LIST OF PUBLICATIONS

**Full papers in indexed journals**

1. Piccinni E., Bertaggia D., **Santovito G.**, Miceli C., Kraev A. (1999). Cadmium metallothionein gene of *Tetrahymena pyriformis*. Gene 234, 51-59. https://doi.org/10.1016/s0378-1119(99)00181-x

2. **Santovito G.***, Irato P., Piccinni E., Albergoni V. (2000). Relationship between metallothionein and metal contents in red-blooded and withe-blooded Antarctic teleosts. Polar Biol. 23, 383-391. https://doi.org/10.1007/s003000050459

3. Albergoni V., Cassini A., Coppellotti O., Favero M., Favero N., Irato P., Piccinni E., **Santovito G.** (2000). Physiological responses to heavy metal and adaptation to increase oxygen partial pressure in Antarctic fish and protozoa. It. J. Zool. 67, 1-11. https://doi.org/10.1080/11250000009356349

4. Manzano M., Cocolin L., Citterio B., Conte L., De Bertoldi M., Comi G., Beltramini M., **Santovito G.**, Salvato B. (2000). Biochemical responses in a *Candida famata* strain adapted to high copper concentrations. Biometals 13, 251-259. https://doi.org/10.1023/a:1009218621588

5. **Santovito G.**, Irato P., Piccinni E (2000). Regulation of metallothionein in *Tetrahymena*: induction of MT-mRNA and protein by cadmium exposure. Eur. J. Protistol. 36, 437-442. https://doi.org/10.1016/S0932-4739(00)80049-8

6. Irato P., **Santovito G.**, Piccinni E., Albergoni V. (2001) Oxidative burst and metallothionein as a scavenger in macrophages. Immunol. Cell Biol. 79, 251-254. https://doi.org/10.1046/j.1440-1711.2001.01009.x

7. **Santovito G.**, Irato P., Palermo S., Boldrin F., Sack R., Hunziker P., Piccinni E. (2001) Identification, cloning and characterisation of a novel copper- metallothionein in *Tetrahymena pigmentosa*. Sequencing of cDNA and expression. Protist 152, 203-213. https://doi.org/10.1078/1434-4610-00061

8. **Santovito G.**, Salvato B., Manzano M., Beltramini M. (2002). Copper adaptation and methylotrophic metabolism in *Candida boidinii*. Yeast 19, 631-640. https://doi.org/10.1002/yea.862

9. Boldrin F., **Santovito G.**, Irato P., Piccinni E. (2002) Metal interaction and regulation of *Tetrahymena pigmentosa* metallothionein genes. Protist 153, 283-291. https://doi.org/10.1078/1434-4610-00105

10. Irato P., **Santovito G.**, Cassini A., Piccinni E., Albergoni V. (2003) Metal accumulation and binding protein induction in *Mytilus galloprovincialis*, *Tapes philippinarum* and *Scapharca inaequivalvis* from Lagoon of Venice. Arch. Environ. Contam. Toxicol. 44, 476-484. https://doi.org/10.1007/s00244-002-1262-8

11. Boldrin F.[e], **Santovito G.**[e], Negrisolo E., Piccinni E. (2003) Cloning and sequencing of four new metallothionein genes from *Tetrahymena thermophila* and *T. pigmentosa*: evolutionary relationships in *Tetrahymena* MT family. Protist 154, 431-442. https://doi.org/10.1078/143446103322454167

12. Corsi I., Bonacci S., **Santovito G.**, Chiantore M., Castagnolo L., Focardi S. (2004) Cholinesterase activities in the Antarctic scallop *Adamussium colbecki*: tissue expression and effect of $ZnCl_2$ exposure. Mar. Environ. Res. 58, 401-406. https://doi.org/10.1016/j.marenvres.2004.03.086

13. Corsi I., Bonacci S., **Santovito G.**, Chiantore M., Castagnolo L., Focardi S. (2004) Preliminary investigation on cholinesterases activity in *Adamussium colbecki* from Terranova Bay: field and laboratory study. Chem. Ecol. 20, 79-87. https://doi.org/10.1080/02757540310001629206

14. Santon A., Albergoni V., **Santovito G.**, Sturniolo G. C., Irato P. (2004) Relationship between MT and Zn in the protection against DNA damage in Zn-treated LEC rat liver. Eur. J. Histochem. 49, 317-321.

15. **Santovito G.***, Piccinni E., Cassini A., Irato P., Albergoni V. (2005) Antioxidant responses of the Mediterranean Mussel, *Mytilus galloprovincialis*, to environmental variability of dissolved oxygen. Comp. Biochem. Physiol. C 140, 321-329. https://doi.org/10.1016/j.cca.2005.02.015

16. Boldrin F., **Santovito G.**, Clark T.G., Wloga D., Gaertig J., Piccinni E. (2006) Metallothionein gene from *Tetrahymena thermophila* with a copper-inducible-repressible promoter. Euk. Cell 5, 422-425. https://doi.org/10.1128/EC.5.2.422-425.2006

17. **Santovito G.***, Cassini A., Piccinni E. (2006) Cu,Zn SOD from *Trematomus bernacchii*: molecular properties and evolution. Comp. Biochem. Physiol. C 143, 444-454. https://doi.org/10.1016/j.cbpc.2006.04.007

18. **Santovito G.***, Formigari A., Boldrin F., Piccinni E. (2007) Molecular and functional evolution of *Tetrahymena* metallothioneins: new insights into the gene family of *Tetrahymena thermophila*. Comp. Biochem. Physiol. C 144, 391-397. https://doi.org/10.1016/j.cbpc.2006.11.010

19. Irato P., Piccinni E., Cassini A., **Santovito G.** (2007) Antioxidant responses to variations in dissolved oxygen of *Scapharca inaequivalvis* and *Tapes philippinarum*, two bivalve species from the lagoon of Venice. Mar. Poll. Bull. 54, 1020-1030. https://doi.org/10.1016/j.marpolbul.2007.01.020

20. Boldrin F., **Santovito G.**, Formigari A., Bisharyan Y., Cassidy-Hanley D., Clark T.G., Piccinni E. (2008) MTT2, a copper-inducible metallothionein gene from *Tetrahymena thermophila*. Comp. Biochem. Physiol. C 147, 232-240. https://doi.org/10.1016/j.cbpc.2007.10.002

21. Formigari A., Boldrin F., **Santovito G.**, Cassidy-Hanley D., Clark T.G., Piccinni E. (2010) Functional characterization of the 5'-upstream region of MTT5 metallothionein gene from *Tetrahymena thermophila*. Protist 161, 71-77. https://doi.org/10.1016/j.protis.2009.06.002

22. **Santovito G.**, Piccinni E., Boldrin F., Irato P. (2012) Comparative study on metal homeostasis and detoxification in two Antarctic teleosts. Comp. Biochem. Physiol. C 155, 580-586. https://doi.org/10.1016/j.cbpc.2012.01.008

23. Franchi N., Ferro D., Ballarin L., **Santovito G.** (2012) Transcription of genes involved in glutathione biosynthesis in the solitary tunicate *Ciona intestinalis* exposed to metals. Aquat. Toxicol. 114-115, 14-22. https://doi.org/10.1016/j.aquatox.2012.02.007

24. **Santovito G.**, Marino S., Sattin G., Cappellini R., Bubacco L., Beltramini M. (2012) Cloning and characterization of cytoplasmic carbonic anhydrase from gills of four Antarctic fish: insights into the evolution of fish carbonic anhydrase and cold adaptation. Polar Biol. 35, 1587-1600. https://doi.org/10.1007/s00300-012-1200-9

25. Ferro D., Franchi N., Mangano V., Bakiu R., Cammarata M., Parrinello N., **Santovito G.***, Ballarin L. (2013) Characterization and metal-induced gene transcription of two new copper zinc superoxide dismutases in the solitary ascidian *Ciona intestinalis*. Aquat. Toxicol. 140-141, 369-379. https://doi.org/10.1016/j.aquatox.2013.06.020

26. Franchi N., Piccinni E., Ferro D., Basso G., Spolaore B., **Santovito G.***, Ballarin L. (2014) Characterization and transcription studies of a phytochelatin synthase gene from the solitary tunicate *Ciona intestinalis* exposed to cadmium. Aquat. Toxicol. 152, 47-56. https://doi.org/10.1016/j.aquatox.2014.03.019

27. Ferro D., Bakiu R., De Pittà C., Boldrin F., Cattalini F., Pucciarelli S., Miceli C., **Santovito G.*** (2015) Cu,Zn superoxide dismutases from *Tetrahymena thermophila*: molecular evolution and gene expression of the first line of antioxidant defenses. Protist 166, 131-145. https://doi.org/10.1016/j.protis.2014.12.003

28. Bakiu R., Korro K., **Santovito G.** (2015) Positive selection effects on the biochemical properties of mammal pyroglutamylated RFamide peptide receptor (QRFPR). It. J. Zool. 82, 309-326. https://doi.org/10.1080/11250003.2015.1018352

29. **Santovito G.**, Boldrin F., Irato P. (2015) Metal and metallothionein distribution in different tissues of the Mediterranean clam *Venerupis philippinarum* during copper treatment and detoxification. Comp. Biochem. Physiol. C 174-175, 46-53. https://doi.org/10.1016/j.cbpc.2015.06.008

30. Bakiu R., **Santovito G.** (2015) New insights into the molecular evolution of Metazoan Peroxiredoxins. Acta Zool. Bulg. 67, 305-317.

31. Sattin G., Bakiu R., Tolomeo A.M., Carraro A., Coppola D., Ferro D., Patarnello T., **Santovito G.*** (2015) Characterization and expression of a new cytoplasmic glutathione peroxidase 1 gene in the Antarctic fish *Trematomus bernacchii*. Hydrobiologia 761, 363-372. https://doi.org/10.1007/s10750-015-2488-6

32. Bakiu R., Tolomeo A.M., **Santovito G.** (2015) Positive selection effects on the biochemical properties of fish pyroglutamylated RFamide peptide receptor (QRFPR). It. J. Zool. 82, 460-472. https://doi.org/10.1080/11250003.2015.1071437

33. Tolomeo A.M., Carraro A., Bakiu R., Toppo S., Place S.P., Ferro D., **Santovito G.*** (2016) Peroxiredoxin 6 from the Antarctic emerald rockcod: molecular characterization of its response to warming. J. Comp. Physiol. B 186, 59-71. https://doi.org/10.1007/s00360-015-0935-3

34. Ricci F., Lauro F.M., Grzymski J.J., Read R., Bakiu R., **Santovito G.**, Luporini P., Vallesi A. (2017) The anti-oxidant defense system of the marine polar ciliate *Euplotes nobilii*: characterization of the msrB gene family. Biology, 6, 4. https://doi.org/10.3390/biology6010004

35. Ferro K., Ferro D., Corrà F., Bakiu R., **Santovito G.**[e], Kurtz J.[e] (2017) Cu,Zn superoxide dismutase genes in *Tribolium castaneum*: evolution, molecular characterisation, and gene expression during immune priming. Front. Immunol. 8: 1811. https://doi.org/10.3389/fimmu.2017.01811

36. Ferro D., Franchi N., Bakiu R., Ballarin L., **Santovito G.*** (2018) Molecular characterization and metal induced gene expression of the novel glutathione peroxidase 7 from the chordate invertebrate *Ciona robusta*. Comp. Biochem. Physiol. C 205, 1-7. https://doi.org/10.1016/j.cbpc.2017.12.002

37. Garofalo F., **Santovito G.**, Amelio D. (2019) Morpho-functional effects of heat stress on the gills of Antarctic *T. bernacchii* and *C. hamatus*. Mar. Poll. Bull. 141, 194-204. https://doi.org/10.1016/j.marpolbul.2019.02.048

38. AL-Asadi S., Malik A., Bakiu R., **Santovito G.**, Schuller K. (2019) Characterization of the peroxiredoxin 1 subfamily from *Tetrahymena thermophila*. Cell. Mol. Life Sci. 76, 4745–4768. https://doi.org/10.1007/s00018-019-03131-3

39. Bargelloni L., Babbucci M., Ferraresso S., Papetti C., Vitulo N., Carraro R., Pauletto M., **Santovito G.**, Lucassen M., Mark F.C., Zane L., Patarnello T. (2019) Draft genome assembly and transcriptome data of the icefish *Chionodraco myersi* reveal the key role of mitochondria for a life without hemoglobin at subzero temperatures. Commun. Biol. 2, 443. https://doi.org/10.1038/s42003-019-0685-y

40. Tolomeo A.M., Carraro A., Bakiu R., Toppo S., Garofalo F., Pellegrino D., Gerdol M., Ferro D., Place S.P., **Santovito G.*** (2019) Molecular characterization of novel mitochondrial peroxiredoxins from the Antarctic emerald rockcod and their gene expression in response to environmental warming. Comp. Biochem. Physiol. C 255, 108580. https://doi.org/10.1016/j.cbpc.2019.108580

41. Chatzidimitriou E., Bisaccia P., Corrà F., Bonato M., Irato P., Manuto L., Toppo S., Bakiu R., **Santovito G.*** (2020) Copper/zinc superoxide dismutase from the crocodile icefish *Chionodraco hamatus*: antioxidant defense at constant sub-zero temperature. Antioxidants 9, 325. https://doi.org/10.3390/antiox9040325

42. Ferro D., Bakiu R., Pucciarelli S., Miceli C., Vallesi A., Irato P., **Santovito G.*** (2020) Molecular characterization, protein-protein interaction network, and evolution of four glutathione peroxidases from *Tetrahymena thermophila*. Antioxidants, 9, 949. https://doi.org/10.3390/antiox9100949

43. Bonato M., Corrà F., Bellio M., Guidolin L., Tallandini L., Irato P., **Santovito G.*** (2020) PFAS environmental pollution and antioxidant responses: an overview of the impact on human field. Int. J. Environ. Res. Public Health, 17, 8020. https://doi.org/10.3390/ijerph17218020

44. **Santovito G.***, Trentin E., Gobbi I., Bisaccia P., Tallandini I., Irato P. (2021) Non-enzymatic antioxidant responses of *Mytilus galloprovincialis*: insights into the physiological role against metal-induced oxidative stress risk. Comp. Biochem. Physiol. C, 240, 108909. https://doi.org/10.1016/j.cbpc.2020.108909

45. Motta C.M., Simoniello P., Di Lorenzo M., Migliaccio V., Panzuto R., Califano E., **Santovito G.** (2021) Endocrine disrupting effects of copper and cadmium in the oocytes of the Antarctic Emerald rockcod *Trematomus bernacchii*, Chemosphere, 268, 129282. https://doi.org/10.1016/j.chemosphere.2020.129282

46. Drago L., Peronato A., Franchi N., Ballarin L., Bakiu R., **Santovito G.** (2021) Stress granules in *Ciona robusta*: molecular evolution of TIA-1-related nucleolysin and tristetraprolin and first evidence of their gene expression in an invertebrate chordate under metal-induced stress conditions, Comp. Biochem. Physiol. C, 243, 108977. https://doi.org/10.1016/j.cbpc.2021.108977

