

Arianna Smerilli



Born in Lanciano (Italy) on 01/06/1984

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Current Position: Research technician - CTER VI

Current Affiliation:

Department of Marine Biotechnology, Stazione Zoologica Anton Dohrn, Napoli (Italy)

Education/Training/Experience

Institute and Location	Degree / Function	Year	Field of Study
Sapienza University of Rome, Italy	BSc	2010	Biological Sciences
University of Genova, Italy	MSc	2012	Biological Monitoring
Environmental Physiology - Biomarker/Bioassays Laboratory. Department of Earth, Environmental and Life Science (DISTAV), University of Genova, Italy	Research fellow	2013-2014	(Eco)toxicity of nanomaterials
Stazione Zoologica Anton Dohrn, Napoli, Italy Open University, Milton Keynes, UK	PhD	2014-2017	Enhancement of carotenoid biosynthesis and antioxidant responses in microalgae by light modulation
Marine Biotechnology Department. Stazione Zoologica Anton Dohrn, Napoli, Italy	Research technician	2019 - present	Maintenance and mass cultivation of microalgae for potential biotechnological applications

Publications

Author of 14 publications on ISI-journals (H index: 9), total citations 446 (as of February 2020)

List of peer-reviewed publications

- T Balbi, R Fabbri, K Cortese, **A Smerilli**, C Ciacci, C Grande, L Vezzulli, C Pruzzo, L Canesi (2013) Interactions between *Mytilus galloprovincialis* hemocytes and the bivalve pathogens *Vibrio aestuarianus* 01/032 and *Vibrio splendidus* LGP32. *Fish & shellfish immunology* 35 (6), 1906-1915
- L Canesi, G Frenzilli, T Balbi, M Bernardeschi, C Ciacci, S Corsolini, C Della Torre, R Fabbri, C Faleri, S Focardi, P Guidi, A Kočan, A Marcomini, M Mariottini, M Nigro, K Pozo-Gallardo, L Rocco, V Scarcelli, **A Smerilli**, I Corsi (2014) Interactive effects of n-TiO₂ and 2, 3, 7, 8-TCDD on the marine bivalve *Mytilus galloprovincialis*. *Aquatic toxicology* 153, 53-65
- T Balbi, **A Smerilli**, R Fabbri, C Ciacci, M Montagna, E Grasselli, A Brunelli, G Pojana, A Marcomini, G Gallo, L Canesi (2014) Co-exposure to n-TiO₂ and Cd²⁺ results in interactive effects on biomarker responses but not in increased toxicity in the marine bivalve *M. galloprovincialis*. *Science of the Total Environment* 493, 355-364
- E Grasselli, K Cortese, R Fabbri, **A Smerilli**, L Vergani, A Voci, G Gallo, L Canesi (2014) Thyromimetic actions of tetrabromobisphenol A (TBBPA) in steatotic FaO rat hepatoma cells. *Chemosphere* 112, 511-518
- C Della Torre, T Balbi, G Grassi, G Frenzilli, M Bernardeschi, **A Smerilli**, P Guidi, L Canesi, M Nigro, F Monaci, V Scarcelli, L Rocco, S Focardi, M Monopoli, I Corsi (2015) Titanium dioxide nanoparticles modulate the toxicological response to cadmium in the gills of *Mytilus galloprovincialis*. *Journal of hazardous materials* 297, 92-100
- I Orefice, R Chandrasekaran, **A Smerilli**, F Corato, T Caruso, A Casillo, MM Corsaro, F Dal Piaz, AV Ruban, C Brunet (2016) Light-induced changes in the photosynthetic physiology and biochemistry in the diatom *Skeletonema marinoi*. *Algal Research* 17, 1-13
- T Balbi, C Ciacci, E Grasselli, **A Smerilli**, A Voci, L Canesi (2017) Utilization of *Mytilus* digestive gland cells for the in vitro screening of potential metabolic disruptors in aquatic invertebrates. *Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology* 191, 26-35
- A Smerilli**, I Orefice, F Corato, A Gavalás Olea, AV Ruban, C Brunet (2017) Photoprotective and antioxidant responses to light spectrum and intensity variations in the coastal diatom *Skeletonema marinoi*. *Environmental Microbiology* 19 (2), 611-627
- I Orefice, M Musella, **A Smerilli**, C Sansone, R Chandrasekaran, F Corato, C Brunet (2019) Role of nutrient concentrations and water movement on diatom's productivity in culture. *Scientific Reports* 9:1479
- A Smerilli**, S Balzano, M Maselli, M Blasio, I Orefice, C Galasso, C Sansone, C Brunet (2019) Antioxidant and photoprotection networking in the coastal diatom *Skeletonema marinoi*. *Antioxidants* 8:154

