

Elisabetta Tosti

Born in Naples, 08/01/1954



Current Position: Primo Ricercatore, II level Senior Scientist

Current Affiliation: Department of Biology and Evolution of Marine Organisms (BEOM)

Tel.: +39 081 5833288; Fax: +39 081 7641355

e-mail: tosti@szn.it; Skype: eli.tosti54**Education/Training /Experience**

| Institute and Location | Degree (if applicable) | Year | Field of Study |
|---|-----------------------------------|----------------------------------|---|
| University Federico II of Naples, Italy | Laurea cum laude | 1977 | Biological Sciences |
| Stazione Zoologica Anton Dohrn, Naples, Italy | Training | 1977-1979 1981-1982 | Marine Biology |
| Italian National Biologist Order | Affiliation | 1979 | Biology |
| University of Padova, Italy | Fellowship | 1980 | Marine Biology |
| Italian Public Schools | Teacher | 1978-1983 | Mathematic and Sciences |
| Procura della Repubblica (Court) Salerno, Italy | Technical Expert appointment | 1983 | Marine Ecology |
| Stazione Zoologica Anton Dohrn, Naples, Italy | Fellowship | 1983-1988 | Marine Biology |
| Stazione Zoologica Anton Dohrn, Naples, Italy | Researcher-III level | 1989-2000 | Biology of Reproduction |
| MBL, Woods Hole (MA) USA | Visiting Scientist | 1990 | Biology of Reproduction |
| Stazione Zoologica Anton Dohrn, Naples, Italy | Group leader | 1993-today | Biology of Reproduction Marine Ecotoxicology |
| University of Nashville, USA | Visiting Scientist | 1998 | Biology of Reproduction |
| University of Naples Federico II, Italy | Contract Professor | 1996-1997 and 2006 to 2010 | Biology of Reproduction |

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| University of Naples Federico II and Stazione Zoologica Anton Dohrn, Naples, Italy | Coordinator Master course | 2006-2007 | Biology of Reproduction |
| Stazione Zoologica Anton Dohrn, Naples, Italy | Senior scientist-II level | 2000-today | Biology of Reproduction, Marine Ecotoxicology |
| Italian Ministry of Research (MIUR) | National Scientific Qualification as full professor | 2017-2023 | Comparative Anatomy and Cytology |
| Stazione Zoologica Anton Dohrn, Naples, Italy- MIUR | Coordinator WP4 ABBaCo project | 2017-2020 | Marine Ecotoxicology and Bio remediation |
| Stazione Zoologica Anton Dohrn, Naples, Italy | Coordinator Summer School | 2019 | Marine Ecotoxicology |

Appointments and Awards

- 1994-2000- National Coordinator of the International Society of Reproductive Medicine “Alpha”
- 1995- Scientific consulting in Biology of Reproduction at the “Department of Physiopathology of Reproduction” Faculty of Medicine University of Naples Federico II
- 1998- Founder member of the “Italian Society of Embryology, Reproduction and Research” SIERR.
- 1998 and 1999- Member of the Scientific Advisory Board of the Danube University, Krems, Austria
- 1998 and 1999- Invited teacher Master course University Danube University Krems, Austria.
- 1998-Tutor” for “Industrial Placement Degree Programs”, University of Salford , Manchester (UK)
- 2007- Scientific Reviewer for grant assignment for the “National Science Foundation” USA
- 2009 - Appointed in the Editorial Board of the International Journal “ Marine Drugs”
- 2010 - Appointed in the Editorial Board of the International Journal Marine Science: Research & Development
- 2011 - Appointed in the Editorial Board of the International Journal “Journal of Fertilization: in vitro”
- 2016- Editor in Chief of the International Journal of Marine Science: Research & Development
- 2014 and 2017- Scientific Reviewer for grant assignments for : Israel Science Foundation (ISF)
- 2014- Scientific Reviewer for grant assignment for Italian Ministry of Research –MIUR
- 2016- Scientific Reviewer for grant assignment for Belgian Foundation against Cancer,
- 2000, to date - Member in 13 jury competitions (from), Member in the Library Scientific Committee , Member in the committee “Science and Society”
- 2016- Member of the Scientific Committee of the “Italian Foundation of Biologists”
- Scientific Reviewer for 40 different International Referenced Journals (ISI)
- Tutor of 10 degree thesis, 4 PhD thesis, and 5 post-doc contracts
- External Supervisor of four PhD thesis Open University and Stazione Zoologica,
- Supervisor in Ph.D courses Università de Tunis el-Manar, Tunisia.
- **Partner in the following financed projects:**
- 2017-2020- Project ABBaCo- Italian Ministry of research (MIUR)
- 2016-2018- Flagship project Stazione Zoologica Modres
- 2008-2011- Project ENNSATOX . FP7 NMP-2008
- 2006- PIAS Progetto Interdipartimentale Ambiente e Salute (PIAS) CNR
- 2002 - COFIN, 40% Italian Ministry of Research (MIUR)
- 1995-96- Ministry of Education, Sports, Science and Culture of Japan (#06011023)