47. Ansaloni F., Gerdol M., Giulianini P.G., Coscia M.R., **Santovito G.**, Buonocore F., Scapigliati G., Pallavicini A. (2021) Cold adaptation in Antarctic notothenioids: comparative transcriptomics reveals novel insights in the peculiar role of gills and highlights signatures of cobalamin deficiency, Int. J. Mol. Sci., 22, 1812. https://doi.org/10.3390/ijms22041812

48. Bernardini I., Matozzo V, Valsecchi S., Peruzza L., Dalla Rovere G., Polesello S., Iori S., Marin M.G., Fabrello J., Ciscato M., Masiero L., Bonato M., **Santovito G.**, Boffo L., Bargelloni L., Milan M., Patarnello T. (2021) The new PFAS C6O4 and its effects on marine invertebrates: First evidence of transcriptional and microbiota changes in the Manila clam *Ruditapes philippinarum*, Environ. Int., 152, 106484. https://doi.org/10.1016/j.envint.2021.106484

49. Greco S., D'Agostino E., Manfrin C., Gaetano A.S, Furlanis G., Capanni F., **Santovito G.**, Edomi P., Giulianini P., Gerdol M. (2021) RNA-sequencing indicates high hemocyanin expression as a key strategy for cold adaptation in the Antarctic amphipod *Eusirus cf. giganteus* clade g3, Biocell, 45, 1611-1619. https://doi.org/10.32604/BIOCELL.2021.016121

50. Marrone A., La Russa D., Brunelli E., **Santovito G.**, La Russa M.F., Barca D., Pellegrino D. (2021) Antarctic fish as a global pollution sensor: metals biomonitoring in a twelve-year period, Front. Mol. Biosci., 8, 794946. https://doi.org/10.3389/fmolb.2021.794946

51. Rizzotti D., Manfrin C., Gerdol M., Greco S., **Santovito G.**, Giulianini P.G. (2022) Morphological analysis of erythrocytes of an Antarctic teleost under heat stress: Bias of the stabling effect. J. Therm. Biol., 103, 103139. https://doi.org/10.1016/j.jtherbio.2021.103139

52. Drago L., Ferro D., Bakiu R., Ballarin L.*, **Santovito G.*** (2022) Typical 2-Cys Peroxiredoxins as a Defense Mechanism against Metal-Induced Oxidative Stress in the Solitary Ascidian *Ciona robusta*. Antioxidants, 11, 93. https://doi.org/10.3390/antiox11010093

53. Tolomeo A.M., Fabozzo A., Malvicini R., De Lazzari G., Bisaccia P., Gaburro G., Arcidiacono D., Notarangelo D., Caicci F., Zanella F., Marchesan M., Yannarelli G., **Santovito G.**, Muraca M., Gerosa G. (2022) Temperature-related effects of myocardial protection strategies in swine hearts after prolonged warm ischemia. Antioxidants, 11, 476. https://doi.org/10.3390/antiox11030476

54. Ferrario C., Peruzzi C., Cislaghi A., Polesello S., Valsecchi S., Lava R., Zanon F., **Santovito G.**, Barausse A., Bonato M. (2022) Assessment of reed grasses (*Phragmites australis*) performance in PFAS removal from water: a phytoremediation pilot plant study. Water, 14, 946. https://doi.org/10.3390/w14060946

55. Piva E., Schumann S., Dotteschini S., Brocca G., Radaelli G., Marion A., Irato P., Bertotto D., **Santovito G.*** (2022) Antioxidant Responses Induced by PFAS Exposure in Freshwater Fish in the Veneto Region. Antioxidants, 11, 1115. https://doi.org/10.3390/antiox11061115

56. Priante E., Pietropoli E., Piva E., **Santovito G.**, Schumann S., Irato P. (2022) Cadmium–Zinc Interaction in *Mus musculus* Fibroblasts. Int. J. Mol. Sci., 23, 12001. https://doi.org/10.3390/ijms231912001

57. Bakiu R., Pacchini, S., Piva E., Schumann S., Tolomeo A.M., Ferro D., Irato P., **Santovito G.*** (2022) Metallothionein Expression as a Physiological Response against Metal Toxicity in the Striped Rockcod *Trematomus hansoni*. Int. J. Mol. Sci., 23, 12799. https://doi.org/10.3390/ijms232112799

58. Bakiu R., Boldrin F., Pacchini, S., Schumann S., Piva E., Tolomeo A.M., Ferro D., Grapputo A., **Santovito G.***, Irato P. (2022) Molecular Evolution of Metallothioneins of Antarctic Fish: A Physiological Adaptation to Peculiar Seawater Chemical Characteristics, J. Mar. Sci. Eng., 10, 1592. https://doi.org/10.3390/jmse10111592

59. Amelio D., Garofalo F., Brunelli E., **Santovito G.**, Pellegrino D. (2022) Absence of Nitrergic Modulation of Starling Response in Haemoglobin-Less Antarctic Fish *Chionodraco hamatus*. J. Mar. Sci. Eng., 10, 1705. https://doi.org/10.3390/jmse10111705

60. Carlig E., Di Blasi D., Pisano E., Vacchi M., **Santovito G.**, Ghigliotti L. (2022) Ecomorphological Differentiation of Feeding Structures within the Antarctic Fish Species Flock Trematominae (Notothenioidei) from Terra Nova Bay (Ross Sea). J. Mar. Sci. Eng., 10, 1876. https://doi.org/10.3390/jmse10121876

61. Greco S., Gaetano A.S., Furlanis G., Capanni F., Manfrin C., Giulianini P.G., **Santovito G.**, Edomi P., Pallavicini A., Gerdol M. (2022) Gene Expression Profiling of *Trematomus bernacchii* in Response to Thermal and Stabling Stress. Fishes, 7, 387. https://doi.org/10.3390/fishes7060387

62. Greco S., Gaetano A.S., Manfrin C., Capanni F., **Santovito G.**, Pallavicini A., Giulianini P.G., Gerdol M. (2023) The Antarctic Scallop *Adamussium colbecki* Is Unable to Transcriptomically Respond to Captivity and Moderate Thermal Stress. Stresses, 3, 475-487. https://doi.org/10.3390/stresses3020034

63. Pacchini S., Piva E., Schumann S., Irato P., Pellegrino D., **Santovito G.*** (2023) An Experimental Study on Antioxidant Enzyme Gene Expression in *Trematomus newnesi* (Boulenger, 1902) Experimentally Exposed to Perfluoro-octanoic Acid. Antioxidants, 12, 352. https://doi.org/10.3390/antiox12020352

64. Drago L., Perin G., **Santovito G.**, Ballarin L. (2023) The stress granule component TIAR during the non-embryonic development of the colonial ascidian *Botryllus schlosseri*. Fish Shellfish Immunol., 141, 108999. https://doi.org/10.1016/j.fsi.2023.108999

65. Lugaj A., Korro K., Tolomeo A.M., Bakiu R., **Santovito G.** (2023) Possibilities of using mussels (*Mytilus galloprovincialis*) to predict rotavirus contamination in Albania. J. Vet. Res., 67 339-345. https://doi.org/10.2478/jvetres-2023-0053

66. Schumann S., Mozzi G., Piva E., Devigili A., Negrato E., Marion A., Bertotto D., **Santovito G.*** (2023) Social buffering of oxidative stress and cortisol in an endemic cyprinid fish. Sci. Rep., 13 20579. https://doi.org/10.1038/s41598-023-47926-8

67. Schumann S., Bortoletto E., Negrato E., Marion A., **Santovito G.***, Bertotto D. (2024). Fish in the fast lane: the stressful consequences of speeding through a flume. J. Ecohydraul., 1–14. https://doi.org/10.1080/24705357.2024.2363751

68. Schumann S., Negrato E., Piva E., Pietropoli E., Bonato M., Irato P., Marion A., **Santovito G.***, Bertotto D. (2024). Cortisol levels reveal species-specific stress condition in fish from PFAS polluted rivers. Chemosphere, 363, 142925. https://doi.org/10.1016/j.chemosphere.2024.142925

69. Bakiu R., Piva E., Pacchini, S., **Santovito G.** (2024) Antioxidant Systems in Extremophile Marine Fish Species, J. Mar. Sci. Eng., 12, 1280. https://doi.org/10.3390/jmse12081280

70. Tolomeo A.M., Malvicini R., Ventrella D., Elmi A., Lombardi V., Zanella F., Andreis M., De Lazzari G., Todeschini G., Caicci F., Aniballi C., Troisio I., **Santovito G.**, Bacci M.L., Muraca M., Fabozzo A., Gerosa G. (2024) Protective effects of mesenchymal stem cells-derived extracellular vesicles against ischemia-reperfusion injury of hearts donated after circulatory death: Preliminary study in a pig model, Biomed. Pharmacother., 178, 117256. https://doi.org/10.1016/j.biopha.2024.117256

71. Piva E., Nicorelli E., Pacchini S., Schumann S., Drago L., Vanzan G., Tolomeo A.M., Irato P., Bakiu R., Gerdol M., **Santovito G.*** (2024) Unravelling stress granules in the deep cold: Characterisation of TIA-1 gene sequence in Antarctic fish species, Fish Shellfish Immunol., 154, 109903. https://doi.org/10.1016/j.fsi.2024.109903

72. Trentin R., Nai I., Schumann S., **Santovito G.**, Moschin E., Custódio L., Moro I. (2024) Effect of lead on photosynthetic pigments, antioxidant responses, metabolomics, thalli morphology and cell ultrastructure of *Iridaea cordata* (Rhodophyta) from Antarctica.

Comp. Biochem. Physiol. C Toxicol. Pharmacol., 287, 110063. https://doi.org/10.1016/j.cbpc.2024.110063

* corresponding author [e] equally contributed

## Books

1. Poli A., Fabbri E., Agnisola C., Calamita G., **Santovito G.**, Verri T. (2014) Fisiologia Animale, EdiSES, Napoli. ISBN 987-88-7959-817-0

2. **Santovito G.** (2015) Insegnare la biologia ai bambini. Dalla scuola dell'infanzia al primo ciclo d'istruzione, Carocci, Roma. ISBN 978-88-430-7837-0

3. Poli A., Fabbri E., Agnisola C., Calamita G., **Santovito G.**, Verri T. (2018) Fisiologia Animale, Seconda Edizione, EdiSES, Napoli. 987-88-7959-902-3

## Full papers in international books and journals without impact factor

1. Irato P., Cassini A., **Santovito G.**, Cattalini F., Albergoni V. (2001) Metallothionein and glutathione as stress indicators in bivalves in the Lagoon of Venice. In: Faranda F.M., Guglielmo L., Spezie G. (Eds), Mediterranean ecosystems: structures and processes, Springer Verlag Italia, Chapter 11, pp. 85-89.

2. Albergoni V., Cassini A., Irato P., **Santovito G.** (2002) Valutazione di parametri ecotossicologici in molluschi della laguna di Venezia: metallotioneine, glutatione ed enzimi antiossidanti. Biol. Mar. Medit., 8, 497-503.

3. **Santovito G.**, Piccinni E., Irato P. (2008) An Improved method for rapid determination of the reduced and oxidized states of metallothioneins in biological samples. In: Hofer T.N. (Ed), Marine Pollution: New Research, Nova Science Publishers Inc., New York, USA, Ch. 3, pp. 101-124.

4. Filippin L., Tonon E., Forte V., Zottini M., **Santovito G.**, Borgo M, Angelini E. (2009) Genetic polymorphism of stolbur phytoplasma in grapevine, wild plants and insects. Le progrès Agricole et Viticole, hors série, spécial Congrès ICVG, 139-140.

5. Camerin M., Soncin M., Piccinni E., Irato P., Boldrin F., Guidolin L., Jori G, **Santovito G.** (2011) Gene expression profile in murine 3T3 fibroblasts photosensitised by a tetracationic porphyrin. For. Immunopathol. Dis. Therap. 2, 227-236. https://doi.org/10.1615/ForumImmunDisTher.2011004397

6. **Santovito G.**, Piccinni E., Irato P. (2012) An Improved method for rapid determination of the reduced and oxidized states of metallothioneins in biological samples. In: Melekhin D.S., Dolukhanov M.F. (Eds), Environmental Research Summaries: Volume 2, Nova Science Publishers Inc., New York, USA, pp. 287-288.

7. Bakiu R., **Santovito G.**, Hoda A., Shehu J., Durmishaj S., Irato P., Piccinni E. (2013) Metallothionein (MT): a good biomarker in marine sentinel species like sea bream (*Sparus aurata*). Albanian J. Agric. Sci., 12, 247-253.

8. Gaiotto A., Tonon S., **Santovito G.** (2013) The scientific method in the teaching of life sciences in primary school. The plants and their seasonal changes. EDULEARN13 Proceedings, IATED, Valencia, ISBN: 978-84-616-3822-2, pp. 4226-4235.

9. Tonon S., Gaiotto A., **Santovito G.** (2013) The active teaching of life sciences in primary school: a comparative approach to the musculoskeletal system EDULEARN13 Proceedings, IATED, Valencia, ISBN: 978-84-616-3822-2, pp. 4289-4298.

10. Zandonella Necca I., Tamino G., **Santovito G.** (2014) Sustainable food: an educational proposal, for key stage 3 in secondary schools, based on the assessment for learning method. EDULEARN14 Proceedings, IATED, Valencia, ISBN: 978-84-617-0557-3, pp 7348-7356.

11. Pavan C., **Santovito G.** (2014) The laboratory didactics in the teaching -learning processes of life sciences. an educational project on microorganisms in the alimentation in primary school. EDULEARN14 Proceedings, IATED, Valencia, ISBN: 978-84-617-0557-3, pp 7546-7555.

12. Trevisan T., **Santovito G.** (2015) Teaching evolution: a laboratory approach. EDULEARN15 Proceedings, IATED, Valencia, ISBN: 978-84-606-8243-1, pp 2234-2244.

13. Toninato V., **Santovito G.** (2015) The laboratory didactics in the teaching-learning processes of life sciences. an educational project on the structure of the flower and the inflorescences phenomenon in primary school. EDULEARN15 Proceedings, IATED, Valencia, ISBN: 978-84-606-8243-1, pp 2245-2254.