- C Sansone, C Piscitelli, C Galasso, **A Smerilli**, A Bruno, A Albini, C Brunet (2020) *Skeletonema marinoi* (diatom) extracts are endowed with promising cancer preventive properties in prostate cancer cells. *Cancer Research* 80 (16 Supplement), 25-25
- A Milito, I Orefice, **A Smerilli**, I Castellano, A Napolitano, C Brunet, A Palumbo (2020) Insights into the light response of *Skeletonema marinoi*: involvement of Ovothiols. *Marine drugs* 18(9), 477
- A Del Mondo, **A Smerilli**, E Sané, C Sansone, C Brunet (2020) Challenging microalgal vitamins for human health. *Microbial Cell Factories* 19 (1), 1-23
- A Del Mondo, **A Smerilli**, L Ambrosino, A Albini, D Noonan, C Sansone, C Brunet (2021) Insights in Phenolic compounds from microalgae: structural variety and complex beneficial activities from health to nutraceuticals. *Critical Reviews in Biotechnology* 41:2, 155-171

Participation in conferences

14th Italian Association of Developmental and Comparative Immunobiology Meeting

February 14th- 16th, 2013 - Palermo (Italy)

Differential interactions between *Mytilus* hemolymph components and *Vibrio aestuarianus* and *Vibrio splendidus*: *in vitro* and *in vivo* studies”

C Ciacci, T Balbi, R Fabbri, **A Smerilli**, E Pezzati, C Grande, L Vezzulli, C Pruzzo, L Canesi

17th Pollutant Responses In Marine Organisms Congress

May 5th - 8th, 2013 - Faro (Portugal)

Interactive effects of n-TiO₂ and other contaminants (Cd²⁺ and TCDD) on *Mytilus galloprovincialis*

T Balbi, **A Smerilli**, R Fabbri, C Ciacci, G Gallo, L Canesi

1st International Conference of Fish and Shellfish Immunology

June 25th- 28th, 2013 - Vigo (Spain)

Interactions between hemolymph components of *Mytilus galloprovincialis* and different *Vibrio* species (ORAL)

L Canesi, T Balbi, R Fabbri, **A Smerilli**, E Pezzati, C Grande, M Stauder, L Vezzulli, C Pruzzo

64th Italian Society of Physiology National Meeting

September 18th - 20th 2013- Portonovo (Italy)

Thyromimetic effects of Tetrabromobisphenol A (TBBPA) on lipid metabolism in steatotic FaO rat hepatoma cells (ORAL)

E Grasselli, A Voci, L Vergani, R Fabbri, **A Smerilli**, K Cortese, G Gallo, L Canesi

15th Italian Association of Developmental and Comparative Immunobiology Meeting

February 12th- 14th, 2014 - Ferrara (Italy)

Interactive effects of nanoparticles with other environmental pollutants on immune function and larval development of *Mytilus galloprovincialis* (ORAL)

T Balbi, **A Smerilli**, R Fabbri, C Ciacci, M Montagna, G Gallo, L Canesi

7th International Nanotoxicology Congress

April 23th - 26th, 2014 - Antalya (Turkey)

