

PERSONAL INFORMATION

Maria I. Arnone

- 📍 born 23/07/1963 in Napoli, Italy
- ☎ +39 333 182 5450
- ✉ miarnone@szn.it; miarnone@pec.it
- 🌐 <https://orcid.org/0000-0002-9012-7624>; <https://arnonelab.it/>

CURRENT POSITION

Senior Scientist (Dirigente di ricerca) - Department of Biology and Evolution of Marine Organisms - Stazione Zoologica Anton Dohrn, Villa Comunale, 80121 Napoli, Italy

SCIENTIFIC CAREER**EDUCATION AND TRAINING**

- Oct 1988–Jun 1993 *PhD* (Biochemistry)
Università degli Studi di Napoli Federico II, Napoli (Italy)
Thesis title: "Thermophily and thermostability of aspartate aminotransferases"
- Oct 1987–Sep 1988 Course of Specialization (Biochemical Biotechnology)
Università degli Studi di Napoli Federico II, Napoli (Italy)
- Oct 1981–Mar 1987 *Summa cum Laude Laurea* (Chemistry)
Università degli Studi di Napoli Federico II, Napoli (Italy)
Thesis title: "Aspartate aminotransferases from *Sulfolobus solfataricus*: gene and protein

SCIENTIFIC CAREER**WORK EXPERIENCE**

- 1 Jun 2019–Present Senior Scientist (dirigente di ricerca, TI)
Stazione Zoologica Anton Dohrn, Napoli (Italy)
Gene regulatory networks in development and evolution
- Aug 2000–May 2019 Senior Scientist (primo ricercatore, TI)
Stazione Zoologica Anton Dohrn, Napoli (Italy)
Gene regulatory networks in development and evolution
- Apr 2000–Jul 2000 Visiting Associate in Biology
California Institute of Technology, Pasadena, CA (United States)
- Apr 1998–Jul 2000 Staff Scientist (ricercatore, TD)
Stazione Zoologica Anton Dohrn, Napoli (Italy)
Gene regulation during development
- Jan 1998–Mar 1998 Visiting Scientist
California Institute of Technology, Pasadena, CA (United States)
Gene regulation during development
- Jan 1995–Dec 1997 Research postdoctoral fellow, Stowers Associate and Caltech faculty member
California Institute of Technology, Pasadena, CA (United States)
Gene expression in embryonic development (Advisor: Prof. Eric H Davidson)
- Jan 1993–Dec 1994 CNR research postdoctoral fellow
Stazione Zoologica Anton Dohrn, Napoli (Italy)
Gene expression in mammalian systems (Advisor: Prof. Roberto Di Lauro)
- Jun 1991–Jul 1991 Visiting scientist
University of Cambridge, Cambridge (United Kingdom)
Conformational analysis by NMR (Advisor: Prof. Richard Perham)

SCIENTIFIC CAREER**HONORS AND AWARDS**

- 2018: Elected Member of the European Molecular Biology Organization (EMBO)

- 2018: SZN Excellence Award (ex legis D.Lgs. 218/2016 Art. 15)
- 2017: Full Professor Qualification in Comparative Anatomy and Cytology (Abilitazione Scientifica Nazionale Prima Fascia, settore concorsuale 05/B2 ANATOMIA COMPARATA E CITOLOGIA)
- 2017: Full Professor Qualification in Molecular Biology (Abilitazione Scientifica Nazionale Prima Fascia, settore concorsuale 05/E2 BIOLOGIA MOLECOLARE)
- 2017: Premio Anton Dohrn Miglior Ricercatore 2017, Stazione Zoologica Anton Dohrn
- 1993: Italian Centro Nazionale delle Ricerche (CNR) Award
- 1991: Società Italiana di Biochimica (SIB) Award
- 1989: “Pasquale Corsicato Premio di Laurea” Award

Memberships

- EMBO: European Molecular Biology Organization, elected member in 2018
- EED: European Society for Evolutionary Developmental Biology, member since 2012
- SDB: Society for Developmental Biology, member since 2017
- SIBBM: Società Italiana di Biofisica e Biologia Molecolare, member since 2014

SCIENTIFIC CAREER GRANT SUPPORT

Currently funded

- 2021-2023: **Marie Skłodowska-Curie IF** “Microplastics: morphological and genetic developmental effects in a marine invertebrate. MICRODEV”. Role: Supervisor of Eva Jimenez-Guri. EU H2020-MSCA-IF-2019 (GA no. 882904; € 183 473).
- 2019-2023: **Human Frontiers Science Project** “Studying sea urchin dermal photoreception to unravel principles of decentralized spherical vision” Role: Principal applicant and Coordinator of total four teams in four different countries. (RGP0002/2019; for the four teams: \$1.350.000).