Scientific Production

- Author of 82 papers on international referenced (ISI) journals, 6 book chapters, 16 invited reviews (Impact factor >220 ; H - index Scopus: 23, H-index Google-scholar: 27.
- Author of a book, Guest Editor of 2 special issues of the journal Marine Drugs, Guest Editor of a special issue on the journal Molecular Reproduction and development, Editor of an E-book, 4 cover illustrations dedicated.

PUBLICATIONS

Gianfreda L. **Tosti E.** Scardi V. (1979) A comparison of α and β glucanase in fourteen species of marine molluscs. Biochemical Systematics and Ecology- 7: 57-59

Evison LM. **Tosti E.** (1980) An appraisal of bacterial indicators of pollution in sea water. Progress in water technology 12: 591-599

Volterra L. Aulicino FA. **Tosti E.** Zicarelli M. (1980) Bacteriological monitoring of pollution in shellfish: methodological evaluation. Water, Air and Soil Pollution 13:399-410

Evison LM. **Tosti E.** (1980) Bathing water quality in the north sea and the Mediterranean. Marine Pollution Bulletin 11: 72-75

Volterra L. Aulicino FA. **Tosti E.** Zicarelli M. (1980) Microbiological monitoring of pollution in shellfish from the neapolitan area. Progress in water technology 12/4: 533-577

Tosti E. Volterra L. (1981) Water quality along the neapolitan coast. Water, Air and Soil Pollution 16: 433-444

Cariello L. De Nicola M. **Tosti E.** Zanetti L. (1982) On the mechanism of action of Bonellin on the sea urchin egg. Gamete Research 5 :161-166

Cariello L. **Tosti E.** Zanetti L. (1982) The hemolytic activity of Suberitine. Comparative Biochemistry and Physiology 73/1: 91-93

Izzo G. **Tosti E.** Volterra L. (1983) Faecal contamination of marine sediments in a stretch of the gulf of Naples. Water, Air and Soil Pollution 20: 191-198

Tosti E. Volterra L. (1984) Incubation temperature and fecal streptococci recovery from marine sediments. Microbiologica 7: 103-106

Volterra L. **Tosti E.** Vero A. Izzo G. (1985) Microbiological pollution of marine sediments in the southern stretch of the gulf of Naples. Water, Air and Soil Pollution. 26: 175-184

Modigh M. Ribera d'Alcalà M. Saggiomo V. Forlani G. **Tosti E.** (1985) Time relationship between physico-chemical and biological properties of phytoplankton bloom in the inner part of the gulf of Naples. Summer 1983 . Rapp. Comm. Int. Mer. Medit 29, 9

Tosti E. Volterra L. (1988) Water hygiene of two swimming pools: microbial indicators. Journal of Applied Bacteriology 65, 87-91

Forlani G. **Tosti E.** Volterra L. (1989) Growth interaction of phytoplanktonic algae and enteric bacteria. Revue Internationale d'Océanographie Medicale LXXXIII-LXXXIV: 15-30

Dale B. Santella L. **Tosti E.** (1991) Gap-junctional permeability in early and cleavage arrested ascidian embryos. Development 112, 153-160