Interactive effects of n-TiO₂ and Cd²⁺ in marine invertebrates (POSTER)
T Balbi, **A Smerilli**, R Fabbri, C Ciacci, E Grasselli, A Brunelli, G Pojana, A Marcomini, G Gallo, L Canesi

24th Society of Environmental Toxicology and Chemistry (SETAC) Meeting

May 11th- 15th, 2014 - Basel (Switzerland)

Interactive effects of n-TiO₂ with other contaminants on immune and digestive gland function of the marine bivalve *Mytilus* (ORAL)

L Canesi, T Balbi, **A Smerilli**, C Ciacci, R Fabbri, G Gallo

Titanium dioxide nanoparticles modulate the response to Cadmium in the gills of marine mussel

Mytilus galloprovincialis (ORAL)

C Della Torre, L Canesi, G Frenzilli, L Rocco, G Pojana, E Bocci, T Balbi, M Bernardeschi, C Faleri, P Guidi, F Mottola, M Santonastasio, V Scarcelli, **A Smerilli**, V Stingo, A Marcomini, M Nigro, S Focardi, I Corsi

1st Italian Society of Nanotoxicology National Meeting

June 27th - 28th, 2014 - Naples (Italy)

Comparison between mammalian cell lines as models for the *in vitro* evaluation of nano-oxides toxicity (POSTER)

A Smerilli, G Gallo, L Canesi

Marine ecotoxicology of nanomaterials: toxicity and bioaccumulation of titanium dioxide nanoparticles in fishes in presence of cadmium and 2,3,7,8 Tetrachlorodibenzo-p-dioxin (ORAL)

L Rocco, L Canesi, G Frenzilli, C Della Torre, G Pojana, C Faleri, F Buonocore, E Bocci, T Balbi, M Bernardeschi, A Brunelli, S Corsolini, P Guidi, F Mottola, E Randelli, S Picchietti, M Santonastasio, V Scarcelli, **A Smerilli**, V Stingo, A Marcomini, M Nigro, G Scapigliati, S Focardi, I Corsi

6th Bilateral Seminar Italy-Japan

November 19th - 20th, 2014 - Palermo (Italy)

Organic contaminants as potential obesogens in mammalian and marine invertebrate cells (ORAL)

A Smerilli, E Grasselli, C Ciacci, T Balbi, L Canesi

66th Italian Society of Physiology National Meeting

June 16th-18th, 2015 - Genova (Italy)

Disturbance in lipid homeostasis by environmental chemicals in mammalian and invertebrate hepatic cells (ORAL)

T Balbi, **A Smerilli**, C Ciacci, E Grasselli, A Voci, G Gallo, L Canesi

School on molecular and physical aspects of photosynthesis

January 25th – 29th, 2016 – Venice (Italy)

Photoprotective and antioxidant responses to light spectrum and intensity variations in a coastal diatom (POSTER)

A Smerilli, I Orefice, F Corato, A Gavalás Olea, AV Ruban, C Brunet

Light-induced changes in the photosynthetic physiology and biochemistry in the diatom *Skeletonema marinoi* (POSTER)

I Orefice, R Chandrasekaran, **A Smerilli**, F Corato, T Caruso, A Casillo, MM Corsaro, F Dal Piaz, AV Ruban, C Brunet

Retreat and Scientific Council SZN

November 20th – 21st, 2017 – Naples (Italy)

Enhancement of carotenoid biosynthesis and antioxidant responses in microalgae by light modulation (POSTER)

A Smerilli

American Association for Cancer Research (AACR)

June 22nd – 24th, 2020 – Virtual meeting

Skeletonema marinoi (diatom) extracts are endowed with promising cancer preventive properties in prostate cancer cells (POSTER)

C Sansone, C Piscitelli, C Galasso, **A Smerilli**, A Bruno, A Albini, C Brunet