14. Gaiotto A., **Santovito G.** (2016) An innovative didactic approach to the study of invertebrate animals in primary school. EDULEARN16 Proceedings, IATED, Valencia, ISBN: 978-84-608-8860-4, pp 1410-1418. https://doi.org/10.21125/edulearn.2016.1284

15. Rossi E., **Santovito G.** (2016) Introduction to Mendelian genetics in primary school. EDULEARN16 Proceedings, IATED, Valencia, ISBN: 978-84-608-8860-4, pp 1374-1382. https://doi.org/10.21125/edulearn.2016.1274

16. Lago A., Masiero S., Bramuzzo S., Callegaro E., Poloni E., Corrà F., **Santovito G.** (2017) Exploring microbiology and biotechnologies: a laboratory approach to the study of yeasts and bacteria in primary school. INTED2017 Proceedings, IATED, Valencia, ISBN: 978-84-617-8491-2, pp 4110-4120. https://doi.org/10.21125/inted.2017.0992

17. Capparotto A., Bramuzzo S., Callegaro E., Poloni E., Corrà F., **Santovito G.** (2017) The didactics of biology in primary school: an innovative approach to skeletal system teaching in fifth class based on comparative vertebrate anatomy. INTED2017 Proceedings, IATED, Valencia, ISBN: 978-84-617-8491-2, pp 3831-3839. https://doi.org/10.21125/inted.2017.0935

18. Favaron A., Ancona E., Bramuzzo S., Callegaro E., Guidolin L., Irato P., **Santovito G.** (2017) An innovative teaching approach to circulatory and skeletal systems based on comparative vertebrate anatomy and physiology. EDULEARN17 Proceedings, IATED, Valencia, ISBN: 978-84-697-3777-4, pp 60-67. https://doi.org/10.21125/edulearn.2017.1015

19. Meneghetti G, Bramuzzo S., Callegaro E., Guidolin L., Irato P., **Santovito G.** (2017) The kingdom of fungi in primary school: an educational research in biology field. EDULEARN17 Proceedings, IATED, Valencia, ISBN: 978-84-697-3777-4, pp 102-110. https://doi.org/10.21125/edulearn.2017.1023

20. **Santovito G.** (2017) New frontiers in the microbiological research of extreme marine environments: the antioxidant system of Antarctic protozoa. J. Mar. Microbiol., 1, 1-2.

21. Grando G., Bramuzzo S., Irato P., Guidolin L., Ferrari L., **Santovito G.** (2018) Introduction to the world of insects: a didactic research in kindergarten. INTED2018 Proceedings, IATED, Valencia, ISBN: 978-84-697-9480-7, pp 404-412. https://doi.org/10.21125/inted.2018.1066

22. Tura N., Guidolin L., Irato P., **Santovito G.** (2018) From cell to inheritance of characters: an introduction to classical genetics in primary school. INTED2018 Proceedings, IATED, Valencia, ISBN: 978-84-697-9480-7, pp 439-447. https://doi.org/10.21125/inted.2018.1076

23. Fassinato C., Nicorelli E., Corrà F., Irato P., Guidolin L., **Santovito G.** (2018) An innovative approach to deal with biodiversity at school with its investigation in different environments. EDULEARN18 Proceedings, IATED, Valencia, ISBN: 978-84-09-02709-5, pp 2671-2678. https://doi.org/10.21125/edulearn.2018.0717

24. Grando G, Bramuzzo S., Callegaro E., Guidolin L., Irato P., **Santovito G.** (2018) Who is afraid of insects? A didactic research in the biological field in kindergarten. EDULEARN18 Proceedings, IATED, Valencia, ISBN: 978-84-09-02709-5, pp 2712-2720. https://doi.org/10.21125/edulearn.2018.0724

25. Forlin E., **Santovito G.**, Guidolin L., Irato P. (2018) Citrus fruits. Course to educate to scientific curiosity. EDULEARN18 Proceedings, IATED, Valencia, ISBN: 978-84-09-02709-5, pp 6604-6611. https://doi.org/10.21125/edulearn.2018.1573

26. Barbacovi V., **Santovito G.**, Irato P. (2018) Little scientists for large discoveries: an experimental approach to survey the world with classes ii of the primary school - The observation and study of plant life. EDULEARN18 Proceedings, IATED, Valencia, ISBN: 978-84-09-02709-5, pp 6641-6648. https://doi.org/10.21125/edulearn.2018.1579

27. Gallina S., Irato P., **Santovito G.** (2019) Inquiry into animal tracks: an experimental application of IBSE -inquiry based science education- approach in the ecological field in primary school. INTED2019 Proceedings, IATED, Valencia, ISBN: 978-84-09-08619-1, pp 186-195. https://doi.org/10.21125/inted.2019.0089

28. Chiesa E., Irato P., **Santovito G.** (2019) The circulatory system of vertebrates and invertebrates: an empirical research to introduce in the fourth class the treatment of animal

morphology in a comparative key. INTED2019 Proceedings, IATED, Valencia, ISBN: 978-84-09-08619-1, pp 1210-1219. https://doi.org/10.21125/inted.2019.0391

29. Palmieri G., Irato P., Nicolosi P., **Santovito G.** (2019) A day at the museum. Laboratory teaching in the Museum of Zoology at the University of Padua for primary school. EDULEARN19 Proceedings, IATED, Valencia, ISBN: 978-84-09-12031-4, pp 4089-4097. https://doi.org/10.21125/edulearn.2019.1037

30. Lui F., Irato P., **Santovito G.** (2019) Discovering living organisms: a didactic research to introduce biology in kindergarten. EDULEARN19 Proceedings, IATED, Valencia, ISBN: 978-84-09-12031-4, pp. 4108-4117. https://doi.org/10.21125/edulearn.2019.1040

31. Tonon S., Bisaccia P., Bonato M., Irato P., Corrà F., **Santovito G.** (2020) A comparative approach to the musculoskeletal system in primary school. INTCESS2020 Proceedings, OCERINT, Istanbul, ISBN: 978-605-82433-8-5, pp. 251-260.

32. Gaiotto A., Bisaccia P., Bonato M., Irato P., Corrà F**., Santovito G.** (2020) The plants and their seasonal changes: teaching biology in primary school using the scientific method. INTCESS2020 Proceedings, OCERINT, Istanbul, ISBN: 978-605-82433-8-5, pp. 261-270.

33. Corbolino N., Bisaccia P., Corrà F., Bonato M., Irato P., **Santovito G.** (2020) The vegetable garden. an instrument for sustainable development education and care pedagogy. INTED2020 Proceedings, IATED, Valencia, ISBN: 978-84-09-17939-8, pp. 4618-4626. https://doi.org/10.21125/inted.2020.1282

34. Zanata M., **Santovito G.** (2020) The "Da Vinci" Biodiversity Park (Treviso, Italy). A didactic garden as innovative support to the teaching of science in secondary school. INTED2020 Proceedings, IATED, Valencia, ISBN: 978-84-09-17939-8, pp. 5460-5469. https://doi.org/10.21125/inted.2020.1474

35. Bortolami I., Bisaccia P., Corrà F., Bonato M., Irato P., **Santovito G.** (2020) The blue gold: an empirical research to introduce the discussion of water issue in relation to plants, animals and human in primary school. EDULEARN20 Proceedings, IATED, Valencia, ISBN: 978-84-09-17979-4, pp 1518-1527. https://doi.org/10.21125/edulearn.2020.0496

36. Fabris G., Bisaccia P., Corrà F., Bonato M., Irato P., **Santovito G.** (2020) Discovering the nervous system. An innovative teaching approach for primary school. EDULEARN20 Proceedings, IATED, Valencia, ISBN: 978-84-09-17979-4, pp 2969-2977. https://doi.org/10.21125/edulearn.2020.0889

37. Tonon S., Bisaccia P., Bonato M., Irato P., Corrà F., **Santovito G.** (2020) A comparative approach to the vertebrate musculoskeletal system in primary school. Int. E-J. Adv. Educ., 6, 210-219. https://doi.org/10.18768/ijaedu.789414

38. Gaiotto A., Bisaccia P., Bonato M., Irato P., Corrà F., **Santovito G.** (2020) Plants and their seasonal changes: teaching biology in primary school using the scientific method. Int. E-J. Adv. Educ., 6, 228-237. https://doi.org/10.18768/ijaedu.789427

39. Pavan C., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., **Santovito G.** (2021) Microorganisms in the alimentation in primary school: the laboratory didactics in the teaching - learning processes of life sciences. INTCESS2021 Proceedings, OCERINT, Istanbul, ISBN: 978-605-06286-1-6, pp. 715-724. https://doi.org/10.51508/intcess.202176

40. Zandonella Necca I., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., Tamino G., **Santovito G.** (2021) Sustainable food: an innovative approach based on the assessment for learning method in secondary schools. INTCESS2021 Proceedings, OCERINT, Istanbul, ISBN: 978-605-06286-1-6, pp. 725-733. https://doi.org/10.51508/intcess.202177

41. Furlanetto L., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., **Santovito G.** (2021) The circle of life. Human reproduction and embryonic development in primary school. INTED2021 Proceedings, IATED, Valencia, ISBN: 978-84-09-27666-0, pp. 909-917. https://doi.org/10.21125/inted.2021.0209

42. Barana C., Dall'Acqua d'Industria L., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., **Santovito G.** (2021) "Teacher, may we touch it?" An innovative laboratory approach to address macroscopic and microscopic anatomy of the digestive system of human and mammals in primary school. INTED2021 Proceedings, IATED, Valencia, ISBN: 978-84-09-27666-0, pp. 918-927. https://doi.org/10.21125/inted.2021.0210

43. Pavan C., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., **Santovito G.** (2021) Microorganisms in the alimentation: the laboratory didactics in the teaching - learning processes of life sciences in primary school. Int. E-J. Adv. Educ., 7, 13-21. https://doi.org/10.18768/ijaedu.875608

44. Zandonella Necca I., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., Tamino G., **Santovito G.** (2021) Sustainable food: an innovative educational approach in secondary schools based on the assessment for learning method. Int. E-J. Adv. Educ., 7, 48-57. https://doi.org/10.18768/ijaedu.875627

45. Bertoncello O., De Rosso A., **Santovito G.** (2021) My classroom as big as the world of CAITPR. An innovative educational-didactic approach for the training of eco-sensitive citizens. EDULEARN21 Proceedings, IATED, Valencia, ISBN: 978-84-09-31267-2, pp 1559-1568. https://doi.org/10.21125/edulearn.2021.0372

46. Furlan S., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., Tamino G., **Santovito G.** (2021) A, B, C, D… NA: Genetics explained to children. an innovative didactic and laboratory proposal in primary school. EDULEARN21 Proceedings, IATED, Valencia, ISBN: 978-84-09-31267-2, pp 6012-6021. https://doi.org/10.21125/edulearn.2021.1216

47. Frigerio R., Bellio M., Bonato M., **Santovito G.**, Irato P. (2021) Fruit and vegetables: discovering conscious food choices. Creation of an educational project to stimulate the study of science in a class ii of a lower secondary school. EDULEARN21 Proceedings, IATED, Valencia, ISBN: 978-84-09-31267-2, pp 6547-6555. https://doi.org/10.21125/edulearn.2021.1329

48. Bassi C., Fattori G., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., **Santovito G.** (2021) Feel with the skin. A didactic research to introduce the integumentary system and

sensory perception in primary school. EDULEARN21 Proceedings, IATED, Valencia, ISBN: 978-84-09-31267-2, pp 6693-6702. https://doi.org/10.21125/edulearn.2021.1352

49 Lago A., Masiero S., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) Bacteria and yeasts in primary school: a laboratory approach to the study of microbiology and biotechnologies. INTCESS2022 Proceedings, OCERINT, Istanbul, ISBN: 978-605-06286-4-7, pp. 159-169. https://doi.org/10.51508/intcess.202222

50. Massaro B., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) What is essential is invisible to eye. A didactic research on microbiology and health education in third grade of primary school through playing and laboratory approach. INTCESS2022 Proceedings, OCERINT, Istanbul, ISBN: 978-605-06286-4-7, pp. 170-180. https://doi.org/10.51508/intcess.202223

51. Serato S., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) The didactic approach of the educational resource e-Bug in the topics of microbiology and health education in primary school. INTED2022 Proceedings, IATED, Valencia, ISBN: 978-84-09-37758-9, pp. 5010-5019. https://doi.org/10.21125/inted.2022.1317

52. Gaiotto A., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) An innovative didactic approach to study porifera, annelida and mollusca in primary school. INTED2022 Proceedings, IATED, Valencia, ISBN: 978-84-09-37758-9, pp. 5030-5039. https://doi.org/10.21125/inted.2022.1319

53. Cazzador N., Dal Maso S., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) The school meets its environment. Discovering the Venice Lagoon. EDULEARN22 Proceedings, IATED, Valencia, ISBN: 978-84-09-42484-9, pp. 2086-2094. https://doi.org/10.21125/edulearn.2022.0546

54. Masiero S., Lago A., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) Microrganisms in primary school: a laboratory approach to study microbiology and biotechnologies. EDULEARN22 Proceedings, IATED, Valencia, ISBN: 978-84-09-42484-9, pp. 2095-2104. https://doi.org/10.21125/edulearn.2022.0547

55. Bolzon F., Bellio M., Pietropoli E., **Santovito G.**, Irato P., (2022) Microrganisms in primary school: a laboratory approach to study microbiology and biotechnologies. EDULEARN22 Proceedings, IATED, Valencia, ISBN: 978-84-09-42484-9, pp. 5846-5854. https://doi.org/10.21125/edulearn.2022.1368

56. De Rossi M., Bellio M., Pietropoli E., Piva E., **Santovito G.**, Schumann S., Irato P. (2022) An investigation on the positive aspects of the contact with nature in developing-age children. A review of formal and non-formal educational realities in the veneto region. EDULEARN22 Proceedings, IATED, Valencia, ISBN: 978-84-09-42484-9, pp. 5879-5887. https://doi.org/10.21125/edulearn.2022.1377

57. Massaro B., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) What is essential is invisible to eye: a didactic research on microbiology and health education in third grade of primary school through playing and laboratory approach. Int. E-J. Adv. Educ., 8, 92-101. https://doi.org/10.18768/ijaedu.1067957

58. Lago A., Masiero S., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) Bacteria and yeasts in primary school: a laboratory approach to the study of microbiology and biotechnologies. Int. E-J. Adv. Educ., 8, 163-171. https://doi.org/10.18768/ijaedu.1067951

59. Toninato V., Schumann S., Piva E., Pacchini S., Irato P., **Santovito G.** (2023) The structure of the flower and the inflorescences phenomenon in primary school. INTCESS2023 Proceedings, OCERINT, Istanbul, ISBN: 978-605-72065-0-3, pp. 170-179. https://doi.org/10.51508/intcess.202331

60. Trevisan T., Piva E., Schumann S., Pacchini S., Irato P., Santovito G. (2023) Teaching evolution with the laboratory approach. INTCESS2023 Proceedings, OCERINT, Istanbul, ISBN: 978-605-72065-0-3, pp. 180-190. https://doi.org/10.51508/intcess.202332

61. Masiero G., Bellio M., Schumann S., Piva E., Pacchini S., Irato P., Bramuzzo S., **Santovito G.** (2023) Parasitic arthropods: a common feature of humans, other animals and plants. INTED2023 Proceedings, IATED, Valencia, ISBN: 978-84-09-49026-4, pp. 2651-2659. https://doi.org/10.21125/inted.2023.0744

62. Rossi E., Bellio M., Piva E., Schumann S., Pacchini S., Irato P., Bramuzzo S., **Santovito G.** (2023) Fruitfly to introduce the mendelian genetics in primary school. INTED2023 Proceedings, IATED, Valencia, ISBN: 978-84-09-49026-4, pp. 2668-2676R. https://doi.org/10.21125/inted.2023.0747

63. Massignani M., Pacchini S., Piva E., Schumann S., **Santovito G.**, Irato P. (2023) How to be “acrobats of time”: teaching climate change to primary students. EDULEARN23 Proceedings, IATED, Valencia, ISBN: 978-84-09-52151-7, pp. 4240-4247. https://doi.org/10.21125/edulearn.2023.1124

