



Società  
Italiana  
di Immunobiologia  
Comparata  
e dello Sviluppo

UNIVERSITÀ DELLA CALABRIA  
DIPARTIMENTO DI  
BIOLOGIA, ECOLOGIA  
E SCIENZE DELLA TERRA  
DIBEST

**ITALIAN ASSOCIATION OF DEVELOPMENTAL AND COMPARATIVE  
IMMUNOBIOLOGY  
XX MEETING 13th -15th February 2019**

**SALA STAMPA – CENTRO CONGRESSI “B. ANDREATTA”**

**UNIVERSITA’ DEGLI STUDI DELLA CALABRIA**

Organizing Committee

*Anita Giglio, Pietro Brandmayr, Federica Talarico, Antonio Mazzei, Stefania Marsico, Attilio Naccarato, Francesco Cavaliere, Maria Luigia Vommaro, Maria Concetta Granieri*

Scientific Board

*Matteo Cammarata, Lorian Ballarin, Luigi Abelli, Magda de Eguileor, Piero Giulianini, Davide Malagoli, Maria Giovanna Parisi, Adriana Vallesi, Cesare Indiveri, Tommaso Angelone*

PATRONAGE

**UNIVERSITÀ DELLA CALABRIA E DIPARTIMENTO DI BIOLOGIA, ECOLOGIA E SCIENZE DELLA TERRA**

**MUSEO DI ZOOLOGIA**

**PARCO NAZIONALE DELLA SILA**

**CONSORZIO DI TUTELA DELLA PATATA SILANA IGP**

**CONFEDERAZIONE ITALIANA ELICICOLTORI**



Sponsored by



# SCIENTIFIC PROGRAM

**Wednesday, February 13<sup>th</sup>**

13.30-15.00 Registration

15.00-15.30 Welcome address

SESSION 1 - CELL-CELL INTERACTION

*Chair: Magda de Eguileor – Adriana Vallesi*

15.30-16.10 LECTURE

Laura Canesi<sup>1</sup>, T. Balbi<sup>1</sup>, C. Ciacci<sup>2</sup>, A Borello<sup>1</sup>, L. Vezzulli<sup>1</sup>, M. Auguste<sup>1</sup>  
<sup>1</sup>University of Genoa. <sup>2</sup>University of Urbino

***Mytilus* hemocytes as a model to investigate the specificity of innate immunity in bivalve molluscs**

16.10-16.30 A. Vallesi, P. Luporini

*University of Camerino*

**The often overlooked coming out of ciliates: biological and experimental benefits from accepting genetically identical conspecifics as sexual partners**

16.30-16.50 A. Vallesi, P. Luporini

*University of Camerino*

**The pheromone genes of the self/non-self recognition mechanism of the ciliate *Euplotes crassus* generate multiple transcripts by an alternative splicing of ‘matryoshka’ introns**

16.50-17.10 U. Rosani<sup>1</sup>, S. Domeneghetti<sup>1</sup>, C.M. Bai<sup>2</sup>, M. Shapiro<sup>3</sup>, P. Venier<sup>1</sup>

<sup>1</sup> University of Padova. <sup>2</sup> Yellow Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences. <sup>3</sup> Stony Brook University

**Study of viral infections in bivalves as a tool to trace antiviral host pathways**

17.10-17.30 M. Gerdol<sup>1</sup>, Y. Fujii<sup>2</sup>, Y. Ozeki<sup>3</sup>, A. Pallavicini<sup>1</sup>

<sup>1</sup>University of Trieste. <sup>2</sup>Nagasaki International University, <sup>3</sup>Yokohama City University

**Two distinct lectin families with different glycan-binding specificity share a  $\beta$ -trefoil fold in mussels**

17.30-17.50 A. Montanari<sup>1</sup>, A. Accorsi<sup>2</sup>, M. Nasi<sup>1</sup>, D. Malagoli<sup>1</sup>

<sup>1</sup>University of Modena and Reggio Emilia. <sup>2</sup> Stowers Institute for Medical Research, Kansas City.