Completed

- 2018-2022: **Marie Skłodowska-Curie ITN** EVOCELL “Animal evolution from a cell type perspective: multidisciplinary training in single-cell genomics, evo-devo and in science outreach”. Role: Principal Investigator. EU H2020-MSCA-ITN-2017 (GA no. 766053; € 344,082).
- 2015-2020: **EU Infradev** Corbel "Coordinated Research Infrastructures Building Enduring Life-science Services ". Role: Principal Investigator. EU Horizon 2020 research and innovation programme (GA No 654248; € 90,700).
- 2014-2015: **MIUR Progetti Premiali** Pantrac “Gut patterning and PANcreas development in evolution and disease: a TRAnsCriptomic approach”. Role: Principal Investigator. (DLGS 213/99; € 169,143).
- 2013-2017: **Marie Curie ITN** NEPTUNE “Multidisciplinary training in evo-devo and neurobiology of marine animal models”. Role: Principal Investigator. FP7-PEOPLE-2012-ITN (GA no. 317172; € 302,697).
- 2010-2014: **NCS Taiwan** mobility project in the context of the NCS Taiwan - SZN Bilateral Agreement (03/2010- 03/2012), in collaboration with Dr. Yi-Hsien Su, Academia Sinica, Taiwan (€ 5,000).
- 2008-2012: **Marie Curie ITN** EVONET “Evolution of Gene Regulatory Networks in Animal Development”. Role: Principal Investigator. FP7-PEOPLE-2007-ITN (GA-2008-215781; € 254,000).
- 2008-2013: **EU FP7** Assemble grant, received eight accesses (1 from France, 2 from Spain, 3 from UK and 2 from Croazia (€10,000).
- 2005-2008: **Marie Curie RTN** ZOONET “Development and evolution of animal form: training modern comparative zoologists”. Role: principal investigator. FP6-2004-Mobility (GA MRTN-CT-2004-005624; € 444,000).
- 2004-2009: **Network of Excellence** (NoE) Marine Genomics Europe. Roles: National representative, member of Scientific Steering Committee, member of the Technological Platform committee, Coordinator of the WP Functional Genomics of the EED Node, Principal Investigator. EU FP6- NoE (€ 140,000).

SCIENTIFIC CAREER PUBLICATIONS

Research interests and Scientific impact

Author of **more than 70 papers** on ISI journals and **4 book chapters**, Maria Ina Arnone, biochemist by training, is a developmental molecular biologist with expertise in gene expression analysis, functional genomics and gene regulatory network (GRN) studies. After a period of three years (1995-1998) at the California Institute of Technology, Pasadena, CA, where she contributed to a seminal work on the organization and function of genomic regulatory systems (reviewed in Arnone and Davidson, *Development* 1997, 912 citations), she established her group at Stazione Zoologica in Naples with the aim of studying evolution of organs and body parts by comparison of the GRNs that control the formation of such parts in different animals. Using the sea urchin embryo as main model system, she recently developed a novel approach integrating various ‘omics’ technologies to study developmental GRNs and their evolution. Currently, she is leading an interdisciplinary team of four labs in different countries covering expertise as wide as developmental molecular biology (Italy), ultrastructural morphology (Germany), physics and physiology of vision (Sweden) and theoretical modeling (USA) within a HFSPO funded project aimed at studying sea urchin dermal photoreception to unravel principles of decentralized spherical vision.

