



**XXII CONVEGNO DELLA SOCIETÀ ITALIANA DI IMMUNOBIOLOGIA COMPARATA E DELLO SVILUPPO
(SIICS)**

**XXII CONFERENCE OF THE ITALIAN ASSOCIATION OF DEVELOPMENTAL AND COMPARATIVE
IMMUNOBIOLOGY (IADCI)**

PROGRAM

WEDNESDAY February 16th 2022

13.00-14.30 Registration

Main Lecture

14.30 *D Oyanedel, A Lagorce, G Charrière, M-A Travers, D Destoumieux-Garzón (CNRS Montpellier)*
Immune-microbiota interplay in oyster health and disease

Session I: Immune competence and immune response (part I)

Chair *Paola Venier (University of Padova)* and *Grimaldi Annalisa (University of Insubria)*

15.10 *G Blasi, E Bortoletto, M Gasparotto, F Filippini, U Rosani, P Venier (University of Padova)*
Antiviral sensors and ZNF1 in the innate immunity of invertebrates

15.25 *J Fabrello, M Ciscato, D Asnicar, MG Marin, V Matozzo (University of Padova)*

First morpho-functional characterization of *Anemonia viridis* amoebocytes: a light microscopy study

15.40 *CF Tucci, S Greco, M Sollitto, A Pallavicini, M Gerdol (University of Trieste)*

Analysis of structural variants and associated gene presence-absence variation phenomena in the genome of the pacific oyster *Crassostrea gigas*

15.55 *R Frizzo, E Bortoletto, T Riello, P Venier, S Mammi (University of Padova)*

Understanding bivalve physiology through NMR metabolomics

16.10 Coffee Break

16.40 *E Bortoletto, U Rosani, C Montagnani, C-M Bai, P Venier (University of Padova)*

ADAR-editing in mollusc species: in between physiology and antiviral response

16.55 *G Bovo, L Ballarin (University of Padova)*

Tissue distribution of a rhamnose binding lectin in the colonial ascidian *Botryllus schlosseri* and effects of microinjections of the specific antibody into the circulatory system

17.10 F La Torre, A Peronato, F Gasparini, V Vanni, G Martello, L Manni (University of Padova)

Phylogenetic and transcriptomic analysis of two putative STAT genes in the colonial ascidian *Botryllus schlosseri* and their involvement in immunity

17.25 N Franchi (University of Modena and Reggio Emilia)

How can we define “self”? Complement system and missing-self theory

17.40 A Peronato, N Franchi, M Tabarelli, L Ballarin (University of Padova)

Characterisation and functional role of a novel C1qDC from a colonial ascidian

17.55 A Ametrano, S Picchiatti, L Guerra, S Giacomelli, U Oreste, MR Coscia (CNR Napoli)

Isolation and characterization of the polymeric Ig receptor gene from the cold adapted teleost *Trematomus bernacchii*

THURSDAY February 17th 2022

Main Lecture

9.00 Stéphanie Madec (Université de Bretagne Occidentale - Brest)

Climate change and pollution effects on bivalves: cell culture models as promising tools?

Session II: Development and immunity

Chair: Giuseppe Scapigliati (University of Tuscia) and Davide Malagoli (University of Modena and Reggio Emilia)

9.40 G Bergamini (University of Modena and Reggio Emilia)

Immune contribution to tentacle regeneration in adult mollusc and cnidarian models

9.55 L Pulze, N Baranzini, A Grimaldi (University of Insubria)

The role of the immune modulator HvRNASET2 during development

10.10 A Biscontin, F Muller, I Urso, C Bertolucci, S Kawaguchi, B Meyer, C De Pittà (University of Padova).

Defining the Antarctic krill's ontogenesis from a transcriptomic point of view

10.25 L Drago, G Santovito, L Ballarin (University of Padova)

Dynamics of formation of stress granules during the colonial blastogenetic cycle of *Botryllus schlosseri*

10.40 V Pianese, A Miccoli, G Scapigliati, F Buonocore, AM Fausto, S Picchiatti (University of Tuscia)

Brain and immunity in the teleost fish *Dicentrarchus labrax* along development: A preliminary study

10.55 Coffee Break

Session III: Organism interactions

Chair Adriana Vallesi (University of Camerino) and Valerio Matozzo (University of Padova)

11.25 A Candelori, G Di Giuseppe, D Petrelli, P Luporini, A Vallesi (University of Camerino)

Mutual benefits from symbiotic coexistence between bipolar *Euplotes* cells and *Francisella* bacteria

11.40 C Alimenti, B Pedrini, P Luporini, A Vallesi (University of Camerino)

Structural and phylogenetic evidence supports a key role played by helix-3 of *Euplotes* pheromone structure in autocrine and heterologous pheromone/receptor interactions

11.55 M Auguste, FU Rahman, T Balbi, M Leonessi, C Oliveri, L Vezzulli, D Furones, L Canesi (University of Genova)

First insights into the mechanisms involved in immune response in *Mytilus galloprovincialis* towards the emerging pathogen *Arcobacter*

