2485 citations, retrieved on August 28th, 2017) http://goo.gl/BJiSqR

Research Gate (RG Score 40.89, retrieved on August 28th, 2017) https://www.researchgate.net/profile/Stefano Piraino/publications

Personal Data

Birth place/date Palermo (Italy), 06/12/1960 Tax Code PRNSFN60T06G273X

Main disciplines

Marine invertebrate zoology and developmental biology, focus on cnidarians (zoology and evolutionary developmental biology, taxonomy, systematics, ecology, biotech applications)

Keywords

Jellyfish, polyps, life cycles, reproduction, integrative taxonomy, evolution; biodiversity conservation, pelagobenthic coupling, species functional roles, outbreak-forming species, trophic ecology, genetic connectivity, marine bioinvasions, metagenomics; reverse development, cell transdifferentiation, organogenesis; bioactive compounds.

Education

- 1990 Ph.D. Marine Environmental Sciences (III cycle) University of Naples, Stazione Zoologica of Naples, University of Messina, University of Catania.
- 1984 (February) Bachelor Degree + M.Sc. equivalent, cum laude University of Palermo

Professional Appointments

2015-2021 -	National Qualification to Full Professor (05/B1, Zoology)
2005 - to date	Associate Professor of Zoology, University of Salento, Lecce (Italy)
2000 -2005	Researcher and lecturer, University of Salento, Lecce (Italy)
1995-2000	Researcher, National Research Council, Oceanographic Institute Taranto (Italy)
1994	Post-doc fellow, National Health Institute, Rome (Italy)
1991-1993	Post-doc fellow, University Federico II, Naples (Italy)
1989-1991	Research Assistant, National Research Council, Oceanographic Institute Taranto (Italy)

Professional Service

- Chairman, Academic Board in Biology, University of Salento, Lecce (Italy) (2015-2108)
- Steering Committee Member, EuroMarine International Research Network (2014 to date)
- Steering Committee Member, Italian Zoological Union (UZI, Unione Zoologica Italiana) (2014-2017)

- Chairman, Educational Board Italian Zoological Union (Unione Zoologica Italiana) (2016-2017)
- Member of JRC-EASIN European Alien Species Information Network Editorial Board (2015 to date)
- Director, National Interuniversity Consortium of Marine Science (CONISMA) Research Unit, University of Salento
- University of Salento Delegate Member of the Steering Committee of the National Interuniversity Consortium of Marine Sciences
- President of the International Hydrozoan Society (2007-2010)
- Guest Editor: *Estuarine, Coastal and Shelf Science* (2015-2017) Special Issue "Vectors of Change in Oceans and Seas Marine Life, Impact on Economic Sectors" *Biological Invasions* (2015) Special issue " Molecular Tools for monitoring marine bioinvasions"; *Marine Ecology* Wiley (2012) Special Issue "Current Trends in Hydrozoan Biology"; *Scientia Marina* (1996) Special Issue "Advances in Hydrozoan Biology"
- Associate Editor "Marine Biodiversity" Springer
- Associate Editor "*Marine Ecology* An Evolutionary Perspective" (Wiley)
- Chairman Steering Committee 5th International Jellyfish Blooms Symposium (Barcelona) (30 May-3 June 2016) http://www.jellyfishbloom2016.com/
- Chairman 7th International Workshop of the Hydrozoan Society (Porto Cesareo, Italy, September 2010).
- Organizer 3rd International Workshop of the Hydrozoan Society (Roscoff, France, October 1994)
- Reviewer for scientific journals: Current Biology, Estuarine Coastal and Shelf Science, Journal of Plankton Research, Hydrobiologia, International Journal of Developmental Biology, Invertebrate Biology, Journal of Applied Ecology, Journal Experimental Zoology, Journal Experimental Marine Biology and Ecology, Journal of Integrative and Comparative Biology, Journal of Marine Biological Association, Journal of Theoretical Biology, Meiofauna marina, Marine Biology, Marine Ecology Progress Series, Proceedings National Academy of Sciences U.S., PLOS One, Proceedings Royal Society London B, Sarsia, Scientia Marina, Tissue and Cell, Zoomorphology
- Scientific Proposal Reviewer for: U.S. National Science Foundation (NSF), FWF Fonds zur Förderung der wissenschaftlichen Forschung (Austrian Science Fund), CNRS (Centre National de la Recherche Scientifique, France)
- Chairman Board for the selection procedure of 1 full time position of researcher, Stazione Zoologica of Naples (2017)
- Chairman Board for the selection procedure of 1 full time position of research technologist, Stazione Zoologica of Naples (2009)
- University of Salento delegate Coordinator of bilateral agreements with Universities of Basel (Switzerland), Zhoushan (China), Lille (France)