Google Scholar (13/12/2022)

H-index: 30; total citations: 6612

Full list of publications available here:

https://scholar.google.com/citations?hl=en&user=_vDf5HQAAAAJ&view_op=list_works

A selection of most relevant publications follows:

Publications (preprints)

- Li T, Kirwan J, Arnone MI, Nilsson D-E, La Camera G*. A model of decentralized vision in the sea urchin *Diadema africanum*. Under revision in *iScience*, preprint available: BiorXiv <https://doi.org/10.1101/2022.05.03.490537>.
- Paganos P, Ullmann CV, Gaglio D, Bonanomi M, Salmistraro N, Arnone MI*, Jimenez-Guri E*. Plastic leachate-induced toxicity during sea urchin embryonic development: Insights into the molecular pathways affected by PVC. *STOTEN* In press, preprint available: <https://www.sciencedirect.com/science/article/abs/pii/S0048969722080044>.

Publications (ISI Journals)

(selection of the 30 most relevant, starting from most recent; *corresponding author)

- Schwaiger M, Andrikou C, Dnyansagar R, Ferrer Murguia P, Paganos P, Voronov D, Zimmermann B, Lebedeva T, Schmidt H, Genikhovich G, Benvenuto G, Arnone MI*, Technau U*. An ancestral Wnt-Brachyury feedback loop and recruitment of mesoderm-determining target genes revealed by comparative Brachyury target screens. *Nat. Ecol. Evol* (2022) 1-19.
- Skvortsova K, Bertrand S, Voronov D, Duckett PE, Ross SE, Magri MS, Maeso I, Weatheritt RJ, Gomez-Skarmeta JL, Arnone MI, Escriva H, Bogdanovic O*. Active DNA demethylation of developmental cis-regulatory regions predates vertebrate origins. Under review in *Sci. Adv.* (2022) 8: eabn2258.
- Paganos P, Ullrich-Lüter E, Caccavale F, Zakrzewski A, Voronov D, Fournon-Berodia I, Cocurullo M, Lüter C, Arnone MI. A New Model Organism to Investigate Extraocular Photoreception: Opsin and Retinal Gene Expression in the Sea Urchin *Paracentrotus lividus*. *Cells* (2022) 11: 2636.
- Paganos P, Ronchi P, Carl J, Mizzon G, Martinez P, Benvenuto G, Arnone MI. Integrating single cell transcriptomics and volume electron microscopy confirms the presence of pancreatic acinar-like cells in sea urchins. *Front Cell Dev Biol.* (2022) 10: 991664.
- Paganos P, Voronov D, Musser J, Arendt D, Arnone MI*. Single cell RNA sequencing of the *Strongylocentrotus purpuratus* larva reveals the blueprint of major cell types and nervous system of a non-chordate deuterostome. *eLife* (2021) 10: e70416.
- Rendell-Bhatti F, Paganos P, Pouch A, Mitchell C, D'Aniello S, Godley BJ, Pazdro K, Arnone MI, Jimenez-Guri E*. Developmental toxicity of plastic leachates on the sea urchin *Paracentrotus lividus*. *Environ Pollut* (2021) 269: 115744.
- MI Arnone*, P Oliveri. Neuropeptide Signaling: Unravelling the evolutionary history of kisspeptin. *Elife* (2020) 9, e58599.
- Jékely G, Arnone MI. Editorial overview: Tissue-level dynamics in development and evolution. *Curr Opin Genet Dev* (2019) 57: iii-v.