64. Tonon B., Massignani M., Pacchini S., Piva E., Schumann S., **Santovito G.**, Irato P. (2023) The classification of the animal kingdom. A guided didactic path to discover systematics starting from spontaneous hypotheses. EDULEARN23 Proceedings, IATED, Valencia, ISBN: 978-84-09-52151-7, pp. 4295-4302. https://doi.org/10.21125/edulearn.2023.1133

65. Bertoncello O., Sartor D., Simonetto R., Battistella L., Daniel M., Bragagnolo P., Martinello S., **Santovito G.** (2023) Green centre for an ecology of environment, mind and community. EDULEARN23 Proceedings, IATED, Valencia, ISBN: 978-84-09-52151-7, pp. 4713-4721. https://doi.org/10.21125/edulearn.2023.1251

66. Massarin G., Vecchiato S., Piva E., Pacchini S., Schumann S., Bellio M., Irato P., **Santovito G.** (2023) Crustaceans, molluscs and their involvement in marine water pollution: an experimental educational project to involve the primary school in current environmental issues. EDULEARN23 Proceedings, IATED, Valencia, ISBN: 978-84-09-52151-7, pp. 4871-4880. https://doi.org/10.21125/edulearn.2023.1292

67. Dal Pozzo G., Pacchini S., Piva E., Schumann S., **Santovito G.**, Irato P. (2023) Knowing to respect: a sensitization path towards animals in a didactic intervention in primary school. ICERI2023 Proceedings, IATED, Valencia, ISBN: 978-84-09-55942-8, pp. 8337-8342. https://doi.org/10.21125/iceri.2023.2135

68. Pasquetto M., Pietropoli E., **Santovito G.**, Irato P. (2023) Science and school in continuous evolution: how the teaching of science in primary school is changing. ICERI2023 Proceedings, IATED, Valencia, ISBN: 978-84-09-55942-8, pp. 8353-8361. https://doi.org/10.21125/iceri.2023.2137

69. Giantin S., Papa R., Pacchini S., Piva E., Schumann S., Irato P., **Santovito G.** (2024) Cultivating biodiversity: an experimental educational project in the ecological field. INTCESS2024 Proceedings, OCERINT, Istanbul, ISBN: 978-605-72065-5-8, pp. 18-27. https://doi.org/10.5281/zenodo.10464621

70. Secco G., Stefani L., Piva E., Pacchini S., Schumann S., Irato P., **Santovito G.** (2024) A meal that counts! How proper food education can decrease food waste in school canteens. INTCESS2024 Proceedings, OCERINT, Istanbul, ISBN: 978-605-72065-5-8, pp. 28-37. https://doi.org/10.5281/zenodo.10464701

71. Puller E., Veronese G., Pacchini S., Piva E., Schumann S., Vanzan G., Irato P., **Santovito G.** (2024) Discovering insects to overcome stereotypes. A didactic research in biology education in kindergarten. INTED2024 Proceedings, IATED, Valencia, ISBN: 978-84-09-59215-9, pp. 7850-7859. https://doi.org/10.21125/inted.2024.2120

72. Morello M., Piva E., Pacchini S., Schumann S., Vanzan G., Irato P., **Santovito G.** (2024) Educate about the richness of biodiversity. Using the square technique to discover the ecological value of biological variety in an outdoor school. INTED2024 Proceedings, IATED, Valencia, ISBN: 978-84-09-59215-9, pp. 7860-7869. https://doi.org/10.21125/inted.2024.2121

73. Schumann S., Negrato E., Marion A., **Santovito G.**, Bertotto D. (2023) Stress evaluation using physiological biomarkers on fish tested in the hydraulic facility. In: Kalinowska M.B., Mrokowska M.M., Rowiński P.M. (Eds), Advances in Hydraulic Research, GeoPlanet: Earth and Planetary Sciences, Springer Nature, Switzerland, ISBN: 978-3-031-56092-7, pp. 353-362. https://doi.org/10.1007/978-3-031-56093-4_28

74. De Faveri F., Pacchini S., Piva E., Schumann S., Vanzan G., **Santovito G.**, Irato P. (2024) The world of fish “a disciplinary path to discover fish migrations through playful workshop methodologies in primary school”. EDULEARN24 Proceedings, IATED, Valencia, ISBN: 978-84-09-62938-1, pp. 2216-2223. https://doi.org/10.21125/edulearn.2024.0624

75. Dal Pozzo G., Visentin A., **Santovito G.**, Irato P. (2024). The environment that educates us: a survey of environmental education practices at primary school. EDULEARN24 Proceedings, IATED, Valencia, ISBN: 978-84-09-62938-1, pp. 2713-2718. https://doi.org/10.21125/edulearn.2024.0740

76. Burattin C., Piva E., Pacchini S., Vanzan G., Schumann S., Irato P., **Santovito G.** (2024). The digestive system through children's eyes. an educational experiment on the treatment of the digestive system with laboratory modalities in the perspective of lifelong learning. EDULEARN24 Proceedings, IATED, Valencia, ISBN: 978-84-09-62938-1, pp. 3835-3845. https://doi.org/10.21125/edulearn.2024.0978

77. Bertoncello O., Moretto E., Battistella P., De Rosso A., Franceschin M., Guerra I., Tabone S., Zanatta M.T., Ballarin L., **Santovito G.** (2024) Co-designing museum itineraries in a steam perspective for kindergarten and primary school children: an experience at Micromegamondo in Padova. EDULEARN24 Proceedings, IATED, Valencia, ISBN: 978-84-09-62938-1, pp. 3835-3845. https://doi.org/10.21125/edulearn.2024.0988

**Other full papers**

1. Giambartolomei F., **Santovito G.**, Bisol P.M., Cassini A., Albergoni V. (1994). Accumulo di metalli pesanti in diverse forme genotipiche di *Cerastoderma glaucum* (Mollusca: Bivalvia). Atti del XI Congresso Nazionale Associazione Italiana di Oceanologia e Limnologia, Sorrento, 26-28 ottobre. A cura di G. Albertelli, A. De Maio e M. Piccazzo, pp. 373-383.

2. Favero M., **Santovito G.**, Cassini A. (1995). Heavy metals in different organs of a bivalve mollusc (*Cerastoderma glaucum*) exposed to nickel. Proceeding of the 10th International Conference on Heavy Metals in the Environment, Hamburg, vol. 1, pp. 137-140.

3. **Santovito G.**, Favero M., Cassini A., Albergoni V. (1995). Metalli pesanti in crostacei della Laguna di Venezia. S.It.E./Atti 16. A cura di O. Ravera e A. Anelli, Edizioni Zara, Parma pp. 127-129.

4. **Santovito G.**, Favero M., Cassini A., Albergoni V. (1995). Metalli pesanti nella ghiandola digestiva e nelle branchie di *Cerastoderma glaucum* (Mollusca, Bivalvia) della Laguna di Venezia. S.It.E./Atti 16. A cura di O. Ravera e A. Anelli, Edizioni Zara, Parma pp. 123-125.

5. Albergoni V., Cassini A., Coppellotti O., Favero M., Favero N., Irato P., Piccinni E., **Santovito G.** (1996). Physiological and biochemical aspects of adaptation to dissolved oxygen increase and heavy metal contamination. Proceedings of the Third Meeting on Antarctic Biology. Santa Margherita Ligure, December 13-15, 1996. G. Di Prisco, S. Focardi, P. Luporini, Eds. Camerino University Press, pp. 221-231.

6. Favero M., **Santovito G.**, Cassini A. (2000). Superossido dismutasi in molluschi della Laguna di Venezia. In La ricerca scientifica per Venezia: il Progetto Sistema Lagunare Veneziano, Istituto Veneto di Scienze, Lettere ed Arti, Venezia, Vol. II, Tomo I, pp. 479-484.

7. Gallina S., **Santovito G.** (2019). Applicazione sperimentale dell'approccio IBSE in ambito ecologico nella scuola primaria. L'insegnamento della matematica e delle scienze integrate, 42A, 489-516.

8. **Santovito G.** (2020). Effetti biologici dei cambiamenti climatici: la ricerca scientifica in Antartide. Atti della V edizione del Forum del Dialogo, San Marino, 23-25 Ottobre, 2020, pp. 40-44.

9. Arces A., Ferronato O., **Santovito G.**, Vicari S., Zanata M. (2021). Esperienze di didattica delle scienze tra citizen science, student voice e peer tutoring. Idee in form@zione. Il

valore educativo delle discipline, Anno 10, numero 9, 79-115. https://doi.org/10.4399/97888255403145

10. Irato P., **Santovito G.** (2021) Enzymatic and non-enzymatic molecules with antioxidant function. Antioxidants, 10, 579. https://doi.org/10.3390/antiox10040579

11. Bertoncello O., De Rosso A., **Santovito G.** (2023) La mia aula grande come il mondo del CAITPR. Un innovativo approccio educativo-didattico per la formazione di cittadini eco-sensibili. In: Cossu C., Lonigro M., Maiorana F. (Eds), Le STEM nella Rete Scientix Italia. Raccolta di Esperienze Scuola dell'Infanzia Scuola Primaria, INDIRE, ISBN: 979-12-80706-45-4, pp. 25-32.

## Patents

1. Boldrin F., **Santovito G.**, Wloga D., Cassidy-Hanley D., Clark T.G., Gaertig J, Piccinni E. (2005). MTT2 promoter and methods of use. 60/668,930 USA provisional patent.

## Abstracts and congresses

1. **Santovito G.**, Favero M., Cassini A., Albergoni V. (1995). Metalli pesanti in crostacei della Laguna di Venezia. Atti del 6° congresso nazionale della Società Italiana di Ecologia, Venezia, 26-29 settembre 1994.

2. **Santovito G.**, Favero M., Cassini A., Albergoni V. (1995). Metalli pesanti nella ghiandola digestiva e nelle branchie di *Cerastoderma glaucum* (Mollusca, Bivalvia) della Laguna di Venezia. Atti del 6° congresso nazionale della Società Italianadi Ecologia, Venezia, 26-29 settembre 1994.

3. Cassini A., Irato P., **Santovito G.**, Cattalini F., Albergoni V. (1998). Metalli nella laguna di Venezia: utilità degli organismi bentonici nella valutazione dell'inquinamento ambientale. Atti del 1° Convegno Nazionale delle Scienze del Mare "Diversità e Cambiamento", Ischia, 11-14 novembre 1998.

4. Irato P., Cassini A., **Santovito G.**, Cattalini F., Albergoni V. (1998). Valutazione dell'effetto di alcune condizioni di stress ambientale su bivalvi della laguna di Venezia. Atti del 1° Convegno Nazionale delle Scienze del Mare "Diversità e Cambiamento", 11-14 novembre 1998.

5. Botto M., **Santovito G.**, Irato P., Piccinni E. (1999). Interaction of metals and MT expression in *Tetrahymena pigmentosa*. J. Euk. Microbiol., 46, 18A.

6. Bertaggia D., Kraev A., **Santovito G.**, Piccinni E. (1999). Molecular cloning and expression of Cd-MT gene in *Tetrahymena pyriformis*. J. Euk. Microbiol., 46, 18A.

7. Botto M., Irato P., **Santovito G.**, Piccinni E. (2000). Cu accumulation and Cu-MT induction in *Tetrahymena pigmentosa*. J. Euk. Microbiol., 47, 15A.

8. **Santovito G.**, Irato P., Piccinni E., Albergoni V. (2000). Molecole chelanti ed enzimi antiossidanti in pesci antartici. Atti del 61° Congresso Nazionale Unione Zoologica Italiana, S. Benedetto del Tronto, 24-28 settembre 2000, p. 113.

9. Irato P., **Santovito G.**, Botto M. & Piccinni E. (2000). Differenze strutturali di metallotioneine a rame e cadmio in *Tetrahymena*. Atti del 61° Congresso Nazionale Unione Zoologica Italiana. S. Benedetto del Tronto, 24-28 settembre 2000, p. 33.

10. Irato P., **Santovito G.**, Palermo S., Boldrin F., Albergoni V. (2001). Metal accumulation and binding protein induction in three bivalve molluscs from the lagoon of Venice. FESTEM 1st International Congress on Trace Elements and Minerals in Medicine and Biology. 16-19 may 2001, Venezia, P.3.35, 195.

11. Buttignoni S., Irato P., **Santovito G.**, Boldrin F., Palermo S., Albergoni V. (2001). Copper treatment in *Tapes philippinarum*: metal accumulation and chelator induction. FESTEM 1st International Congress on Trace Elements and Minerals in Medicine and. May 16-19, Venezia. (pp. 194).

12. **Santovito G.**, Irato P., Albergoni V., Piccinni E. (2001). cDNA cloning of a novel copper-metallothionein. Proceedings of XI International Congress of Protozoology, Salzburg, Austria, 15-19 July 2001, p. 31.

13. Irato P., **Santovito G.**, Palermo S., Piccinni E. (2001). Regulation and expression of *Tetrahymena pigmentosa* Cu-MT. Proceedings of XI International Congress of Protozoology, Salzburg, Austria, 15-19 July 2001, p. 53.

14. Boldrin F., Irato P., **Santovito G.**, Albergoni V., Piccinni E. (2001). Metal accumulation and MT induction in *Tetrahymena pigmentosa* treated with both cadmium and copper. Proceedings of XI International Congress of Protozoology, Salzburg, Austria, 15-19 July 2001, p. 55.

15. Barbaro B., Mauceri A., **Santovito G.**, Irato P., Lauriano E.R., Parrino V., Fasulo S. (2001). Le metallotioneine: bioindicatori di metalli pesanti in organi di mugilidi viventi in ambienti naturali confinati. Atti del 62° Congresso Nazionale Unione Zoologica Italiana, San Remo, 23-27 settembre 2001, p. 134.

16. **Santovito G.**, Fassina D., Irato P., Piccinni E., Albergoni V. (2001). Effetti dell'esposizione a cadmio e rame in teleostei antartici: *Trematomus bernacchii* e *Trematomus newnesi*. Atti del 62° Congresso Nazionale Unione Zoologica Italiana, San Remo, 23-27 settembre 2001, p. 135.

17. Boldrin F., Furlan P., **Santovito G.**, Piccinni E. (2002). Interazione tra metalli e regolazione genica delle metallotioneine in *Tetrahymena pigmentosa*. Atti del 63° Congresso Nazionale Unione Zoologica Italiana, Rende, 22-26 settembre 2002, p. 126.

18. Mauceri A., Fasulo S., Parrino V., Genovese L., Piccinni E., Furlan P., **Santovito G.**, Irato P. (2002). Determinazione del contenuto di metallotioneine e glutatione come indicatore biologico di stress in Liza aurata esposta sperimentalmente a metalli pesanti. Atti del 63° Congresso Nazionale Unione Zoologica Italiana, Rende, 22-26 settembre 2002, p. 128.

19. **Santovito G.**, Fassina D., Disertori X., Irato P., Piccinni E., Albergoni V. (2002). Risposte fisiologiche a stress ossidativi indotto da rame in teleostei antartici. Atti del 63° Congresso Nazionale Unione Zoologica Italiana, Rende, 22-26 settembre 2002, p. 129.

