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| Curriculum Vitae | |
| Personal information | |
| First name(s) / Surname(s) | Stefania Squadrone |
| Telephone(s) | +39 011 2686415 |
| E-mail | stefania.squadrone@izsto.it |
| Nationality | Italian |
| Work experience | |
| Dates | 2020 |
| Occupation or position held | In charge of Inorganic Contaminants laboratory, Chemistry Dept. |
| Main activities and responsibilities | Food and feed official chemical controls for trace elements; analysis, method validation, staff management, research projects design and coordination, scientific writing. |
| Name and address of employer | Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Via Bologna 148, 10154 Turin, Italy - Veterinary Public Health, Chemistry Dept. |
| Dates | 2006 -2020 |
| Occupation or position held | Assistant Biologist |
| Main activities and responsibilities | Food and feed official chemical controls for trace elements; analysis, method validation, staff management, research projects design and coordination, scientific writing. |
| Name and address of employer | Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Via Bologna 148, 10154 Turin, Italy - Veterinary Public Health |
| Dates | 2006 – 2001 |
| Occupation or position held | Assistant Biologist |
| Main activities and responsibilities | Official controls for GMO and veterinary diseases by molecular biology techniques; analysis, method validation, staff management, involvement in research projects, scientific writing. |
| Name and address of employer | Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Via Bologna 148, 10154 Turin, Italy - Veterinary Public Health |
| Dates | 2001 – 1999 |
| Occupation or position held | Researcher Biologist |
| Main activities and responsibilities | Research activity in molecular biology |
| Name and address of employer | Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Via Bologna 148, 10154 Turin, Italy - Veterinary Public Health |

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|---|--|---------|--------------------|-------------------|----------------|
| Dates | 1999 - 1998 | | | | |
| Occupation or position held | Researcher Biologist | | | | |
| Main activities and responsibilities | Research activity in immunology and gene therapy | | | | |
| Name and address of employer | TIGET, Telethon Institute for Gene Therapy; Milano, Italy | | | | |
| Dates | 1998 - 1997 | | | | |
| Occupation or position held | Researcher Biologist (scholarship) | | | | |
| Main activities and responsibilities | Research activity in immunology | | | | |
| Name and address of employer | Children Hospital, Regina Margherita, Turin, Italy | | | | |
| Dates | 1997 - 1996 | | | | |
| Occupation or position held | Researcher Biologist | | | | |
| Main activities and responsibilities | Research activity in screening techniques for detection of antibiotics in milk | | | | |
| Name and address of employer | Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Via Bologna 148, 10154 Turin, Italy - Veterinary Public Health | | | | |
| Dates | 1996 - 1994 | | | | |
| Occupation or position held | Training Biologist | | | | |
| Main activities and responsibilities | Training in microbiological analysis (food and water) | | | | |
| Name and address of employer | Environmental Regional Agency, Turin, Italy. | | | | |
| Education and training | | | | | |
| Dates | 1988 -1994 | | | | |
| Title of qualification awarded | Specialization Degree in Microbiology and Virology - Turin University, Faculty of Medicine | | | | |
| Level in national or international classification | 70/70 | | | | |
| Dates | 1994 | | | | |
| Title of qualification awarded | Admitted to the Register of Biologists - Turin University, Faculty of Science | | | | |
| Dates | 1993 | | | | |
| Title of qualification awarded | Master in Environmental Engineering- Turin Politecnico University | | | | |
| Dates | 1991-1988 | | | | |
| Title of qualification awarded | Master cum laude in Biology, Turin University, Faculty of Mathematical and Biological Sciences. | | | | |
| Personal skills and competences | | | | | |
| Mother tongue(s) | Italian | | | | |
| Other language(s) | | | | | |
| Self-assessment | Understanding | | Speaking | | Writing |
| European level (*) | Listening | Reading | Spoken interaction | Spoken production | |