- Annunziata R, Andrikou C, Perillo M, Cuomo C, Arnone MI*. Development and evolution of gut structures: from molecules to function. *Cell Tissue Res* (2019) 377: 445–458.
- Lowe EK, Cuomo C, Voronov D, Arnone MI*. Using ATAC-seq and RNA-seq to increase resolution in GRN connectivity. *Methods Cell Biol* (2019) 151, 115-126.
- Lowe EK, Garm A, Ullrich-Luter E, Arnone MI*. The crowns have eyes: Multiple opsins found in the eyes of the Crown-of-Thorns Starfish *Acanthaster planci*. *BMC Evol Biol* (2018) 18: 168.
- Perillo M, Paganos P, Mattiello T, Cocurullo M, Oliveri P, Arnone MI*. Novel neuronal subtypes with a pancreatic-like signature in the sea urchin *Strongylocentrotus purpuratus*. *Front Endocrinol* (2018) 9: 650.
- Burguera D, Marquez Y, Racioppi C, Permanyer J, Torres-Méndez A, Esposito R, Albuixech-Crespo B, Fanlo L, D'Agostino Y, Gohr A, Navas-Perez E, Riesgo A, Cuomo C, Benvenuto G, Christiaen LA, Martí E, D'Aniello S, Spagnuolo A, Ristatore F, Arnone MI*, Garcia-Fernández J*, Irimia M*. Evolutionary recruitment of flexible Esrp-dependent splicing programs into diverse embryonic morphogenetic processes. *Nat Commun* (2017) 8: 1799.
- Lowe EK, Cuomo C, Arnone MI*. Omics approaches to study gene regulatory networks for development in echinoderms. *Brief Funct Genomics* (2017) 16, 299-308.
- Arnone MI*, Andrikou C, Annunziata R. Echinoderm systems for gene regulatory studies in evolution and development. *Curr Opin Gen Dev* (2016) 39: 129-137.
- Perillo M, Wang YJ, Leach, SD, Arnone MI*. A pancreatic exocrine-like cell regulatory circuit operating in the upper stomach of the sea urchin *Strongylocentrotus purpuratus* larva. *BMC Evol Biol* (2016) 16, 117.
- Mao CA, Agca C, Mocko-Strand JA, Wang J, Ullrich-Lüter E, Pan P, Wang SW, Arnone MI, Frishman LJ, Klein WH. Substituting mouse transcription factor Pou4f2 with a sea urchin orthologue restores retinal ganglion cell development. *Proc R Soc B* (2016) 283: 20152978.
- Andrikou C, Pai CY, Su YH, Arnone MI*. Logics and properties of a genetic regulatory program that drives embryonic muscle development in an echinoderm. *eLife* (2015) 4, e07343.
- Arnone MI, Hejnal A. Genomics going wild: Marine sampling for studies of evolution and development. *Mar Genomics* (2015) 24: 119-20.
- Annunziata M and Arnone MI*. A dynamic network of regulatory interactions explains ParaHox gene control of gut patterning in the sea urchin embryo. *Development* (2014) 141: 2462-72.
- Annunziata R, Martinez P and Arnone MI*. Intact cluster and chordate-like expression of ParaHox genes in a sea star. *BMC Biol* (2013) 11:68.
- Ullrich-Lüter E, Dupont S, Arboleda E, Hausen H and Arnone MI*. A Unique System of Photoreceptors in Sea Urchin Tube Feet. *Proc Natl Acad Sci U S A* (2011) 108: 8367-72.
- Cole, AG, Rizzo F, Fernandez-Serra M, Martinez P, and Arnone MI*. ParaHox genes coordinate to pattern the posterior endoderm. *Development* (2009) 136: 541-9.
- Sea Urchin Genome Sequencing Consortium; Sodergren E, Weinstock GM, Davidson EH, Cameron RA, Gibbs RA, Angerer RC, Angerer LM, Arnone MI, Burgess DR, Burke RD, Coffman JA, Dean M, Elphick MR, Etensohn CA... et al The genome of the sea urchin *Strongylocentrotus purpuratus*. *Science* (2006) 314: 941-952.
- Davidson EH, Rast JP, Oliveri P, Ransick A, Calestani C, Yuh CH, Minokawa T, Amore G, Hinman V, Arenas-Mena C, Otim O, Brown CT, Livi CB, Lee PY, Revilla R, Rust AG, Pan Zj, Schilstra MJ, Clarke PJ, Arnone MI, Rowen L, Cameron RA, McClay DR, Hood L, Bolouri H. A genomic regulatory network for development. *Science* (2002) 295, 1669-1678.
- Arnone MI*. Bringing order to organogenesis. *Nat Genet* (2002) 30, 348-350.
- Bogarad LD, Arnone MI, Chang C, Davidson EH. Interference with gene regulation in living sea urchin embryos: “TKO”, a genetically controlled vector for blockade of specific transcription factors. *Proc Natl Acad Sci U S A*. (1998) 95, 14827-32.

- Arnone MI, Davidson EH. The hardwiring of development: organization and function of genomic regulatory systems. *Development* (1997) 124, 1851-1864.
- Arnone MI, Bogarad LD, Collazo A, Kirchhamer CV, Cameron RA, Rast JP, Gregorians A, Davidson EH. Green Fluorescent Protein in the sea urchin: new experimental approaches to transcriptional regulatory analysis in embryos and larvae. *Development* (1997) 124, 1851-1864.