- Dale B. Gualtieri R. Talevi R. **Tosti E.** Santella L. Elder K. (1991) Intercellular communication in the early human embryo. Mol. Reprod. Devel. 29, 22-28
- Tosti E.** Dale B. (1992) Lithium and Phorbol ester modify the activating capacity of ascidian spermatozoa. Experientia. 48, 57-60
- Pecorella C. **Tosti E.** Kyozyuka K. Dale B. (1993) Activation current sperm entry and surface contractions in ascidian oocytes. Zygote, 1, 113-119.
- Tosti E.** Palumbo A. Dale B. (1993) Inositol tri- Phosphate in human and ascidian spermatozoa. Molec. Reprod. Devel 35, 52-56.
- Dale B. DeFelice LJ. Kyozyuka K. Santella L. **Tosti E.** (1994) Voltage clamp of the nuclear envelope Proc. Royal Soc. Lond. 255, 119-124.
- Tosti E.** Dale B. (1994) Regulation of fertilization current in ascidian oocytes by intracellular second messenger. Molec Reprod. Dev. 37, 473-476.
- Dale B. Iaccarino M. Fortunato A. Gragnaniello G. Kyozyuka K. **Tosti E.** (1994) A morphological and functional study of fusibility in round headed spermatozoa in the human. Fertility Sterility 61/2, 336-340.
- Gianaroli L. **Tosti E.** Magli C. Iaccarino M. Ferraretti A. Dale B. (1994) Fertilization current in the human oocyte. Molec Reprod. Dev 38: 209-214
- Tosti E.** (1994) Sperm activation in species with external fertilization. Zygote 2, 359-361.
- Dale B. **Tosti E.** Iaccarino M. (1995) Is the plasma membrane of the human oocyte reorganized following fertilisation and early cleavage ? Zygote, 3 31-36
- Yazaki I. **Tosti E.** Dale B. (1995) Cytoskeletal elements link calcium channel activity and cell cycle in early sea urchin embryos. Development, 121 1827-1831
- Gianaroli L. Magli MC. Ferraretti AP. Fiorentino A. Panzella S. **Tosti E.** Dale B. (1995) Reducing the time of sperm-oocyte interaction in human IVF improve the implantation rate. Hum.Reprod. 11/1 101-106
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- Dale B. Fortunato A. Monfrecola V. **Tosti E.** (1996) A soluble sperm factor gates Ca²⁺ activated K⁺ channels in human oocytes. J. Ass. Repr. Gen. 13/7 573-577
- Wilding M. Kyozyuka K. Russo GL. **Tosti E.** Dale B. (1997) A soluble extract from human spermatozoa activates ascidian oocytes. Dev. Growth Differ. 39, 329-336
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- Yazaki I. Dale B. **Tosti E.** (1999) Functional gap junctions in the early sea urchin embryos are localized to the vegetal pole. Dev. Biol. **212**, 503-510
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- Tosti E.** Boni R. Cuomo A. (2000) Ca²⁺ current activity decreases during meiotic progression in bovine oocytes. Am. J. Physiol. **279**, 1795-1800
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- Tosti E.** Boni R. Cuomo A. (2002) Fertilization and activation current in bovine oocytes. Reproduction, **124**,835-846
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- Gualtieri R. Boni R. **Tosti E.** Zagami M. Talevi R. (2005) Intracellular calcium and protein tyrosine phosphorylation during the release of bovine sperm adhering to the fallopian tube epithelium in vitro. Reproduction **129**, 61-73
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- Gallo A. Russo GL, **Tosti E.** (2013) T-type Ca²⁺ current activity during oocyte growth and maturation in the ascidian *Styela plicata*. Plos One 8(1)54e604.
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- Gallo ., **Tosti E.** (2015) Antifouling Compounds Endangering Marine Invertebrates Reproduction. J Marine Sci Res Dev 5:e133.
- Gallo A. **Tosti E.** (2015) *Ciona intestinalis* as a model for ecotoxicological bioassays. J. Marine Sci Res Dev. 5:3
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Vacuoles in sperm head are not associated with head morphology, DNA damage and reproductive success. Repr. Biom. Online BMO, 32, 154-161.

Tosti E. Boni R, Gallo A. (2016) Ion currents in embryo development" Birth Defects Research Part C: Embryo Today: Reviews. 108(1):6-18.

Tosti E. Ménéz Y. (2016) Gamete activation: basic knowledge and clinical applications. Hum Reprod Update. 22(4):420-439.

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Tosti E. Boni R, Gallo A. (2017) Gamete activation: what else? Atlas of Science.

Tosti E. Boni R, Gallo A. (2017) μ -Conotoxins Modulating Sodium Currents in Pain Perception and Transmission: A Therapeutic Potential. Mar Drugs. 15, 295.

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