20. Corsi I., Bonacci S., **Santovito G.**, Chiantore M., Castagnolo L., Focardi S. (2002) Preliminary investigation on cholinesterases activity and gonadal histology in *Adamussium colbecki* from Terra Nova Bay: field and laboratory study. Atti del 3° Convegno Nazionale sulle Scienze del Mare "Ambienti estremi e aree di transizione", Bari, 27-30 novembre 2002.

21. **Santovito G.**, Fassina D., Irato P., Piccinni E., Albergoni V. (2003). Effects of cadmium and copper exposure in antarctic teleosts: *Trematomus bernacchii* and *Trematomus newnesi*. Pflugers Arc. – Eur. J. Physiol, 445: R44. https://doi.org/10.1007/s00424-002-1006-7

22. Bonacci S., Corsi I., **Santovito G.**, Chiantore M., Castagnolo L., Focardi S. (2003) Colinesterases activity in Atarctic scallop *Aamussium colbecki*: background levels and sensitivity to pollutants. Proceedings of 13th Annual Meeting SETAC Europe, Hamburg, Germany, 7 April - 1 May 2003.

23. Boldrin F., **Santovito G.**, Piccinni E. (2003) Identification of a novel copper-metallothionein in *Tetrahymena thermophila*. Proceedings of the Xth International Meeting on Ciliate Molecular Biology (FASEB Summer Research Conferences), Saxtons River, Vermont, 19-24 July 2003.

24. **Santovito G.**, Coppellotti O., Piccinni E., Cassini A. (2003). Antioxidant responses to alterated $pO_2$ and cadmium exposure on *Euplotes rariseta*, Anctarctic and sub-Antarctic populations. Proceedings of 4th Europen Congress of Protistology and 10th European Conference on Ciliate Biology, San Benedetto del Tronto, Italy, 31 august - 4 september 2003, p. 94.

25. Boldrin F., **Santovito G.**, Piccinni E. (2003) Identification of a novel copper-metallothionein in *Tetrahymena thermophila*. Proceedings of 4th Europen Congress of Protistology and 10th European Conference on Ciliate Biology, San Benedetto del Tronto, Italy, 31 august - 4 september 2003, p. 87.

26. Boldrin F., **Santovito G.**, Piccinni E. (2003). Identities and differences of *Tetrahymena* metallothioneins: evolutionary relationships. Proceedings of 4th Europen Congress of Protistology and 10th European Conference on Ciliate Biology, San Benedetto del Tronto, Italy, 31 august - 4 september 2003, p. 40.

27. **Santovito G.**, Piccinni E., Albergoni V., Cassini A. (2003). Evoluzione molecolare della superossido dismutasi a rame/zinco nei teleostei antartici *Trematomus bernacchii* e *Chionodraco hamatus*. Atti del 64° Congresso Nazionale Unione Zoologica Italiana, Varese, 21-25 settembre 2003, p. 106.

28. **Santovito G.**, Irato P., Piccinni E., Albergoni V. (2003). Induzione di molecole chelanti nelle branchie di *Mytilus galloprovincialis* come risposta fisiologica a mutate condizioni ambientali. Atti del 64° Congresso Nazionale Unione Zoologica Italiana, Varese, 21-25 settembre 2003, p. 124.

29. Boldrin F., **Santovito G.**, Piccinni E. (2003). Identificazione di una nuova metallotioneina a rame in *Tetrahymena thermophila*. Atti del 64° Congresso Nazionale Unione Zoologica Italiana, Varese, 21-25 settembre 2003, p. 187.

30. Bonacci S., Romani R., Corsi I., Hagger J.A., Browne M.A., Dissanayake A., Incocca A., **Santovito G.**, Galloway T.S., Rosi G., Focardi S. (2004) Colinesterases activity in Atarctic scallop *Aamussium colbecki*: background levels and sensitivity to pollutants. Proceedings of 14th Annual Meeting SETAC Europe, Prague, Czech Republic, 18-24 April 2004.

31. Boldrin F., **Santovito G.**, Piccinni E. (2004). Espressione di geni omologhi ed eterologhi in *Tetrahymena thermophila* mediante utilizzo del promoter MTT2. Atti del 65° Congresso Nazionale Unione Zoologica Italiana, Taormina-Giardini Naxos, 21-25 settembre 2004, p. 116.

32. **Santovito G.**, Irato P., Piccinni E., Albergoni V. (2004). Risposte fisiologiche indotte da zinco in teleostei antartici. Atti del 65° Congresso Nazionale Unione Zoologica Italiana, Taormina-Giardini Naxos, 21-25 settembre 2004, p. 139.

33. **Santovito G.**, Irato P., Piccinni E., Albergoni V. (2004). Physiological responses against copper-induced oxidative stress in Antarctic teleosts: *Trematomus bernacchii* and *Trematomus newnesi*. Pflugers Arc. – Eur. J. Physiol., 448: R24. https://doi.org/10.1007/s00424-004-1313-2

34. Boldrin F., **Santovito G.**, Gaertig J., Wloga D., Bisharyan Y., Cassidy-Hanley D., Clark T.G., Piccinni E. (2005) A metallothionein gene from *Tetrahymena thermophila* with a copper inducible-repressible promoter. Proceedings of XIth International Meeting on Ciliate Molecular Biology (FASEB Summer Research Conferences), Lucca, Italy, 3-8 August 2005.

35. Formigari A., Boldrin F., **Santovito G.**, Piccinni E. (2005). The high resitance to metals of *Tetrahymena thermophila* is due to five metallothioneins. Proceedings of XIth International Meeting on Ciliate Molecular Biology (FASEB Summer Research Conferences), Lucca, Italy, 3-8 August 2005.

36. Formigari A., Boldrin F., **Santovito G.**, Piccinni E. (2005). L'elevata resistenza ai metalli di *Tetrahymena thermophila* è dovuta a cinque metallotioneine. Atti del 66° Congresso Nazionale Unione Zoologica Italiana, Roma, 19-22 settembre 2005, p. 104.

37. **Santovito G.**, Irato P., Piccinni E., Albergoni V. (2005). Clonaggio e sequenziamento del cDNA della superossido dismutasi a rame/zinco in teleostei antartici. Atti del 66° Congresso Nazionale Unione Zoologica Italiana, Roma, 19-22 settembre 2005, p. 118.

38. Formigari A., Boldrin F., **Santovito G.**, Piccinni E. (2006). Metallothionein in *Tetrahymena thermophila*: a functional analysis in ecotoxicological perspective. Atti del 67° Congresso Nazionale Unione Zoologica Italiana, Napoli, 12-15 settembre 2006, p. 24.

39. **Santovito G.**, Irato P., Formigari A., Piccinni E. (2006). Induzione della Cu,ZnSOD in *Trematomus bernacchii* in risposta all'esposizione ad elevate concentrazioni ambientali di cadmio. Atti del 67° Congresso Nazionale Unione Zoologica Italiana, Napoli, 12-15 settembre 2006, p. 24.

40. Irato P., Piccinni E., **Santovito G.** (2006). Antioxidant responses against copper and zinc in Antarctic teleosts: *Trematomus bernacchii* and *Trematomus newnesi*. Proceedings of 24th Annual Meeting ESCPB, Integrating hierachical levels of biological organisation towards understanding species responses to stressful condition, September 17-21, 2006, Antwerp, Belgium.

41. Piccinni E., Cassini A., **Santovito G.** (2006). Clonig and sequencing of Cu,ZnSOD from Antarctic teleosts. Acta Physiol., 188, Sup 652, 25.

42. **Santovito G.**, Piccinni E., Albergoni V. (2006). Zinc-induced physiological responses in antarctic teleosts. Acta Physiol., 188, Sup 652, 160.

43. **Santovito G.**, Piccinni E., Albergoni V., Cassini A. (2006). Molecular evolution of copper,zinc superoxide dismutase in Antarctic teleosts: *Trematomus bernacchii* and *Chionodraco hamatus*. Acta Physiol., 188, Sup 652, 218-219.

44. Bakiu R., Gabaldo R., Sforza E., Formigari A., Piccinni E., **Santovito G.** (2007). Superoxide dismutase and metallothioneins in *Trematomus hansoni*: characterisation of the cDNAs for quantification of transcript levels as new bioindicators to detect natural and anthropic change in Antarctic ecosystems. Proceedings of 6th PNRA Meeting on Antarctic Biology, June 7-9, 2007, Follonica, Italy, p. 27.

45. Boldrin F., **Santovito G.**, Formigari A., Bisharyan Y., Cassidy-Hanley D., Clark T.G., Piccinni E. (2007). *Tetrahymena thermophila* metallothioneins: effective tools for recombinant protein expression. Proceedings XIIth International Meeting on Ciliate Molecular Biology (FASEB Summer Research Conferences), Tucson, Arizona, 21-26 July 2007.

46. Formigari A., **Santovito G.**, Boldrin F., Piccinni E. (2007). Molecular evolution of metallothioneins in *Tetrahymena*. Atti del 68° Congresso Nazionale Unione Zoologica Italiana, Lecce, 24-27 settembre 2007.

47. Bakiu R., Gabaldo R., Sforza E., Formigari A., Piccinni E., **Santovito G.** (2007). Superoxide dismutase and metallothioneins in the Antarctic teleost *Trematomus hansoni*: charcterization of the cDNAs for quantifictaion of transcript levels. Acta Physiol. 191, Sup 657

48. Sattin G., **Santovito G.**, Cassini A. (2008). Physiological antioxidant responses against high environmental oxygen concentration: glutathione peroxidase from the Antarctic teleost *Trematomus eulepidotus*. Comp. Biochem. Physiol. A, 151, S27.

49. Sattin G., **Santovito G.**, Bergantino E., Beltramini M. (2008). Characterisation of the carbonic anhydrase cDNAs from Antarctic teleost *Trematomus bernacchii* and mangrove teleost *Periophtalmus sobrinus*. Comp. Biochem. Physiol. A, 151, S51-S52.

50. Bakiu R., **Santovito G.**, Irato P., Piccinni E. (2008) Evoluzione molecolare delle matallotioneine nei teleostei antartici: analisi filogenetica basata sulle 3'UTR. Atti del 69° Congresso Nazionale Unione Zoologica Italiana, Senigallia, 22-25 settembre 2008.

51. Bakiu R., **Santovito G.**, Irato P., Piccinni E. (2008) Molecular evolution of metallothioneins in antarctic teleost: phylogenetic analyses carried out on the 3'UTR. Proceedings of the 3rd Congresso of The Italian Society for Evolutionary Biology (SIBE-ISEB), Alghero, Italy, 2-5 ottobre 2008.

52. Sattin G., **Santovito G.**, Beltramini M., Cassini A. (2008) Characterisation of the carbonic anhydrase and glutathione peroxidase from Antarctic teleost and mangrove teleost. Proceedings of the 3rd Congresso of The Italian Society for Evolutionary Biology (SIBE-ISEB), Alghero, Italy, 2-5 ottobre 2008.

53. Sattin G., Maschietto V., Benetollo L., Cassini A., **Santovito G.** (2008) Antioxidant responses against high environmental oxygen concentration: glutathione peroxidase from the Antarctic teleost *Trematomus eulepidotus*. Acta Physiol., 194, Sup 665, 126.

54. Boldrin F., **Santovito G.**, Piccinni E. (2009) Le metallotioneine nei protozoi. Boll. Mus. Ist. Biol. Univ. Genova, 71, 71-72.

55. Boldrin F. **Santovito G.**, Cassidy-Hanley D., Clark T.G., Piccinni E. (2009). Le metallotioneine di *Tetrahymena thermophila*: tools efficaci per l'espressione di proteine ricombinanti. Boll. Mus. Ist. Biol. Univ. Genova, 71, 77.

56. Bakiu R., **Santovito G.**, Irato P., Piccinni E. (2009). Evoluzione molecolare delle metallotioneine nei teleostei antartici (Notothenioidei). Boll. Mus. Ist. Biol. Univ. Genova, 71, 93.

57. Bakiu R., Sattin G., Boldrin F., **Santovito G.** (2009) Molecular evolution of Cu,Zn superoxide dismutase in Antarctic icefish: *Pagetopsis macropterus*. Acta Physiol., 197, Sup 672, 33-34.

58. Benetollo L., Sattin G., Boldrin F., **Santovito G.** (2009) Expression of selenium glutathione peroxidise in the Antarctic teleost *Trematomus eulepidots* exposed to experimental changes in environmental heavy metal concentrations. Acta Physiol., 197, Sup 672, 38.

59. Sattin G., **Santovito G.**, Marino S., Beltramini M. (2009) Sequencing the carbonic anhydrase cDNAs from the Antarctic teleosts *Trematomus eulepidotus* and *T. lepidorhinus*. Acta Physiol., 197, Sup 672, 38.

60. Volpe F., Boldrin F., **Santovito G.** (2010) Characterisation of selenium glutathione peroxidase in the antarctic teleost *Gymnodraco acuticeps*. Acta Physiol., 200, Sup 681, 74.

61. Franchi N., Ferro D., Piccinni E., Ballarin L., **Santovito G.** (2011) Metal-induced antioxidant defense in the solitary ascidian *Ciona intestinalis*. ISJ-Invertebr. Surviv. J., 8, 42-43.

62. Volpe F., Boldrin F., Ferro D., Piccinni E., **Santovito G.** (2011) Characterization of selenium glutathione peroxidase in the Antarctic teleost *Gymnodraco acuticeps*. ISJ-Invertebr. Surviv. J., 8, 43.

63. Volpe F., Boldrin F., Ferro D., Piccinni E., **Santovito G.** (2011) Selenium glutathione peroxidase in the Antarctic teleost *Gymnodraco acuticeps*: molecular characterisation and regulation of gene expression. Acta Physiol., 203, Sup 686, 250.

64. Ferro D., Boldrin F., Piccinni E., **Santovito G.** (2011) Aging and the antioxidant system in *Tetrahymena thermophila*. Acta Physiol., 203, Sup 688, 184.

65. Camerin M., Soncin M., Piccinni E., Irato P., Boldrin F., Guidolin L., Jori G, **Santovito G.** (2011) Gene expression profile in murine 3T3 fibroblasts photosensitised by a tetracationic porphyrin. International Workshop on Molecular Pathways in the Response of Tumors to Photodynamic Therapy. September 9-10, 2011, Udine, Italy.

66. Franchi N., Ferro D., Ballarin L., **Santovito G.** (2012) Expression of genes involved in glutathione biosynthesis in the solitary tunicate *Ciona intestinalis* exposed to heavy metals. ISJ-Invertebr. Surviv. J., 9, 40-41.

67. Ferro D., Boldrin F., Cattalini F., Piccinni E., **Santovito G.** (2012) The antioxidant system of *Tetrahymena thermophila*. ISJ-Invertebr. Surviv. J., 9, 43.

68. Franchi N., Ferro D., Ballarin L., **Santovito G.** (2012) Expression of genes involved in glutathione biosynthesis in the solitary tunicate *Ciona intestinalis* exposed to heavy metals. Acta Physiol., 206, Sup 692, 197.