Book Chapters

- Magri MS, Voronov D, Randelović J, Cuomo C, Gómez-Skarmeta JL, Arnone MI*. ATAC-Seq for Assaying Chromatin Accessibility Protocol Using Echinoderm Embryos. *Methods Mol Biol* (2021) 2219: 253-265.
- Perillo M, Paganos P, Spurrell M, Arnone MI*, Wessel GM*. Methodology for Whole Mount and Fluorescent RNA In Situ Hybridization in Echinoderms: Single, Double, and Beyond. *Methods Mol Biol* (2021) 2219:195-216.
- Lowe EK, Cuomo C, Arnone MI*. A Differential Transcriptomic Approach to Compare Target Genes of Homologous Transcription Factors in Echinoderm Species In: *Dynamics of Mathematical Models in Biology*, Springer 2016, pp 55-63.
- Arnone MI, Byrne M, Martinez P. Echinodermata. In: *Evolutionary Developmental Biology of Invertebrates* A. Wanninger ed, Springer 2015 vol. 6: 1-58.

LANGUAGES

Mother tongue(s) Italian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
French	B1	C1	A2	A2	A2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

PROFESSIONAL SKILLS

Organizational / managerial skills

- **Managerial skills** gained through (i) more than 20 years of **SERVICE AND COMMITTEE WORK** at Stazione Zoologica Anton Dohrn, in particular as Director of the Department of Biology and Evolution of Marine Organisms for 3 years and as member of the SZN Board of Departments for 4 years; (ii) the participation to several international *Scientific Boards and Panels*; (iii) the participation to several *Editorial Boards*.
- **Organizational skills** gained: (i) through the **GRANT SUPPORT** received, in particular as coordinator of an ongoing HFSP grant of 4 partners in 4 countries; as participant since year 2004 of 1 Network of Excellence (Marine Genomics, FP6) and four Marie Curie Research/Initial Training Networks (under FP6, FP7 and H2020) with various roles ranging from PI, to member of the Steering Scientific Committee, to WP coordinator; (ii) through the *Organization of Meetings, Workshops and Courses*.
- **Leadership and management of personnel skills** gained as responsible during the past 24 years for research teams of 3-10 people including *Supervision* of postdocs, PhD and undergraduate students and as Director of the Department of Biology and Evolution of Marine Organisms for 3 years.
- **Evaluation of research skills** gained through the participation to several *Evaluation Panels* and through *Reviews and Evaluations* of *Grants, Scientific articles, Tenures and Promotions* and *PhD theses* national and international.

Research related skills

- **Mentoring skills** gained through: (i) the *Supervision* of more than 25 students and postdocs; (ii) the interaction with more than 100 among students and postdocs met since 2004 while mentoring within 4 European Marie Curie Research/Training Networks or while teaching at international Graduate Schools and Summer Courses.

- **Grant writing** and **fundraising** testified by the several international and national grants received since 2004 (**GRANT SUPPORT**), accounting overall for more than 3 Million Euro.

Communication skills

- Excellent **communication skills** testified by (i) numerous invitations as speaker to [Conference Plenary Sessions and Departmental Seminars](#), (ii) [Teaching](#) and (iii) [Outreach](#) activities

PROFESSIONAL SKILLS SERVICE AND COMMITTEE WORK

- 2018 (September 1st) to 2021 (September 2nd): Head of the Department of Biology and Evolution of Marine Organisms at SZN
- 2018-2020: Coordination of the O.R. Dado Museum for the project PON SZN “PRIMA”
- 2017: Coordination of the committee for the organization of the SZN Retreat
- 2015- 2018 (August): SZN Board of Departments for the Biology and Evolution of Marine Organism Department (elected member).
- 2012- 2019: SZN Science and Society committee (coordinator since 2013)
- 2010-2013: SZN Institutional Seminar Series committee (coordinator)
- 2011-2013: RI EMBRC, The European Marine Biological Resource Centre (member of WP2 Team during the preparatory phase coordinated by SZN)
- 2009, participation as a member of the Zoological Station delegation at the conference: "Taiwan and Italy Conference on Marine Biology", in Taipei, and a series of meetings to promote scientific exchanges between the Zoological Station and the scientific institutes of Taiwan in the context of the NCS Taiwan - SZN Bilateral Agreement
- 2008- to date: Collegio dei Docenti del Dottorato in “Organismi modello nella ricerca veterinaria e biomedica” Università degli studi di Napoli Federico II
- 2008-2010: European project SZN Committee (member)
- 2008-2010: SZN Scientific Advisory Board (SZN representative)
- 2008-2009: Committee for the SZN website
- 2006- to date: SZN-Open University London PhD. Internal Examiner or Chair at VIVAs; Course teacher, Board (since 2017)