12.10 C La Corte, N Baranzini, M Dara, A Grimaldi, MG Parisi (University of Palermo) **Inflammation events occurring upon bacterial infection in *M. galloprovincialis***

12.25 A Scapolatiello, U Rosani, C Manfrin, S Puljas, A Pallavicini, M Gerdol (University of Trieste)

Investigating the role of viral infections in the population of the *Congerius kusceri*

12.40 U Rosani, R Frizzo, S Kawato (University of Padova)
AMPylation: a new facet of host-virus crosstalk in mollusks

12.55 Lunch

Session IV: Environmental stress and immunity

Chair: *Maria Giovanna Parisi* (University of Palermo) and *Luigi Abelli* (University of Ferrara)

14.30 C Ciacci, M Betti, S Abramovich, M Cavaliere, F Frontalini (University of Urbino)

Protein extractions from *Amphistegina lessonii*: a new approach for the evaluation of the effects of heavy metals on benthic organisms

14.45 N Baranzini, L Pulze, C Bon, L Izzo, A Grimaldi (University of Insubria)

***Hirudo verbana* as a freshwater invertebrate model to assess the effects of polypropylene nano and microplastic dispersion**

15.00 F Bertini, C La Corte, M Dara, D Parrinello, MG Parisi

Study of immunotoxicity responses of *Sabella spallanzanii* exposed to copper sulphate

15.15 ML Vommaro, C Zanchi, A Giglio, J Kurtz (University of Calabria)

Herbicide exposure alters the expression of antimicrobial peptide patterns in the mealworm beetle infected with the natural entomopathogen *Beauveria bassiana*

15.30 A Ferrari, J Duskey, G Bergamini, A Rinaldi, R Fiorino, B Ruozi, G Tosi, D Malagoli (University of Modena and Reggio Emilia)

Organ-specific accumulation of PLGA nanoparticles injected into *Pomacea canaliculata* snails: preliminary in vivo observations

15.45 R Varello, F Cima (University of Padova)

Immunotoxic effects of a new-generation antifouling biocide in a compound ascidian

16.00 D Melillo, R Marino, P Italiani, D Boraschi (CNR Napoli)

Effects of nano- and microplastics in the development of immune memory in the ascidian *Ciona robusta*

16.15 Coffee Break

16.45 M Carnera, S Schumann, P Irato, G Santovito (University of Padova)

Metallothionein gene expression in *Trematomus eulepidotus* as a response to environmental variation of metal ion concentrations

17.00 S Greco, AS Gaetano, A Pallavicini, PG Giulianini, M Gerdol (University of Trieste)

Transcriptomic response of *Trematomus bernacchii* to short- to medium-term mild heat stress and experimental design bias

17.15 S Schumann, G Mozzi, C Manes, D Nyqvist, C Comoglio, E Negrato, P Irato, D Bertotto, A Marion, G Santovito (University of Padova)

The effect of group size on the stress level in an open-channel swimming flume on *Telestes muticellus*

17.30 E Piva, S Schumann, S Dotteschini, M Bonato, D Bertotto, A Marion, P Irato, G Santovito (University of Padova)

Preliminary data on physiological responses induced by PFAS exposure in freshwater fish of the Veneto region

17.45 L Abelli, A Mancina, M Baini, G Limonta, C Panti, MC Fossi (University of Ferrara)

The skin of Mediterranean Cetaceans as model to analyse accumulation and toxicity of POP

20.30 Gala Dinner

FRIDAY February 18th 2022

Main Lecture

9.00 *Damjana Drobne* (University of Ljubljana)

Stem Cells and Innate Immunity in aquatic Invertebrates: which relationships?

Session V: Immune competence and immune response (part II)

Chair: *Matteo Cammarata* (University of Palermo) and *Piero Giulianini* (University of Trieste)

9.40 *V Longo, D Parrinello, A Longo, MG Parisi, N Parrinello, P Colombo, M Cammarata* (University of Palermo)

Isolation and characterization of the polymeric Ig receptor gene from the cold adapted teleost *Trematomus bernacchii*

9.55 *A Ferri, S Sacchi, G Bergamini, M Nasi, D Malagoli* (University of Modena and Reggio Emilia)

Identification of potential hemocyte markers in the gastropod model *Pomacea canaliculata*

10.10 *A Peronato, L Ballarin* (University of Padova)

Insight on the signal transduction pathways involved in morula cell degranulation in the colonial ascidian *Botryllus schlosseri*

10.25 *G Scapigliati, F Porcelli, F Buonocore, G Zarletti, M Tiberi, V De Molfetta, AM Timperio, F Gevi, G Fanelli* (University of Tuscia)

Translational comparative immunology: from fish to bed, new antibiotics and SARS-Cov-1 immunodiagnostic

10.40 Coffee break

11.10 IADCI (SIICS) Members' Assembly