69. Ferro D., De Pittà C., Cattalini F., Coppellotti O., Guidolin L., Tallandini L., Irato P., Boldrin F., Piccinni E., **Santovito G.** (2012) Molecular characterization and gene expression of copper-zinc superoxide dismutase in *Tetrahymena thermophila*. Acta Physiol., 206, Sup 692, 219.

70. Ferro D., Boldrin F., Cattalini F., Piccinni E., **Santovito G.** (2012) The antioxidant system of *Tetrahymena thermophila*. Atti del 73° Congresso UZI, Firenze, 24-27 Settembre 2012.

71. Ferro D., De Pittà C., Cattalini F., Coppellotti O., Guidolin L., Tallandini L., Irato P., Boldrin F., Piccinni E., **Santovito G.** (2012) Copper induces two copper-zinc superoxide dismutase genes in *Tetrahymena thermophila*. Proceedings of 29th SIP Congress, Roma, 1-4 October 2012.

72. Bakiu R., **Santovito G.** (2012) Molecular evolution of peroxiredoxins (Prx) in metazoan. Proceedings of the VIII International Symposium of Biodiversity - Conservation and Suitable Use for Rural Development. Tirana, 21 November 2012.

73. **Santovito G.**, Battistella P., Veronese E. (2012) Le Scienze della Vita nella Scuola Primaria: una didattica attiva. Esempio di laboratorio tra università e contesto scolastico di tirocinio. Atti del Convegno della Conferenza dei Presidi del Corso di Laurea in Scienze della Formazione Primaria e del Gruppo APRED “Il tirocino nella formazione iniziale degli insegnati: bilancio e rilancio”, Milano, 25-26 ottobre 2012.

74. Ferro D., Bakiu R., Cattalini F., **Santovito G.** (2012) Peroxiredoxin-6 and antioxidant defenses in Antarctic fish. Proceedings of the 5th Congress of The Italian Society for Evolutionary Biology (SIBE-ISEB), Ferrara, Italy, 15-16 december 2012.

75. Ferro D., Bakiu R., Cattalini F., Ballarin L., **Santovito G.** (2012) Molecular characterization and evolution of glutathione peroxidase genes from a chordate invertebrate *Ciona intestinalis*. Proceedings of the 5th Congress of The Italian Society for Evolutionary Biology (SIBE-ISEB), Ferrara, Italy, 15-16 december 2012.

76. Ferro D., Cattalini F., Coppellotti O., Bakiu R., Piccinni E., **Santovito G.** (2013) Cloning and expression of methionine sulfoxide reductase genes in the ciliated protozoan *Tetrahymena thermophila*. ISJ-Invertebr. Surviv. J., 10, 16.

77. Ferro D., Bakiu R., Franchi N., Ballarin L., **Santovito G.** (2013) Cloning and expression of glutathione peroxidase genes in the chordate invertebrate *Ciona intestinalis*. ISJ-Invertebr. Surviv. J., 10, 22-23.

78. Gaiotto A., Tonon S., **Santovito G.** (2013) The scientific method in the teaching of life sciences in primary school. The plants and their seasonal changes. Proceedings of the 5th International Conference on Education and New Learning Technologies. Barcelona, Spain. 1-3 July, 2013.

79. Tonon S., Gaiotto A., **Santovito G.** (2013) The active teaching of life sciences in primary school: a comparative approach to the musculoskeletal system. Proceedings of the 5th International Conference on Education and New Learning Technologies. Barcelona, Spain. 1-3 July, 2013.

80. Franchi N., Ferro D., Spolaore B., **Santovito G.**, Ballarin L. (2013) A phytochelatin synthase gene in the solitary tunicate Ciona intestinalis. Proceedings of 7th Tunicate Meeting, Naples, 22-26 July 2013, p. 74.

81. Ferro D., Cattalini F., Coppellotti O., Bakiu R., Piccinni E., **Santovito G.** (2013) Innate immunity and evolution of antioxidant defenses: the methionine sulfoxide reductase genes in the ciliated protozoan *Tetrahymena thermophila*. Proceedings of the 15th International Congress of Immunology, Milan, 22-27 August 2013. Adorini L, Locati M, Eds. p. 1070.

82. Ferro D., Cattalini F., Bakiu R., **Santovito G.** (2013) Clonaggio ed espressione di Quattro nuove sequenze geniche codificanti la perossiredossina 6 in pesci antartici. Atti della Società dei Naturalisti e Matematici di Modena, 144, 31.

83. Ferro D., Bakiu R., Cattalini F., Coppellotti O., Piccinni E., **Santovito G.** (2013) Geni codificanti metionina sulfossido reduttasi nel protozoo ciliato *Tetrahymena thermophila*. Atti della Società dei Naturalisti e Matematici di Modena, 144, 56.

84. Ferro D., Cattalini F., Bakiu R., **Santovito G.** (2013) Peroxiredoxin 6 and antioxidant defences in Antarctic fish. SIF–ESCPBnew Joint Workshop on Comparative and Environmental Physiology, Portonovo (Ancona), September 9th, 2013.

85. Mattiuzzo E., Ferro D., Cattalini F., Tallandini L., Irato P., Ballarin L., **Santovito G.** (2014) Characterization of superoxide dismutases in the Antarctic scallop *Adamussium colbecki*. ISJ-Invertebr. Surviv. J., 11, 63

86. Capriolo C., Ferro D., Cisotto P., De Pittà C., Ballarin L., **Santovito G.** (2014). Functional characterisation of the antioxidant system in *Drosophila melanogaster*, after metals exposure. ISJ-Invertebr. Surviv. J., 11, 64.

87. Benevenia R., Ferro D., Ballarin L., **Santovito G.** (2014). Characterization of proxiredoxins' coding genes in *Ciona intestinalis*. ISJ-Invertebr. Surviv. J., 11, 65.

88. Zandonella Necca I., Tamino G., **Santovito G.** (2014) Sustainable food: an educational proposal, for key stage 3 in secondary schools, based on the assessment for learning method. Proceedings of the 6th International Conference on Education and New Learning Technologies. Barcelona, Spain. 7-9 July, 2014.

89. Pavan C., **Santovito G.** (2014) The laboratory didactics in the teaching -learning processes of life sciences. an educational project on microorganisms in the alimentation in primary school. Proceedings of the 6th International Conference on Education and New Learning Technologies. Barcelona, Spain. 7-9 July, 2014.

90. Ferro D., Torresan E., Boldrin F., Bakiu R., Cattalini F., Piccinni E., Irato P., **Santovito G.** (2014). Cloning and expression of glutathione peroxidase genes in the ciliated protozoan *Tetrahymena thermophila*. Proceedings of 30th SIP Congress, Padova, 2-4 October 2014. p. 20.

91. Tolomeo A.M., Bakiu R., Piccinni E., Ferro D., **Santovito G.** (2014). Structural characterization in evolutionary perspective of peroxiredoxin genes in the ciliated protozoan *Tetrahymena thermophila*. Proceedings of 30th SIP Congress, Padova, 2-4 October 2014. p. 20.

92. Priyan R.K, Pucciarelli S., Mattiuzzo E., **Santovito G.**, Miceli C. (2014). Identification and preliminary characterisation of copper-zinc superoxide dismutases in the Antarctic ciliate *Euplotes focardii*. Proceedings of 1st Frontiers in ciliate genome evolution, adaptation, and symbiosis Meeting, Pisa, 5-9 October 2014.

93. Tolomeo A.M., Bakiu R., Place S.P., **Santovito G.** (2015). Characterization of peroxiredoxins in the Antarctic teleost *Trematomus bernacchii*. ISJ-Invertebr. Surviv. J., 12, 92.

94. Trevisan T., **Santovito G.** (2015) Teaching evolution: a laboratory approach. Proceedings of the 7th International Conference on Education and New Learning Technologies. Barcelona, Spain. 6-8 July 2015.

95. Toninato V., **Santovito G.** (2015) The laboratory didactics in the teaching-learning processes of life sciences. an educational project on the structure of the flower and the inflorescences phenomenon in primary school. Proceedings of the 7th International Conference on Education and New Learning Technologies. Barcelona, Spain. 6-8 July 2015.

96. Ferro D., Bakiu R., De Pittà C., Boldrin F., Cattalini F., Pucciarelli S., Miceli C., **Santovito G.** (2015) Cu,Zn superoxide dismutases from *Tetrahymena thermophila*: molecular evolution and gene expression of the first line of antioxidant defenses. Proceedings of the

XVIth International Meeting on Ciliate Molecular Biology (FASEB Summer Research Conferences), Camerino, Italy. 10-16 July 2015.

97. Priyan R.K., Pucciarelli S., Ballarini P., Boldrin F., Tolomeo A.M., **Santovito G.**, Miceli C. (2015). Characterization of the superoxide dismutase (SOD) family in the marine Antarctic ciliate *Euplotes focardii*. Proceedings of the XVIth International Meeting on Ciliate Molecular Biology (FASEB Summer Research Conferences), Camerino, Italy. 10-16 July 2015.

98. Tolomeo A.M., Bakiu R., Place S.P., Piccinni E., **Santovito G.** (2015). Peroxiredoxins in the emerald rockcode *Trematomus bernacchii*. In: Zapparoli M., Belardinelli M.C. (Eds) Proceedings of the 76th National Conference of the Unione Zoologica Italiana, Viterbo, 15-18 September 2015, Quaderni del Centro Studi Alpino, IV, Università della Tuscia.

99. Tolomeo A.M., Bakiu R., Piccinni E., Ferro D., **Santovito G.** (2015). Characterization of peroxiredoxin genes in the ciliated protozoan *Tetrahymena thermophila*. In: Zapparoli M., Belardinelli M.C. (Eds) Proceedings of the 76th National Conference of the Unione Zoologica Italiana, Viterbo, 15-18 September 2015, Quaderni del Centro Studi Alpino, IV, Università della Tuscia.

100. Gaiotto A., **Santovito G.** (2016) An innovative didactic approach to the study of invertebrate animals in primary school. Proceedings of the 8th International Conference on Education and New Learning Technologies. Barcelona, Spain. 4-6 July 2016.

101. Rossi E., **Santovito G.** (2016) Introduction to Mendelian genetics in primary school. Proceedings of the 8th International Conference on Education and New Learning Technologies. Barcelona, Spain. 4-6 July 2016.

102. Brunelli E., **Santovito G.**, La Russa D., Barca D., Pellegrino D. (2016) Antarctic fish as a global pollution sensor: metal biomonitoring in a decade. 67th Congress of the Italian Physiological Society (SIF). Catania, Italy. 21-23 September 2016.

103. Ferro D., Bakiu R., Corrà F., Cattalini F., Guidolin L., Irato P., Boldrin F., Piccinni E., **Santovito G.** (2016) New insights into reactive oxygen species homeostasis in ciliates: molecular characterization of the catalase gene in *Tetrahymena thermophila*. Proceedings of 31st SIP Congress, Pineto (TE), 14-16 September 2016.

104. Ricci F., Lauro F., **Santovito G.**, Luporini P., Vallesi A. (2016) Anti-oxidant defense of the bipolar ciliate, *Euplotes nobilii*: characterization of the methionine-sulfoxide reductase-B gene family. Proceedings of 31st SIP Congress, Pineto (TE), 14-16 September 2016.

105. Bakiu R., Korro K., **Santovito G.**, Tolomeo A.M. (2016) Rotavirus presence in Mediterranean mussels (*Mytilus galloprovincialis*) from Southwestern Albanian Coasts. Frontiers in Veterinary Science Conference, AquaEpi I, Oslo, Norway, 20-22 September 2016. https://doi.org/10.3389/conf.FVETS.2016.02.00022

106. Corrà F., Poloni E., Callegaro E., Bramuzzo S., Gerdol M., Buonocore F., Scapigliati G., Biscontin A., De Pittà C., Bakiu R., **Santovito G.** (2017) Catalase in Antarctic fish. ISJ-Invertebr. Surviv. J., 14, 46. https://doi.org/10.25431/1824-307X/isj.v14i1.44-55

107. Ferro K., Ferro D., Corrà F., Bakiu R., **Santovito G.**, Kurtz J. (2017) Host-parasite interactions: what is the role of the antioxidant system in immune memory of the red flour beetle *Tribolium castaneum*? ISJ-Invertebr. Surviv. J., 14, 48. https://doi.org/10.25431/1824-307X/isj.v14i1.44-55

108. Lago A., Masiero S., Bramuzzo S., Callegaro E., Poloni E., Corrà F., **Santovito G.** (2017) Exploring microbiology and biotechnologies: a laboratory approach to the study of yeasts and bacteria in primary school. Proceedings of the 11th annual International Technology, Education and Development Conference. Valencia, Spain, 6-8 March 2017.

109. Capparotto A., Bramuzzo S., Callegaro E., Poloni E., Corrà F., **Santovito G.** (2017) The didactics of biology in primary school: an innovative approach to skeletal system teaching in fifth class based on comparative vertebrate anatomy. Proceedings of the 11th annual International Technology, Education and Development Conference. Valencia, Spain, 6-8 March 2017

110. Ferro K., Ferro D, Corrà F., Bakiu R., **Santovito G.**, Kurtz J. (2017) Reactive oxygen species and immune memory: the role of superoxide dismutase genes in the red flour beetle *Tribolium castaneum* immune priming. Ecological Immunology Workshop Insect immunity: genomics, microbiome, applications, Blossin, Germany, 28 August-1 September 2017.

111. Favaron A., Ancona E., Bramuzzo S., Callegaro E., Guidolin L., Irato P., **Santovito G.** (2017) An innovative teaching approach to circulatory and skeletal systems based on comparative vertebrate anatomy and physiology. Proceedings of the 9th International Conference on Education and New Learning Technologies. Barcelona, Spain. 3-5 July, 2017.

112. Meneghetti G, Bramuzzo S., Callegaro E., Guidolin L., Irato P., **Santovito G.** (2017) The kingdom of fungi in primary school: an educational research in biology field. Proceedings of the 9th International Conference on Education and New Learning Technologies. Barcelona, Spain. 3-5 July, 2017.

113. Nicorelli E., Gerdol M., Buonocore F., Pallavicini A., Scapigliati G., Guidolin L., Irato P., Corrà F., **Santovito G.** (2018) First evidence of T cell restricted intracellular antigen (TIA) protein gene expression in Antarctic fish. ISJ-Invertebr. Surviv. J., 15, 127. https://doi.org/10.25431/1824-307X/isj.v15i1.116-130

114. Grando G., Bramuzzo S., Irato P., Guidolin L., Ferrari L., **Santovito G.** (2018) Introduction to the world of insects: a didactic research in kindergarten. Proceedings of the 12th annual International Technology, Education and Development Conference. Valencia, Spain, 6-7 March, 2018.

115. Tura N., Guidolin L., Irato P., **Santovito G.** (2018) From cell to inheritance of characters: an introduction to classical genetics in primary school. Proceedings of the 12th annual International Technology, Education and Development Conference. Valencia, Spain, 6-7 March, 2018.