PROFESSIONAL SKILLS EXTERNAL REPUTATION

Scientific Boards and Panels

- 2018 - to date: Council member of the European Society for Evolutionary Developmental Biology (Elected)
- 2017 - to date: Scientific Advisory Board of Echinobase (An Echinoderm genomic database)
- 2010 - to date: Consortium for the sequencing of the *Paracentrotus lividus* genome (various roles, including coordination of transcriptome analyses)
- 2005-2006: Consortium for the sequencing of the *Strongylocentrotus purpuratus* genome (various roles, including organization of Annotation the workshop)

Editorial Boards

- January 2022 to date: Chief Specialty Section Editor of Evolutionary Developmental Biology (specialty section of Frontiers in Cell and Developmental Biology and Frontiers in Ecology and Evolution)
- June 2018- December 2021: Associate Editor on the Board of Evolutionary Developmental Biology (specialty section of Frontiers in Cell and Developmental Biology and Frontiers in Ecology and Evolution)
- 2012- to date: Associate Editor of Marine Genomics
- 2006-2012: member of the Editorial Board of Journal of Experimental Zoology – PartB

Organization of Meetings, Workshops and Courses

- **Co-organizer of 15 international meetings, workshops and courses** including: the 8th Euro Evo Devo Meeting, Napoli, Italy. Chair of the local organizing committee; more than 500 participants (May 31-June 3 2022); two EMBO Summer Courses, one in Kristineberg Marine Station, Fiskebäckskil, Sweden (July, 2017) and one in Stazione Zoologica Anton Dohrn, Napoli, Italy (September 2006); one EMBO Workshop “Evo-Devo meets Marine Ecology: New Frontiers in Ocean Science through Integrative

Biology”, Ischia, NA, Italy (October 2009).

Evaluation Panels, Reviews
and Evaluations

- 2022-2023: ERC grant evaluation Panel Member
- 2021-2022: ANR grant evaluation Panel Member
- 2008: Evaluation Panel of the Biologie du Developpement Lab, Observatoire Océanologique of Villefranche-sur-Mer (CNRS UMR 7009)
- *Grants*: ERC, AERES, France; ANR, France; BBSRC, UK; Einstein Foundation Berlin, Germany; Genoscope, France; Government of Canada, Canada; NSF, USA; University of Vienna, Austria.
- *Scientific articles*: BMC journals, Development, Developmental Biology, eLife, EvoDevo, Evolution and Development, Frontiers in Ecology and Evolution, Frontiers in Endocrinology, Genesis, Genome Biology, Journal of Experimental Zoology Part B, Marine Genomics, Mechanism of Development, Molecular Ecology, Nucleic Acid Research, Nature, Nature Communications, PlosOne, P.N.A.S, Scientific Report.
- *Tenures and Promotions*: Carnegie Mellon University, USA; University College London, UK; ICREA, Spain.
- *PhD theses*: Sorbonne University, France; University of Barcelona, Spain; University of Vienna, Austria; University of Bergen, Norway; Open University at Stazione Zoologica Anton Dohrn, Napoli, Italy.

Invited speaker to Conference
Plenary Sessions and
Departmental Seminars

Invited speaker to more than 40 international Conference Plenary sessions and Departmental seminars, including three keynote lectures: Keynote lecture of the 10th International Tunicate meeting, Villefranche-sur-mer, France (July 2019); keynote lecture of the Assemble plus 2021 closing conference, Marine biological research at the frontier, on line (January 2021); EMBO Keynote Lecture, Developmental Biology of the Sea Urchin and Other Invertebrates XXVI, Marine Biological Laboratory, Woods Hole, MA (April 2022).