Teaching I - Courses

2015	Chairman, Co-organizer NSF - ARTS Graduate/postgraduate Course on Systematics and Biology
	of Hydrozoa (Cnidaria) Bocas del Toro - Smithsonian Tropical Research Institute (Panama) (7-
	21 July)
2015	Chairman, Co-organizer International Graduate Summer School "An integrated approach to
	invertebrate biodiversity: evolutionary and functional adaptations" co-organized with
	Universities of Padova, Milano, Palermo at Tricase Porto (Lecce) (21-26 September 2015)
2014	Chairman, Co-organizer International Graduate Summer School Introductions to Cnidarians and
	ctenophores (ICM-CSIC, Barcelona, November 2014)
2013	Chairman, Co-organizer International graduate summer School "An integrated approach to
	invertebrate biodiversity: evolutionary and functional adaptations" co-organized with
	Universities of Padoa, Milano, Palermo at Chioggia Marine Biological Station (June 17-22)
2010 to date	Università del Salento - Course on "Life cycles and Development"of Marine Invertebrates -
	Module Evolution and Development (Master Course Programme in Coastal and Marine Biology
	and Ecology - 2010 to date, entirely taught in English)
2006 to date	Chairman - Co-organizer of Master Course (2006-2012, 2014-2016) on Experimental
	Developmental Biology of Marine Invertebrates (in collaboration with UPMC Paris VI and
	University of Basel) - Station Biologique de Roscoff (France) (entirely taught in English)

2000 to date	Università del Salento - courses of Zoology, Animal Biology, General Biology, Biodiversity and	
	Biotechnologies, Systematics and Phylogenetics, Experimental Biology of Marine Invertebrates	
	(Bachelor Course Programmes in Biotechnology and Biological Sciences) (in Italian)	
2008-2009	Zoology and Biology Didactics course for High School Teachers Education (SSIS)	
2007-2008	Zoology and Biology Didactics course for High School Teachers Education (SSIS)	
2002-2003	Zoology and Biology Didactics course for High School Teachers Education (SSIS)	

Teaching II - PhD Board memberships/ PhD tutorships

Université Lille 1, Lille – Invited visiting professor at the Department of Biology (February 2017) Université Pierre et Marie Curie Paris VI - Steering Committee PhD thesis (Gonzalo Quiroga Artigas) (2017) University of Aix Marseille - Steering Committee PhD thesis (Justine Gadreaud) (2015) first year University of Alicante (Spain) Chairman Steering Committee PhD (Cesar Bordehore Fontanet) (2014) Joint PhD École doctorale Systèmes Intégrés, Environnement et Biodiversité, École Pratique des Hautes Études, France and Università del Salento - Steering Committee PhD Fundamental Ecology - Dr. Rita Sahyoun (2012) University of Palermo Steering Committee PhD Animal Biology (XIX cycle, XXII cycle) University of Messina Steering Committee PhD PhD Environmental Sciences: Marine Environment and Resources (XXI cycle)

University of Milano Steering Committee PhD Animal Biology (2009)

University of Basel (Switzerland) Steering Committee PhD in Developmental Biology (Daria Graziussi)(2008)

<u>PhD theses tutorships</u> in Animal Biology/Fundamental Ecology/ Biological Resources/Earth system sciences: environment, resources and cultural heritage/Plankton ecology

University of Salento

dr. Giorgio Aglieri, dr. Giacomo Milisenda (2014)

dr Serena Zampardi, dr Mar Bosch-Belmar (2016)

Co-tutorship University of Tuscia (Viterbo) dr. Simonetta Scorrano (2015)

Co-tutor University of Modena and Reggio Emilia Dr.ssa Rosa Caprioli (2015)

Co-tutor Université de Carthage, Tunisia at Faculté des Sciences de Bizerte dr.ssa Sonia Gueroun (2013-2015) Co-tutorship University of Milano (dr. Alessandro Dell'Anna) (2012)

Co-tutor PhD thesis Universidad de Cadiz, Dr Manuel Maria Gonzalez-Duarte (2011)

PhD thesis external evaluator – Università di Bari – Dottorato di ricerca in Biodiversità, Agricoltura, Ambiente (Pasquale Ricci) (2017)

Scientific activity (Projects and research grant)