**Effects of a nematode-based molluscicide on survival and antimicrobial peptide expression in *Pomacea canaliculata***

17.50-18.10 V. Longo<sup>1</sup>, A. Longo<sup>1</sup>, C. Di Sano<sup>1</sup>, D. Cigna<sup>1</sup>, F. Cibella<sup>1</sup>, G. Di Felice<sup>2</sup> and P. Colombo<sup>1</sup>

<sup>1</sup>Istituto di Biomedicina e di Immunologia Molecolare del Consiglio Nazionale delle Ricerche, Palermo. <sup>2</sup>Istituto Superiore di Sanità, National Center for Drug Research and Evaluation, Rome

***In vitro* exposure to 2,2',4,4'-tetrabromodiphenyl ether (PBDE-47) impairs**

## **innate inflammatory response**

- 18.10-18.30 C. Ciacci<sup>1</sup>, L. Canesi<sup>2</sup>, E. Cesarini<sup>1</sup>, B. Canonico<sup>1</sup>, F. Frontalini<sup>2</sup>  
<sup>1</sup>University of Urbino Carlo Bo. <sup>2</sup> University of Genoa  
**Benthic foraminifera as a model to evaluate contaminant induced stress responses: a confocal microscopy approach**
- 18.30-20.00 **Welcome drink “Taste of Calabria”**
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**Thursday, February 14<sup>th</sup>**

**SESSION 2 – PRIMING AND IMMUNITY MODULATION**

Chair: *Loriano Ballarin - Davide Malagoli*

- 9.00-9.40 LECTURE  
Joachim Kurtz  
*University of Münster*  
**The evolution of specificity in immune priming**
- 9.40-10.00 L. Pulze, A. Grimaldi, F. Ferraro, N. Baranzini, G. Tettamanti, M. de Eguileor  
*University of Insubria*  
**In vivo isolation and characterization of telocytes using supplemented biomatrices**
- 10.00-10.20 N. Baranzini, F. Acquati, M. de Eguileor, G. Tettamanti, A. Grimaldi  
*University of Insubria*  
**The recombinant *HvRNASET2* protein induces a connective tissue remodeling in the invertebrate model medicinal leech *Hirudo verbena***
- 10.20-10.40 C. Manfrin<sup>1</sup>, I. Giovannini<sup>2</sup>, R. Guidetti<sup>2</sup>, P.G. Giulianini<sup>1</sup>, L.Rebecchi<sup>2</sup>  
<sup>1</sup>University of Trieste. <sup>2</sup>University of Modena and Reggio Emilia.  
**Towards decrypting stress response in tardigrade -Transcriptome survey of *Paramacrobiotus sideralis* during anhydrobiotic state**
- 10.40-11.00 **Coffee break**
- 11.00-11.20 M. Mastore, S. Quadron, A. Toscano, N. Mottadelli and M. F. Brivio  
*University of Insubria*  
**Susceptibility to entomopathogens and modulation of basal immunity in two insect models at different temperatures**
- 11.20-11.40 D. Bruno, M. Mastore, M. de Eguileor, A. Grimaldi, M.F. Brivio, G. Tettamanti  
*University of Insubria*  
**The immune response of *Hermetia illucens* larvae: preliminary evidence**
- 11.40-12.00 A. Peronato, N. Franchi, L. Schiavon, L. Ballarin  
*University of Padova*  
**Characterization of the complement system in a colonial protochordate: C3 complement receptors and opsonic role of C3**

- 12.00-12.20 R. Pernice<sup>1</sup>, C. La Corte<sup>1</sup>, D. Parrinello<sup>1</sup>, S. Barnay-Verdier<sup>2</sup>, P. Furla<sup>2</sup>, M. Cammarata<sup>1</sup>, MG. Parisi<sup>1</sup>  
<sup>1</sup> University of Palermo. <sup>2</sup>ERA Team Nice  
**Tentacles regeneration in *Anemonia viridis* (Anthozoa, Cnidaria)**
- 12.20-12.40 S. Leo<sup>1</sup>, R. Mazza<sup>1</sup>, S. Imbrogno<sup>1</sup>, M. Filice<sup>1</sup>, A. Gattuso<sup>1</sup>, C. Rocca<sup>1</sup>, T. Angelone<sup>1</sup>, Y. Anouar<sup>2</sup>, M.C. Cerra<sup>1</sup>  
<sup>1</sup>University of Calabria. <sup>2</sup>Rouen-Normandie University UNIROUEN  
**Selenoprotein T: an example of novel endocrine modulator in non-mammalian species**

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*LUNCH\**

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**Thursday, February 14<sup>th</sup>**