PROFESSIONAL SKILLS

CONTRIBUTION TO EDUCATION

Teaching

- **Lecturer and Co-Organizer** in 15 international advanced training courses, including: one at the White Sea Biological Station, Karelia, Russia (2019); nine at the Kristineberg Station, Sweden (from 2006 to date); three at the Station Biologique Roscoff, France (1999-2001); two at the Marine Biological Laboratory, Woods Hole, MA, USA (1997-1998).
- **Lecturer and Co-Organizer** in various PhD courses, including: seven for the SZN-OU Programme (2000-2004, 2016, 2019, 2021); two for the University of Barcelona, Spain (2015, 2018).
- **Lecturer** for the Marine Genomics Course, Laurea MaRe, Università Federico II di Napoli (2017-2019) and PON 25 (formazione) BioForU (2013)

Supervisions

- **Supervisor** of 6 postdocs, 13 PhD-theses (Open University of London program) and 16 degree-theses (Università degli Studi di Napoli Federico II-IT and Ghent University, BE) national and international.

Postdocs (duration) [current position]:

- Eva Jimenez-Juri, MSCA Fellow (March 2021 – March 2023)
- Periklis Paganos (April 2019 – March 2023)
- Filomena Caccavale (May 2019 – April 2024)
- John Kirwan (October 2019 – September 2022)
- Elijah Lowe (December 2014 - December 2017) [Senior Bioinformatics Systems Software Engineer, Atlanta, Georgia, USA]
- Alison Cole (June 2006 - December 2008) [Senior Scientist, Research associate, Vienna University, Austria]

PhD theses successfully completed (year of completion) [current position]:

- Maria Cocurullo (2022) PhD Open University [postdoc at SZN, Italy]
- Periklis Paganos (2021) PhD Open University [April 2023, starting a postdoc at MBL, Woods Hole, MA, USA]

- Jovana Randelovic (2020) PhD Open University [Services Inside Sales Specialist · NCR Corporation, Serbia]
- Danila Voronov (2019): PhD Open University [Postdoc at Max Planck Institute for Evolutionary Biology, Plon, Germany]
- Claudia Cuomo, PhD Open University (2017) [Agente di Polizia Municipale]
- Margherita Perillo, PhD Open University (2013) [Nov 2022, starting a PI position at MBL, Woods Hole, MA, USA]
- Carmen Andrikou, PhD Open University (2012) [Postdoc at Sars Institute, Bergen, Norway]
- Rossella Annunziata, PhD Open University (2011) [Senior Scientist, PI, SZN, Italy]
- Enrique Arboleda, PhD Open University (2008) [Lab Manager at Institut de Génomique Fonctionnelle de Lyon, France]
- Francesca Rizzo, PhD Open University (2007) [Senior Scientist, University of Salerno; co-founder of start-up Genomix4Life S.r.l.]
- Monserrat Fernandez-Serra, PhD Open University (2006) [Clinical Team Lead en Covance, Madrid, Spain]
- Claudia Consales, PhD Università degli Studi di Napoli “Federico II” (2001) [Staff Scientist, Laboratorio Salute e Ambiente, ENEA, Centro Ricerche Casaccia, Italy]

Completed Masters or equivalent

- Javier Burgoa-Cardas Msc, International Master of Marine Biological Resources, Ghent University, Belgium (2019-2020)
- Ines Fournon-Berodia Msc, International Master of Marine Biological Resources, Ghent University, Belgium (2018-2019)
- Alberto Valero-Gracia, MPhil Open University, SZN [Marie Curie ITN Neptune] (2015-2019)
- Hristiana Lyubenova, Erasmus placement and Master thesis, University of Aberdeen (2016)
- Libero Petrone, Università di Napoli Federico II – Corso di Laurea in Scienze Biologiche (2011)
- Daniela Lovera, Università di Napoli Federico II – Corso di Laurea in Scienze Biologiche (2011)
- Silvia Iannaccone, Università di Napoli Federico II – Corso di Laurea in Scienze Biologiche (2010)
- Edmondo Iovene Università di Napoli Federico II – Corso di Laurea in Scienze Biologiche (2010)
- Lorenza Tsansizi, Erasmus placement and Master thesis Patras University (2010)
- Fabiana Sabelli - Università di Napoli Federico II – Corso di Laurea in Biologia delle Riproduzioni Marine (2009)
- Rossella Annunziata - Università di Napoli Federico II – Corso di Laurea in Scienze Biologiche (2006)
- Paola Squarzoni - Università di Napoli Federico II – Corso di Laurea in Scienze Biologiche (2005)
- Aristeia Arkimandritis - Seconda Università di Napoli - Corso di Laurea in Scienze Biologiche (2004)
- Clelia Frosini - Università di Napoli Federico II – Corso di Laurea in Chimica (2002).
- Francesca Rizzo - Università di Napoli Federico II – Corso di Laurea in Chimica (2002)
- Alessandra Livigni - Università di Napoli Federico II – Corso di Laurea in Biotecnologie Mediche (2001)