116. Russo F., Vazzoler M., Groppi V., Zanon F., Da Prà F., Lava R., Mazzola M., Onofrio G., Da Rugna L., Guidolin L., Irato P., **Santovito G.**, Tallandini L., Carrer M., Palmeri L.,

Tormen N., Valsecchi S., Cappelli F., Polesello S. (2018) LIFE project PHOENIX: a new project for the management of water pollution from short chain perfluoroalkyl acids in Veneto region (Italy). Proceedings of the 28th annual meeting of SETAC Europe. Rome, Italy, 13-17 May, 2018, p. 346.

117. Irato P., Guidolin L., Manea F., **Santovito G.**, Tormen N., Trabucco S., Vantini A., Tallandini L. (2018) Responses to PFOA and PFBS exposure in the sediment dwelling invertebrate *Dendrobaena veneta* (Annelida). Proceedings of the 28th annual meeting of SETAC Europe. Rome, Italy, 13-17 May, 2018, p. 463.

118. Fassinato C., Nicorelli E., Corrà F., Irato P., Guidolin L., **Santovito G.** (2018) An innovative approach to deal with biodiversity at school with its investigation in different environments. Proceedings of the 10th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 2-4 July, 2018.

119. Grando G, Bramuzzo S., Guidolin L., Irato P., Ferrari L., **Santovito G.** (2018) Who is afraid of insects? a didactic research in the biological field in kindergarten. Proceedings of the 10th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 2-4 July, 2018.

120. Barbacovi V., **Santovito G.**, Irato P. (2018) Little scientists for large discoveries: an experimental approach to survey the world with classes ii of the primary school - The observation and study of plant life. Proceedings of the 10th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 2-4 July, 2018.

121. Forlin E., **Santovito G.**, Guidolin L., Irato P. (2018) Citrus fruits. Course to educate to scientific curiosity. Proceedings of the 10th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 2-4 July, 2018.

122. Gallina S., Irato P., **Santovito G.** (2019) Inquiry into animal tracks: an experimental application of IBSE -inquiry based science education- approach in the ecological field in primary school. Proceedings of the 13th annual International Technology, Education and Development Conference. Valencia, Spain, 11-13 March, 2019.

123. Chiesa E., Irato P., **Santovito G.** (2019) The circulatory system of vertebrates and invertebrates: an empirical research to introduce in the fourth class the treatment of animal morphology in a comparative key. Proceedings of the 13th annual International Technology, Education and Development Conference. Valencia, Spain, 11-13 March, 2019.

124. Russo F., Groppi V., Favaretto P., Gubian L., Bonato M., Gredelj A., Carrer M., Palmieri L., Guidolin L., Corrà F., Irato P., **Santovito G.**, Tallandini L., Ferrario C., Valsecchi S., Polesello S., Mazzola M., Onofrio G., Zanon F., Daprà F., Lava R. (2019) A novel holistic approach in the governance of environmental pollution events from PMOC. Proceedings of the 17th International Conference on Chemistry and the Environment. Thessaloniki, Greece, 16-20 June, 2019.

125. Palmieri G., Irato P., Nicolosi P., **Santovito G.** (2019) A day at the museum. Laboratory teaching in the Museum of Zoology at the University of Padua for primary school.

Proceedings of the 11th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 1-3 July, 2018.

126. Lui F., Irato P., **Santovito G.** (2019) Discovering living organisms: a didactic research to introduce biology in kindergarten. Proceedings of the 11th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 1-3 July, 2018.

127. Tallandini L., Bonato M., Corrà F., Dolfato E., Guidolin L., Irato P., Pietropoli E., **Santovito G.**, Vantini A., Valsecchi S. (2019) Bioaccumulation Potential and cytological responses of a short -chain PFAS, PFBS, in the sediment dwelling worm *Eisenia hortensis* (Annelida). Proceedings of the SETAC North America Focused Topic Meeting: Environmental Risk Assessment of PFAS. Durham, North Carolina, USA, 12-15 August, 2019.

128. Gerdol M., Ansaloni F., Torboli V., Giulianini P.G., Coscia M.R., **Santovito G.**, Buonocore F., Scapigliati G., Pallavicini A. (2019) Comparative transcriptomics sheds new light on peculiar cold adaptation strategies in the gills of Cryonotothenioidea. Proceedings of the 8th Congress of The Italian Society for Evolutionary Biology (SIBE-ISEB), Padova, Italy, 1-4 September 2019.

129. Garofalo F., **Santovito G.**, Amelio D. (2019) Heat stress-dependent morpho-functional changes in the gills of the Antarctic *Trematomus bernacchii* and *Chionodraco hamatus*. Acta Physiol., 227, Sup 718, 107. https://doi.org/10.1111/apha.13366

130. Tolomeo A.M., Carraro A., Bakiu R., Toppo S., Gerdol M., Irato P., Bonato M., Corrà F., Pellegrino D., Garofalo F., Ferro D., Place S.P., **Santovito G.** (2019) Too warm or not too warm... Is the antioxidant system of Antarctic fish ready to face climate changes? Acta Physiol., 227, Sup 718, 107-108. https://doi.org/10.1111/apha.13366

131. Irato P., Bonato M., Corrà F., Dolfatto E., Guidolin L., Pietropoli E., **Santovito G.**, Tallandini L., Vantini A. (2019) Effects of PFOA and PFBS exposure in the soil invertebrate *Dendrobaena veneta* (Annelida). Acta Physiol., 227, Sup 718, 114. https://doi.org/10.1111/apha.13366

132. Drago L., Ballarin L., **Santovito G.** (2019). Stress granules in *Ciona robusta*: molecular evolution of TIAR and TTP and early evidence of their gene expression under stress conditions induced by metals. Proceedings of the 80th National Conference of the Unione Zoologica Italiana, Roma, 23-26 September 2019.

133. Gaiotto A., Bisaccia P., Bonato M., Irato P., Corrà F., **Santovito G.** (2020) The plants and their seasonal changes: teaching biology in primary school using the scientific method. Proceedings of the 7th International Conference on Education and Social Sciences. Dubai, United Arab Emirates. 20-22 January 2020.

134. Tonon S., Bisaccia P., Bonato M., Irato P., Corrà F., **Santovito G.** (2020) A comparative approach to the musculoskeletal system in primary school. Proceedings of the 7th International Conference on Education and Social Sciences. Dubai, United Arab Emirates. 20-22 January 2020.

135. Corbolino N., Bisaccia P., Corrà F., Bonato M., Irato P., **Santovito G.** (2020) The vegetable garden. An instrument for sustainable development education and care pedagogy. Proceedings of the 14th annual International Technology, Education and Development Conference. Valencia, Spain, 2-4 March 2020.

136. Zanata M., **Santovito G.** (2020) The "Da Vinci" Biodiversity Park (Treviso, Italy). A didactic garden as innovative support to the teaching of science in secondary school. Proceedings of the 14th annual International Technology, Education and Development Conference. Valencia, Spain, 2-4 March 2020.

137. Tolomeo A.M., Carraro A., Bakiu R., Toppo S., Gerdol M., Irato P., Pellegrino D., Garofalo F., Bisaccia P., Corrà F., Ferro D., Place S.P., **Santovito G.** (2020) Too warm or not too warm... Is the antioxidant system of Antarctic fish ready to face climate changes? ISJ-Invertebr. Surviv. J., 17, 11. https://doi.org/10.25431/1824-307X/isj.v0i0.9-23

138. Rizzotti D., Greco S., Gerdol M., Manfrin C., **Santovito G.**, Pallavicini A., Giulianini P.G. (2020) Heat stress in *Trematomus bernacchii*: bias of experimental design. ISJ-Invertebr. Surviv. J., 17, 11-12. https://doi.org/10.25431/1824-307X/isj.v0i0.9-23

139. Bisaccia P., Corrà F., Gerdol M., Irato P., **Santovito G.** (2020) Glutathione peroxidases in the striped rockcod *Trematomus hansoni*. ISJ-Invertebr. Surviv. J., 17, 12. https://doi.org/10.25431/1824-307X/isj.v0i0.9-23

140. Drago L., Ballarin L., **Santovito G.** (2020) Stress granules in *Ciona robusta*: molecular evolution of TIAR and TTP and early evidence of their gene expression under stress conditions induced by metals. ISJ-Invertebr. Surviv. J., 17, 12-13. https://doi.org/10.25431/1824-307X/isj.v0i0.9-23

141. Fabris G., Bisaccia P., Corrà F., Bonato M., Irato P., **Santovito G.** (2020) Discovering the nervous system. An innovative teaching approach for primary school. Proceedings of the 12th International Conference on Education and New Learning Technologies. Virtual format. 6-7 July, 2020

142. Bortolami I., Bisaccia P., Corrà F., Bonato M., Irato P., **Santovito G.** (2020) The blue gold: an empirical research to introduce the discussion of water issue in relation to plants, animals and human in primary school. Proceedings of the 12th International Conference on Education and New Learning Technologies. Virtual format. 6-7 July, 2020.

143. Drago L., Peronato A., Franchi N., Ballarin L., Bakiu R., **Santovito G.** (2020) Stress granules in *Ciona robusta*: molecular evolution of TIA-1-related nucleolysin and tristetraprolin and gene expression studies under metal-induced stress conditions. Proceedings of the 1st Italian Congress of Marine Evolution. Virtual format. 23-25 November, 2020.

144. Greco S., Gaetano A.S., Ansaloni F., **Santovito G.**, Scapigliati G., Pallavicini A., Giulianini P.G., Gerdol M. (2020) Transcriptomic adaptations of Cryonotothenioidea to the Antarctic environment and response to heat stress Proceedings of the 1st Italian Congress of Marine Evolution. Virtual format. 23-25 November, 2020.

145. Pavan C., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., **Santovito G.** (2021) Microorganisms in the alimentation in primary school: the laboratory didactics in the teaching - learning processes of life sciences. Proceedings of the 8th International Conference on Education and Social Sciences. Istanbul, Turkey. 18-19 January, 2021.

146. Zandonella Necca I., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., Tamino G., **Santovito G.** (2021) Sustainable food: an innovative approach based on the assessment for learning method in secondary schools. Proceedings of the 8th International Conference on Education and Social Sciences. Virtual format. 18-19 January, 2021.

147. Barana C., Dall'Acqua d'Industria L., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., **Santovito G.** (2021) "Teacher, may we touch it?" An innovative laboratory approach to address macroscopic and microscopic anatomy of the digestive system of human and mammals in primary school. Proceedings of the 15th annual International Technology, Education and Development Conference. Virtual format. 8-9 March, 2021.

148. Furlanetto L., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., **Santovito G.** (2021) The circle of life. Human reproduction and embryonic development in primary school. Proceedings of the 15th annual International Technology, Education and Development Conference. Virtual format. 8-9 March, 2021.

149. Drago L., Ballarin L., **Santovito G.** (2021) Effects of iron on the transcription of stress-related genes in the solitary ascidian *Ciona robusta*. J. Biol. Res., 94, 12-13.

150. Frigerio R., Bellio M., Bonato M., **Santovito G.**, Irato P. (2021) Fruit and vegetables: discovering conscious food choices. Creation of an educational project to stimulate the study of science in a class II of a lower secondary school. Proceedings of the 13th International Conference on Education and New Learning Technologies. Virtual format, 5-6 July, 2021.

151. Furlan S., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., **Santovito G.** (2021) A, B, C, D… NA: Genetics explained to children. An innovative didactic and laboratory proposal in primary school. Proceedings of the 13th International Conference on Education and New Learning Technologies. Virtual format, 5-6 July, 2021.

152. Bassi C., Fattori G., Bellio M., Corrà F., Bonato M., Schumann S., Irato P., **Santovito G.** (2021) Feel with the skin. A didactic research to introduce the integumentary system and sensory perception in primary school. Proceedings of the 13th International Conference on Education and New Learning Technologies. Virtual format, 5-6 July, 2021.

153. Bertoncello O., De Rosso A., **Santovito G.** (2021) My classroom as big as the world of CAITPR. An innovative educational-didactic approach for the training of eco-sensitive citizens. Proceedings of the 13th International Conference on Education and New Learning Technologies. Virtual format, 5-6 July, 2021.

154. Schumann S., Bertotto D., Radaelli G., **Santovito G.** (2021) Investigation on accumulated PFAS impact on the stress response in freshwater fish of the Veneto Region. 71st Congress of the Italian Society of Physiology. Milan (Online), 7-9 September 2021.

155. Marrone A., La Russa D., Brunelli E., G. **Santovito G.**, Pellegrino D. (2021) Antarctica as a global sensor of transboundary pollution: metals biomonitoring in a twelve-year period. Proceedings of the 18th International Symposium on Waste Management and Sustainable Landfilling. Cagliari, 11-15 October 2021.

156. Lago A., Masiero S., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) Bacteria and yeasts in primary school: a laboratory approach to the study of microbiology and biotechnologies. Proceedings of the 9th International Conference on Education and Social Sciences. Virtual format. 17-18 January, 2022.

157. Massaro B., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) What is essential is invisible to eye. A didactic research on microbiology and health education in third grade of primary school through playing and laboratory approach. Proceedings of the 9th International Conference on Education and Social Sciences. Virtual format. 17-18 January, 2022.

158. Drago L., **Santovito G.**, Ballarin L. (2022) Dynamics of formation of stress granules during the colonial blastogenetic cycle of *Botryllus schlo*sseri. ISJ - Invertebrate Survival Journal, 19, 75. https://doi.org/10.25431/1824-307X/isj.v19i1.69-84

159. Carnera M., Schumann S., Irato P., **Santovito G.** (2022) Metallothionein gene expression in *Trematomus eulepidotus* as a response to environmental variation of metal ion concentrations. ISJ - Invertebrate Survival Journal, 19, 81. https://doi.org/10.25431/1824-307X/isj.v19i1.69-84

160. Schumann S., Mozzi G., Manes C., Nyqvist D., Comoglio C., Negrato E., Irato P., Bertotto D., Marion A., **Santovito G.** (2022) The effect of group size on the stress level in an open-channel swimming flumeon *Telestes muticellus*. ISJ - Invertebrate Survival Journal, 19, 81-82. https://doi.org/10.25431/1824-307X/isj.v19i1.69-84

161. Piva E., Schumann S., Dotteschini S., Bonato M., Bertotto D., Marion A., Irato P., **Santovito G.** (2022) Preliminary data on physiological responses induced by PFAS exposure in freshwater fish of the Veneto region. ISJ - Invertebrate Survival Journal, 19, 82. https://doi.org/10.25431/1824-307X/isj.v19i1.69-84

162. Gaiotto A., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) An innovative didactic approach to study porifera, annelida and mollusca in primary school. Proceedings of the 16th annual International Technology, Education and Development Conference. Virtual format. 7-8 March, 2022.

163. Serato S., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) The didactic approach of the educational resource e-Bug in the topics of microbiology and health education in primary school. Proceedings of the 16th annual International Technology, Education and Development Conference. Virtual format. 7-8 March, 2022.

164. Drago L., **Santovito G.**, Ballarin L. (2022) MAP kinases involvement in stress signaling during the colonial blastogenetic cycle of *Botryllus schlosseri*. J. Biol. Res., 95, 13.