2016-2019 National Coordinator PRIN Italian National Project " PHENIX - From cell fate plasticity to tissue homeostasis to longevity: insights from two emerging model invertebrates, the"immortal jellyfish" Turritopsis dohrnii and the budding ascidian Botryllus schlosseri" 2016-2020 Principal Investigator CONISMA-Lecce Research Unit H2020 project CERES - Climate change and European aquatic resources (jellyfish impact on fishery and aquaculture) 2016-2018 Scientific Coordinator PULMO EC-Marie Sklodowska-Curie IF "Population dynamics, trophic interactions, and exploitation of a novel nutraceutical and pharmaceutical marine resource: the Mediterranean sea lung, Rhizostoma pulmo" Scientific Coordinator ENPI CBC MED project MED-JELLYRISK (www.jellyrisk.eu) 2012-2015: " 2012-2015 Integrated monitoring of jellyfish outbreaks under anthropogenic and climatic impacts in the Mediterranean Sea (coastal zones): trophic and socio-economic risks" WP Leader / Member of Steering Committee - EC 7th FP Project VECTORS "Vectors of Change 2011-2015 in Oceans and Seas Marine Life, Impact on Economic Sectors WP2 Mechanisms of changes" -WP2.1) Outbreaks and invasive species". 2012 - 2016 Task Leader EU 7thFP Towards COast to COast NETworks of marine protected areas (from the shore to the high and deep sea), coupled with sea-based wind energy potential (CoCoNET)

	project - Lead Author deliverable D4.2 "Report on dynamics of the invasive species in the
	Mediterranean and Black Seas"
2012	ASSEMBLE Visiting grant /on site access Kristineberg Marine Station (Sweden) - Project
	coordinator research proposal MORPHOS-GAP "Role of intercellular gap junction
	communications in morphogenesis and neural development of the basal metazoan Clava
	<i>multicornis</i> (Hydrozoa, Cnidaria)" (main applicant)
2008-2010	National Coordinator PRIN 2007 Italian National Project " PROTOBRAIN - Origin and Evolution
	of centralized nervous systems in early metazoans"
2003-2006	Scientific Coordinator EC 5th FP Project Marie Curie Project "MEDUSA - Genetic controls for
	hydrozoan life cycle reversal: Hox/Parahox gene inventory and expression studies".
2003	Sandgerdi Marine Center, Iceland - European Commission Grant Visiting Scientist
2000 - 2003	PNRA - Programma Nazionale Ricerche in Antartide (2000, 2002 POLARSTEN R/V, Alfred
	Wegener Institute; Coordinator, Biology group at the Italian Base "Mario Zucchelli", Terra Nova
	Bay, Ross Sea, Antarctica)
1999	National Research Council - Short-Term Mobility Grant, University of Basel (Switzerland)

Research periods (visiting scientist)

2015	Smithsonian Tropical Research Institute - Panama	(2 weeks)

- 2003 Sandgerdi Marine Center (Iceland) (1 month)
- 1995-2005 Zoology Institute of the University of Basel and the Biocenter/Pharmacenter, Basel (2-3 weeks per year)
- 1992 Friday Harbor Laboratories, University of Washington BC, USA (2 months),
- 1988National Environmental Council UK, Plymouth (2 months)
- 1987-1989 Stazione Zoologica of Naples (PhD fellow)

Third Mission (outreach, international)

2016	NATIONAL GEOGRAPHIC "Like 'Deadpool,' This Jellyfish Has Amazing Superpowers (https://goo.gl/8EMhvL)
2014	EUROCEAN 2014 - EUROPEAN MARINE BOARD EVENT (ROME, October 7-9) - Invited Speaker "Citizen Science in Action (Jellywatch)"
2014	Suez Canal expansion could see more alien species invade the Mediterranean. The Conversation. (https://goo.gl/BuJt9R)
2014	NATIONAL GEOGRAPHIC Beautiful, Golden Jellyfish Invading Fisher's Nets Is a New Species (https://goo.gl/EeKSQE)
2014	The beautiful new jellyfish identified in the Gulf of Venice. The Conversation (https://goo.gl/6rXQDM)
2013	THE GUARDIAN Jellyfish surge in Mediterranean threatens environment – and tourists (on ENPI CBC MED project Med-Jellyrisk) (https://goo.gl/qal7kF)
2009	NATIONAL GEOGRAPHIC "Immortal" Jellyfish Swarm World's Oceans (https://goo.gl/40bj)
2008	Cuissot P, Lossignol F. (film directors) Cuissot P, Turquet B. (film writers) - Superjellyfish
	(Movie), Gideon production (France) (53 minutes). https://goo.gl/AAydMa
2008	Proponent and Author of Laudatio for the Degree Honoris Causa in Human Biology to Walter Jakob Gehring (Lecce, 18 March 2008