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|---|---|----|----|----|----|
| English | B2 | C1 | B1 | B1 | C1 |
| French | A1 | A1 | A1 | A1 | A1 |
| | (*) <u>Common European Framework of Reference for Languages</u> | | | | |
| Technical skills and competences | The scientific interests cover the area of heavy metals and contaminants. Researches mainly focused on development of innovative analytical methods to applying in the food and feed control area. Moreover, the trace elements occurrence in marine, freshwater and terrestrial ecosystems is investigated by the use of living organisms as bioindicators of environmental health. | | | | |
| Additional Information | <p>Other Qualifications (since 1995):</p> <ul style="list-style-type: none"> - <u>participation in courses and seminars</u> in chromatographic techniques, in separation and extraction methods for foodstuff and feed, in Laboratory Health and Safety, in spectroscopic techniques, in Quality Control (EN 45001 and ISO/IEC 17025), in molecular biology, in environmental safety. - <u>Chief Scientist and Coordinator of research projects</u> financed by the Italian Health Ministry and by the Piedmont Region. -<u>Reviewer for</u>: Chemosphere, Environmental Pollution, Science of The Total Environment, Environmental Science and Pollution Research, Food Analytical Methods, Environmental Research, J Hazardous Materials, Environmental Technology, Ecotoxicology and Environmental Safety; Environmental Monitoring and Assessment, Bulletin of Environmental Contamination and Toxicology, Methods in Ecology and Evolution. -<u>Coauthor</u> more than 200 scientific articles, poster, presentation. <p><u>International Publications (last five years)</u></p> <p>Squadrone, S., (2020). Water environments: metal-tolerant and antibiotic-resistant bacteria. <i>Environ Monit Assess</i> 192: 238</p> <p>Squadrone, S., Crescio, I., Brizio, D. Dutto, R. Bocca, C. Stella, G. Colombero, M. Rizzi, S, Pederiva, F. Ingravalle, M.C: Abete (2020). Nickel Occurrence in a Livestock Food Chain (Northwestern Italy). <i>Water Air Soil Pollut</i> 231,265.</p> <p>Squadrone S, Brizio P, Stella C, Pederiva S, Brusa F, Mogliotti P, Garrone A, Abete MC, (2020).Trace and rare earth elements in monofloral and multifloral honeys from Northwestern Italy; a first attempt of characterization by a multi-elemental profile, <i>Journal of Trace Elements in Medicine and Biology</i>, 61:126556.</p> <p>Squadrone, S., P. Brizio, C. Stella, M. Mantia, S. Pederiva, F. Brusa, P. Mogliotti, A. Garrone, M. C. Abete (2020). Trace elements and rare earth elements in honeys from the Balkans, Kazakhstan, Italy, South America and Tanzania. <i>Environ Sci Pollut Res.</i> 27(1).</p> <p>Squadrone, S, P. Brizio, M. C. Abete, A. Brusco (2020). Trace elements profile in the blood of Huntington' disease patients.</p> | | | | |

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P. Pastorino, P. Brizio, M.C. Abete, M. Bertoli, A.G. Oss Noser, G. Piazza, M. Prearo, A.C. Elia, E. Pizzul, **S. Squadrone**, (2020). Macrobenthic invertebrates as tracers of rare earth elements in freshwater watercourses. *Science of the Total Environment* 698: 134-282.

S. Squadrone, P. Brizio, C. Stella, M. Mantia, L. Favaro, B. Biancani, C. Da Rugna, S. Gridelli, M. C. Abete (2020). Differential bioaccumulation of trace elements and rare earth elements in muscle, kidneys and liver of the invasive Indo-Pacific Lionfish (*Pterois* spp.) from Cuba. *Biological trace elements research*

S. Squadrone, P. Brizio, M. C. Abete, A. Brusco (2020). Trace elements profile in the blood of Huntington' disease patients. *Journal of Trace Elements in Medicine and Biology* 57: 18–20

P. Pastorino, P. Brizio, M.C. Abete, M. Bertoli, A.G. Oss Noser, G. Piazza, M. Prearo, A.C. Elia, E. Pizzul, **S. Squadrone**, (2020). Macrobenthic invertebrates as tracers of rare earth elements in freshwater watercourses. *Science of the Total Environment* 698: 134-282

A. Ruo Redda, O. Abollino, M. Malandrino, **S. Squadrone**, M. C. Abete, S. Berto, R. Toniolo, F. Durbiano, A. Giacomino (2019). A Portable Setup for the Voltammetric Determination of Total Mercury in Fish with Solid and Nanostructured Gold Electrodes. *Molecules* 24: 1910

S. Squadrone, P. Brizio, L. Favaro, D. Florio, C. Da Rugna, S. Gridelli, M. C. Abete (2019). Feathers of Humboldt penguin are suitable bioindicators of Rare Earth Elements. *Science of The Total Environment* 678: 627–631.

S. Squadrone, P. Brizio, M. Mantia, C. Stella, M. Battuello, N. Nurra, R. Mussat Sartor, R. Orusa, S. Robetto, F. Brusa, P. Mogliotti, A. Garrone, M.C. Abete (2019). Rare earth elements in marine and terrestrial matrices of Northwestern Italy: Implications for food safety and human health. *Science of The Total Environment* 660:1383-1391.

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R. Juncos, M. Arcagni, **S. Squadrone**, A. Rizzo, M. Arribère, J.P. Barriga, M.A. Battini, L.M. Campbell, P. Brizio, M.C. Abete, S. Ribeiro Guevara (2019). Interspecific differences in the bioaccumulation of arsenic of three Patagonian top predator fish: Organ distribution and arsenic speciation *Ecotoxicology and Environmental Safety*,168: 431-442.