165. Piva E., Schumann S., Bonato M., Bertotto D., Marion A., Irato P., **Santovito G.** (2022) Physiological responses induced by PFAS exposure in freshwater fish of the Veneto region. J. Biol. Res., 95, 15-16.

166. Bernardini I., Milan M., Matozzo V, Valsecchi S., Peruzza L., Dalla Rovere G., Polesello S., Iori S., Marin M.G., Fabrello J., Masiero L., Ciscato M., Bonato M., **Santovito G.**, Boffo L., Bargelloni L., Patarnello T. (2022) Transcriptional and microbiota changes in the Manila clam (*Ruditapes philippinarum*) following exposures to environmental concentration of the new PFAS C6O4. Proceedings of the 21th International Symposium on Pollutant Responses in Marine Organisms. Gothenburg, 22-25 May 2022.

167. Tolomeo A.M., Fabozzo A., Ventrella D., Lombardi V., Zanella F., Elmi A., Andreis M., Todeschini G., Malvicini R., Aniballi C., Ruggeri M., Astori G., **Santovito G.**, Muraca M., Bacci M.L., Gerosa G. (2022) Protective effects of extracellular vesicles derived from mesenchymal stem cells against ischemia-reperfusion injury of hearts donated after circulatory death: study in a pig model. J. Extracell. Vesicles, 11, 152. https://doi.org/10.1002/jev2.12224

168. Schumann S., Piva E., Dotteschini S., Negrato E., Bonato M., Irato P., Marion A., Bertotto D., **Santovito G.** (2022) Biomonitoring the effect of accumulating perfluorochemicals on physiological responses of a benthivorous and a potadromous fish species by using a multiple biomarker approach. Proceedings of the 14th International congress on the biology of fish. Montpellier, 28 June-1 July 2022.

169. Cazzador N., Dal Maso S., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) The school meets its environment. Discovering the Venice Lagoon. Proceedings of the 14th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 4-6 July, 2022.

170. Masiero S., Lago A., Bellio M., Piva E., Schumann S., Irato P., **Santovito G.** (2022) Microrganisms in primary school: a laboratory approach to study microbiology and biotechnologies. Proceedings of the 14th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 4-6 July, 2022.

171. Bolzon F., Bellio M., Pietropoli E., **Santovito G.**, Irato P. (2022) Microrganisms in primary school: a laboratory approach to study microbiology and biotechnologies. Proceedings of the 14th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 4-6 July, 2022.

172. De Rossi M., Bellio M., Pietropoli E., Piva E., **Santovito G.**, Schumann S., Irato P., (2022) An investigation on the positive aspects of the contact with nature in developing-age children. A review of formal and non-formal educational realities in the veneto region. Proceedings of the 14th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 4-6 July, 2022.

173. Piva E., Schumann S., Negrato E., Irato P., Marion A., Bertotto D., **Santovito G.** (2022) Antioxidant responses induced by PFAS environmental contamination in freshwater fish of Veneto region. Proceedings of the 32nd ESCPB Congress - New European Society for Comparative Physiology and Biochemistry. Naples, Italy. 28-31 August, 2022.

174. Schumann S., Mozzi G., Manes C., Comoglio C., Negrato E., Piva E., Marion A., Bertotto D., **Santovito G.** (2022) Physiological controls against hydrodynamic stress in the freshwater fish species *Telestes muticellus*. Proceedings of the 32nd ESCPB Congress - New European Society for Comparative Physiology and Biochemistry. Naples, Italy. 28-31 August, 2022.

175. Schumann S., Mozzi G., Manes C., Comoglio C., Negrato E., Piva E., Marion A., Bertotto D., **Santovito G.** (2022) Physiological stress response induced by different hydrodynamic conditions with varying group size in *Telestes muticellus*. Proceedings of the 9th International Symposium on Aquatic Animal Health. Santiago, Chile. 5-8 September, 2022.

176. Drago L., Pennati A., Rothbächer U., **Santovito G.**, Ballarin L. (2022) Stress granules in ascidians: an overview. Proceedings of the 81th National Conference of the Unione Zoologica Italiana. Trieste, Italy. 20-23 September, 2022.

177. Bertoncello O., De Rosso A., **Santovito G.** (2023) La mia aula grande come il mondo del CAITPR. Un innovativo approccio educativo-didattico per la formazione di cittadini eco-sensibili. 3rd Conference Scientix Italia, 28-30 September, 2022.

178. Toninato V., Schumann S., Piva E., Pacchini S., Irato P., **Santovito G.** (2023) The structure of the flower and the inflorescences phenomenon in primary school. Proceedings of the 10th International Conference on Education and Social Sciences. Istanbul, Turkey. 23-25 January, 2023

179. Trevisan T., Piva E., Schumann S., Pacchini S., Irato P., **Santovito G.** (2023) Teaching evolution with the laboratory approach. Proceedings of the 10th International Conference on Education and Social Sciences. Istanbul, Turkey. 23-25 January, 2023

180. Masiero G., Bellio M., Schumann S., Piva E., Pacchini S., Irato P., Bramuzzo S., **Santovito G.** (2023) Parasitic arthropods: a common feature of humans, other animals and plants. Proceedings of the 17th annual International Technology, Education and Development Conference. Valencia, Spain. 6-8 March, 2023.

181. Rossi E., Bellio M., Piva E., Schumann S., Pacchini S., Irato P., Bramuzzo S., **Santovito G.** (2023) Fruitfly to introduce the mendelian genetics in primary school. Proceedings of the 17th annual International Technology, Education and Development Conference. Valencia, Spain. 6-8 March, 2023.

182. Pietropoli E., Piva E., Schumann S., **Santovito G.**, Irato P. (2023) Evaluation of some biomarkers in *Dendrobaena veneta* exposed to PFAS under controlled condition. Free Rad. Biol. Med., 198, 17S. https://doi.org/10.1016/j.freeradbiomed.2022.12.063

183. Piva E., Schumann S., Pacchini S., Brasola E., Stoilova V., Irato P., Pellegrino D., **Santovito G.** (2023) How can climate change affect Antarctic fish physiology? A study on the effects of increasing seawater temperatures on fish heart rates. ISJ - Invertebrate Survival Journal, 20, 22. https://doi.org/10.25431/1824-307X/isj.v20i1.21-37

184. Drago L., Pennati A., Rothbächer U., **Santovito G.**, Ballarin L. (2023) Stress granules-related genes regulation during embryogenesis of an invertebrate chordate. ISJ - Invertebrate Survival Journal, 20, 32-33. https://doi.org/10.25431/1824-307X/isj.v20i1.21-37

185. Pacchini S., Piva E., Schumann S., Irato P., Pellegrino D., **Santovito G.** (2023) Antioxidant enzyme gene expression in *Trematomus newnesi* from Ross Sea (Antarctica) experimentally exposed to PFOA. ISJ - Invertebrate Survival Journal, 20, 35. https://doi.org/10.25431/1824-307X/isj.v20i1.21-37

186. Pietropoli E., Pacchini S., Piva E., Schumann S., **Santovito G.**, Irato P. (2023) Evaluation of stress biomarkers in the European nightcrawler *Dendrobaena veneta* exposed to PFAS under controlled conditions. ISJ - Invertebrate Survival Journal, 20, 37. https://doi.org/10.25431/1824-307X/isj.v20i1.21-37

187. Massignani M., Pacchini S., Piva E., Schumann S., **Santovito G.**, Irato P. (2023) How to be “acrobats of time”: teaching climate change to primary students. Proceedings of the 15th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 3-5 July, 2023.

188. Tonon B., Massignani M., Pacchini S., Piva E., Schumann S., **Santovito G.**, Irato P. (2023) The classification of the animal kingdom. A guided didactic path to discover systematics starting from spontaneous hypotheses. Proceedings of the 15th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 3-5 July, 2023.

189. Bertoncello O., Sartor D., Simonetto R., Battistella L., Daniel M., Bragagnolo P., Martinello S., **Santovito G.** (2023) Green centre for an ecology of environment, mind and community. Proceedings of the 15th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 3-5 July, 2023.

190. Massarin G., Vecchiato S., Piva E., Pacchini S., Schumann S., Bellio M., Irato P., **Santovito G.** (2023) Crustaceans, molluscs and their involvement in marine water pollution: an experimental educational project to involve the primary school in current environmental issues. Proceedings of the 15th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 3-5 July, 2023.

191. Schumann S., Negrato E., Marion A., **Santovito G.**, Bertotto D. (2023), Stress evaluation using physiological biomarkers on fish tested in the hydraulic facility. Proceedings of the 40th International School of Hydraulics, Kąty Rybackie, Poland. 23-26 May 2023.

192. Schumann S., Piva E., Negrato E., Marion A., Bertotto D., **Santovito G.** (2023), Assessment of stress markers in fish for experiments in the field. Proceedings of the 40th IAHR World Congress, Vienna, Austria. 21-25 August 2023.

193. Piva E., Schumann S., Pacchini S., Stoilova V., Irato P., Papetti C., Pellegrino D., **Santovito G.** (2023) Investigating the influence of rising seawater temperatures on fish

heart: Exploring the physiological impact of climate change on Antarctic fish. Acta Physiol., 239, Sup 728, e14042. https://doi.org/10.1111/apha.14042

194. Pacchini S., Piva E., Schumann S., Irato P., Marion A., **Santovito G.** (2023) Antioxidant responses against oxidative stress risk induced by PFAS in freshwater fish from the Veneto Region, Italy. Acta Physiol., 239, Sup 728, e14044. https://doi.org/10.1111/apha.14044

195. Schumann S., Bottacin-Busolin A., Negrato E., Stoilova V., Erlandson A., Marion A., **Santovito G.**, Bertotto D. (2023). Insights from cortisol and oxidative stress assessment in brown trout (*Salmo trutta*) under light stress. Acta Physiol., 239, Sup 728, e14044. https://doi.org/10.1111/apha.14044

196. Dal Pozzo G., Pacchini S., Piva E., Schumann S., **Santovito G.**, Irato P. (2023) Knowing to respect: a sensitization path towards animals in a didactic intervention in primary school. Proceedings of the 16th annual International Conference of Education, Research and Innovation, Seville, Spain. 13th - 15th of November, 2023.

197. Pasquetto M., Pietropoli E., **Santovito G.**, Irato P. (2023) Science and school in continuous evolution: how the teaching of science in primary school is changing. Proceedings of the 16th annual International Conference of Education, Research and Innovation, Seville, Spain. 13th - 15th of November, 2023.

198. Giantin S., Papa R., Pacchini S., Piva E., Schumann S., Irato P., **Santovito G.** (2024) Cultivating biodiversity: an experimental educational project in the ecological field. Proceedings of the 11th International Conference on Education and Social Sciences. Istanbul, Turkey. 22-24 January, 2024

199. Secco G., Stefani L., Piva E., Pacchini S., Schumann S., Irato P., **Santovito G.** (2024) A meal that counts! How proper food education can decrease food waste in school canteens. Proceedings of the 11th International Conference on Education and Social Sciences. Istanbul, Turkey. 22-24 January, 2024

200. Pacchini S., Vanzan G., Piva E., Schumann S., Irato P., Bottacin A., Marion A., **Santovito G.** (2024). Effects of chronic PFAS exposure on mitochondrial antioxidant defences in a freshwater fish species (*Squalius cephalus*) from the Veneto region, RETURN First Dissemination Workshop, Torino (Italy), 1-2 February 2024. https://doi.org/10.5281/zenodo.10598007

201. Piva E., Schumann S., Pacchini S., Stoilova V., Papetti C., Irato P., Pellegrino D., **Santovito G.** (2024) Could rising seawater temperatures become a challenge for Antarctic fish? Exploring defence responses of *Trematomus bernacchii* to climate change. ISJ - Invertebrate Survival Journal, 21, 45. https://doi.org/10.25431/1824-307X/isj.v21i1.43-57

202. Pacchini S., Vanzan G., Piva E., Schumann S., Irato P., Bottacin A., Marion A., **Santovito G.** (2024) Antioxidant responses in the kidney of *Squalius cephalus* chronically exposed to PFAS in Veneto rivers. ISJ - Invertebrate Survival Journal, 21, 47. https://doi.org/10.25431/1824-307X/isj.v21i1.43-57

203. Puller E., Veronese G., Pacchini S., Piva E., Schumann S., Vanzan G., Irato P., **Santovito G.** (2024) Discovering insects to overcome stereotypes. A didactic research in biology education in kindergarten. Proceedings of the 18th annual International Technology, Education and Development Conference. Valencia, Spain. 4-6 March, 2024.

204. Morello M., Piva E., Pacchini S., Schumann S., Vanzan G., Irato P., **Santovito G.** (2024) Educate about the richness of biodiversity. Using the square technique to discover the ecological value of biological variety in an outdoor school. Proceedings of the 18th annual International Technology, Education and Development Conference. Valencia, Spain. 4-6 March, 2024.

205. Piva E., Carnera M., Schumann S., Pacchini S., Masiero L., Pellegrino D., Irato P., **Santovito G.** (2024) Exploring Heavy Metal Toxicity in the Antarctic Marine Ecosystem: Investigating the Defensive Role of Metallothioneins in *Trematomus eulepidotus*. Proceedings of the SETAC Europe Focused Topic Meeting: Science-Based Solutions in Times of Crisis: Integrating Science and Policy for Environmental Challenges. Seville, Spain, 5-9 May, 2024.

206. Pacchini S., Vanzan G., Piva E., Schumann S., Marion A., Irato P., **Santovito G.**, Bottacin-Busolin A. (2024) Gene Expression of Mitochondrial Antioxidant Enzymes in a Freshwater Fish Species (*Squalius Cephalus*) Exposed to Environmental Concentrations of Pfas in the Veneto Region. Proceedings of the SETAC Europe Focused Topic Meeting: Science-Based Solutions in Times of Crisis: Integrating Science and Policy for Environmental Challenges. Seville, Spain, 5-9 May, 2024.

207. De Faveri F., Pacchini S., Piva E., Schumann S., Vanzan G., **Santovito G.**, Irato P. (2024) The world of fish “a disciplinary path to discover fish migrations through playful workshop methodologies in primary school”. Proceedings of the 16th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 1-3 July, 2024.

208. Dal Pozzo G., Visentin A., **Santovito G.**, Irato P. (2024). The environment that educates us: a survey of environmental education practices at primary school. Proceedings of the 16th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 1-3 July, 2024.

209. Burattin C., Piva E., Pacchini S., Vanzan G., Schumann S., Irato P., **Santovito G.** (2024). The digestive system through children's eyes. an educational experiment on the treatment of the digestive system with laboratory modalities in the perspective of lifelong learning. Proceedings of the 16th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 1-3 July, 2024.

210. Bertoncello O., Moretto E., Battistella P., De Rosso A., Franceschin M., Guerra I., Tabone S., Zanatta M.T., Ballarin L., **Santovito G.** (2024) Co-designing museum itineraries in a

steam perspective for kindergarten and primary school children: an experience at Micromegamondo in Padova. Proceedings of the 16th International Conference on Education and New Learning Technologies. Palma de Mallorca, Spain. 1-3 July, 2024.

Padova, 11/11/2024

Gianfranco Santovito, PhD