Outreach

- Collaboration to the virtual exhibit "Life: Through the looking glass" (24/05/2022 – ongoing; > 4000 views; <https://www.life-throughthelookingglass.com>)
- Blog post and video on SZN social media promoting an eLife publication (20/04/2022; 108 views; <https://m.youtube.com/watch?v=62TzQRaxj80#menu>)
- Collaboration to the exhibit “Theodor Boveri at the Naples Zoological Station”, Stazione Zoologica Anton Dohrn Napoli, Italy (February 2017).
- Conference “Cosa determina la forma di un organismo vivente? Ce lo raccontano i ricci di

- mare” Città della Scienza, Napoli (March 2015).
- TV show for the Italian national television (RAI 2) Cronache Animali (Episode n. 53 rx 4/03/15, 2015).
 - Documentary “I vagabondi del mare” (screenplay and local organization), directed by Alessandro Scippa and produced by Mediacontents for the Stazione Zoologica Anton Dohrn, partner of the “Forum Universale delle Culture di Napoli e Campania”. Organization of the closing event “Tara a Napoli” at Città della Scienza, Napoli, Italy (October 2014).
 - Conference within the event “La Stazione Zoologica in visita a Nisida. La vita in una goccia di mare” (May 2013).
 - Science and Society event “Homo, ma quanto sapiens? Il nostro impatto sui processi evolutivi e la biodiversità” (April 2012).
 - TV Show for the Italian National television (RAI 3) Geo & Geo (October 2011).
 - Set up of three sections of the exhibit “Il filo della vita: 150 anni di genetica a Napoli”, displayed in Genova (Festa della Scienza, 2011) and at Città della Scienza, Napoli (2012).
 - Conference “150 anni di scienza: Gli organismi marini e le grandi scoperte della biologia: l’esperimento di Theodor Boveri alla Stazione Zoologica Anton Dohrn 100 anni dopo”. Celebration of the “150 anni di genetica a Napoli” (May 2011).
 - Science and Society event “Il cibo e l’evoluzione del gusto. In memoria di Carlo Cannella” (June 2011).
 - Conference “Gli esperimenti di Theodor Boveri alla Stazione Zoologica 100 anni dopo” within the Workshop “L’evoluzione in gestazione”, Istituto Italiano di Studi Germanici, Roma Italy. (2009). Essay published in the Journal “Il Veltro” (2011).
 - Participation to the documentary “Cell: The Chemistry of Life” produced and directed by Alison Rooper for the BBC4 (2009)

Self-certification

“A conoscenza di quanto prescritto agli artt 46 e seguenti del D.P.R. 28 dicembre 2000 n. 445, sulla responsabilità penale cui può andare incontro in caso di falsità in atti e di dichiarazioni mendaci, nonché di quanto prescritto dall’art. 75 del D.P.R. 28 dicembre 2000 n. 445, sulla decadenza dai benefici eventualmente conseguenti al provvedimento emanato sulla base di dichiarazioni non veritiere, ai sensi e per gli effetti del citato D.P.R. n. 445/2000 art 46, e sotto la propria personale responsabilità, dichiaro che tutte le informazioni contenute nel mio curriculum vitae sono veritiere.

Presto consenso all’utilizzo dei dati personali ai sensi del Decreto legislativo 196/2003 e s.m.i.”

14 dicembre 2022

Maria I Arnone