G. Esposito, D. Meloni, M. C. Abete, G. Colombero, M. Mantia, P.

Pastorino, M. Prearo, A. Pais, E. Antuofermo, **S. Squadrone (2018)**. The bivalve *Ruditapes decussatus*: A biomonitor of trace elements pollution in Sardinian coastal lagoons (Italy). *Environmental Pollution* 242:1720-1728.

P. Pastorino, E. Pizzul, M. Bertoli, S. Perilli, P. Brizio, G. Salvi, Esposito G, M.C. Abete M. Prearo, A.C. Elia, D. Mugetti, **S. Squadrone, (2019)**. Macrobenthic invertebrates as bioindicators of trace elements in high-mountain lakes. *Environmental Science and Pollution Research*.

S. Squadrone, C. Stella, P. Brizio, M. C. Abete (2018). A Baseline Study of the Occurrence of Rare Earth Elements in Animal Feed. *Water Air Soil Pollut* 229:190.

S. Squadrone, N. Nurra, M. Battuello, R. Mussat Sartor, C. Stella, P. Brizio, M. Mantia, D. Pessani, M. C. Abete. Trace elements, rare earth elements and inorganic arsenic in seaweeds from Giglio Island (Tyrrhenian Sea) after the Costa Concordia shipwreck and removal (2018). *Marine Pollution Bulletin*, 133: 88-95

S. Squadrone, M.C. Abete, P. Brizio, D. Pessani, L. Favaro (2018). Metals in Feathers of African Penguins (*Spheniscus demersus*): Considerations for the Welfare and Management of Seabirds Under Human Care. *Bulletin of Environmental Contamination and Toxicology*, 100 (4): 465–471.

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S. Squadrone, M. C. Abete, M. Rizzi, G. Monaco, L. Favaro (2018). Bioaccumulation of Trace and Non-trace Elements in Blood and Fibers of Alpacas (*Vicugna pacos*) that Graze in Italian Pastures. *Water Air Soil Pollut*. 229:41

A. Benedetto, C. Bocca, P. Brizio, S. Cannito, M. C. Abete, **S. Squadrone (2018)**. Effects of the rare elements lanthanum and cerium on the growth of colorectal and hepatic cancer cell lines. *Toxicology in Vitro* 46:9-18.

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M. Battuello, N. Nurra, P. Brizio, R. Mussat Sartor, D. Pessani, M.C. Abete, **S. Squadrone** (2017). The isopod *Eurydice spinigera* and the chaetognath *Flaccisagitta enflata*: How habitat affects bioaccumulation of metals in predaceous marine invertebrates). *Ecological Indicators* 74: In press 2018

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Stefania Squadrone, Paola Brizio, Caterina Stella, Marino Prearo, Paolo Pastorino, Laura Serracca, Carlo Ercolini, Maria Cesarina Abete (2016). Presence of trace metals in aquaculture marine ecosystems of the Northwestern Mediterranean Sea (Italy) *Environmental Pollutions*, 215: 77-83

A. Benedetto, P. Brizio, **S. Squadrone**, T. Scanzio, M. Righetti, L. Gasco, M. Prearo, M.C. Abete (2016). Oxidative stress related to chlorpyrifos exposure in rainbow trout: Acute and medium-term effects on genetic biomarkers. *Pesticide Biochemistry and Physiology* 129: 63-69

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Stefania Squadrone, Cecilia Mancini, Alfredo Brusco (2015). Down regulation of antioxidant enzymes in SCA28. *European Journal of Human Genetics* 6/2015

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S. Squadrone, E. Chiaravalle, S. Gavinelli, G. Monaco, M. Rizzi, M.C. Abete (2015). Analysis of mercury and methylmercury concentrations, and selenium:mercury molar ratios for a

toxicological assessment of sperm whales (*Physeter macrocephalus*) in the most recent stranding event along the Adriatic coast (Southern Italy, Mediterranean Sea). *Chemosphere*, 138:633-641

Stefania Squadrone, Daniela Marchis, Andrea Loria, Giuseppina Amato, Gianluca Ferro, Maria Cesarina Abete (2015). Detection of banned antibacterial growth promoter in animal feed by enzyme-linked immunosorbent assay: Method validation according to the Commission Decision 2002/657/EC criteria. *Food Control* 47:66-70

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Stefania Squadrone, Walter Mignone, Maria Cesarina Abete, Livio Favaro, Tommaso Scanzio, Claudio Foglini, Barbara Vivaldi, Marino Prearo, (2015). Non-dioxin-like polychlorinated biphenyls (NDL-PCBs) in eel, trout and barbel from the River Roya, Northern Italy *Food Chemistry* 175:10-15.