SESSION 3 – FISH IMMUNOLOGY

**Chair: Luigi Abelli – Giuseppe Scapigliati**

- 15.00-15.40 LECTURE  
Simona Picchietti  
*University of Tuscia*  
**Immunity in the teleost digestive tract**
- 15.40-16.00 G. Scapigliati, S. Picchietti  
*University of Tuscia*  
**Evolution of immune responses: similarities between fish lymphocytes and mammalian innate-like lymphocytes**
- 16.00-16.20 A. Mancia<sup>1</sup>, L. Abelli<sup>1</sup>, A. Benkhalqui<sup>1</sup>, C. Bertolucci<sup>1</sup>, M.C. Fossi<sup>2</sup>, G. Limonta<sup>2</sup>, C. Panti<sup>2</sup>  
<sup>1</sup>University of Ferrara. <sup>2</sup>University of Siena  
**Effects on immunity of exposure to microplastics in adult zebrafish**
- 16.20-16.40 **Coffee break**
- 16.40-17.00 A. Ametrano<sup>1</sup>, A. Mancia<sup>2</sup>, S. Ballarin<sup>2</sup>, A. Benkhalqui<sup>2</sup>, G. Calderoni<sup>2</sup>, G. Pavani<sup>2</sup>, MR. Coscia<sup>1</sup>, L. Abelli<sup>2</sup>  
<sup>1</sup>Institute of Protein Biochemistry, CNR, Napoli. <sup>2</sup>University of Ferrara.  
**Immunodetection of IgM, IgT and pIgR in mucosal tissues of Antarctic teleost**
- 17.00 17.20 M. Dara<sup>1</sup>, PG. Giulianini<sup>2</sup>, C. Manfrin<sup>2</sup>, MG. Parisi<sup>1</sup>, M. Cammarata<sup>1\*</sup>  
<sup>1</sup>University of Palermo. <sup>2</sup> University of Trieste  
**F-type lectin from serum of *Trematomus bernacchii* (Boulenger, 1902): purification, characterization and bacterial agglutinating activity**
- 17.20-17.40 E. Conforto<sup>1</sup>, L. Vélchez-Gómez<sup>2</sup>, MA. Esteban<sup>2</sup>, MG. Parisi<sup>1</sup>, D. Parrinello<sup>1</sup>, M. Cammarata<sup>1</sup>, FA. Guardiola<sup>2,3</sup>  
<sup>1</sup>University of Palermo. <sup>2</sup>Campus Regional de Excelencia Internacional “Campus Mare Nostrum”,

University of Murcia.<sup>3</sup> (CIIMAR), University of Porto

**Mucosal immunity response of European eel (*Anguilla anguilla* L.) after bacterial infections**

- 18.00 IADCI (SIICS) MEMBERS ASSEMBLY AND ELECTIONS
- 20.00 BUS TERMINAL Unical - TRANSFER TO THE RESTAURANT
- 20.30 SOCIAL DINNER\*\* “Relais Serra d’Ulivo” Via Umbria 24 (Località Piano Monello) 87036 Rende (CS)
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**Friday, February 15<sup>th</sup>**

SESSION 4 – MICROBIOTA AND INVERTEBRATE IMMUNITY

**Chair: Anita Giglio – Piero Giulianini**

- 9.00-9.40 LECTURE  
Francesco Pennacchio  
*University of Napoli “Federico II”*  
**Insect immunity as affected by stress factors and associated microorganisms**
- 9.40-10.00 M. Auguste<sup>1</sup>, A. Lasa<sup>1</sup>, A. Pallavicini<sup>2</sup>, C. Pruzzo,<sup>1</sup> L. Vezzulli<sup>1</sup>, L. Canesi<sup>1</sup>  
<sup>1</sup>*University of Genoa.* <sup>2</sup> *University of Trieste*  
**Exposure to TiO<sub>2</sub> nanoparticles results in shift in hemolymph microbiome composition and immunomodulation in *Mytilus galloprovincialis***
- 10.00-10.20 C. Ferrario<sup>1</sup>, A. Czarkwiani<sup>3</sup>, F. Bonasoro<sup>1</sup>, M.D. Candia Carnevali<sup>1</sup>, P. Oliveri<sup>3</sup>, M. Sugni<sup>1,2</sup>  
<sup>1</sup>*Università degli Studi di Milano.* <sup>2</sup>*University College London*  
**When immunity and extracellular matrix matter: repair and regenerative events after echinoderm arm injury**
- 10.20-10.40 **Coffee break**
- 10.40-11.00 F. Stasi<sup>1</sup>, A.P. Miglietta<sup>1</sup>, J. Vizioli<sup>2</sup>, P. Pagliara<sup>1</sup>  
<sup>1</sup>*Università del Salento.* <sup>2</sup>*Université Lille*  
**Preliminary data on functional coelomocytes changes during *Echinaster sepositus* arm regeneration**
- 11.00-11.20 A. Giglio<sup>1</sup>, S. Battistella<sup>2</sup>, F. Cavaliere<sup>1</sup>, P.G. Giulianini<sup>2</sup>, A. Mazzei<sup>1</sup>, F. Talarico<sup>1</sup>, M.L. Vommaro<sup>1</sup>, and P. Brandmayr<sup>1</sup>  
<sup>1</sup>*University of Calabria.* <sup>2</sup> *University of Trieste*  
**Cellular immune responses in *Harpalus (Pseudoophonus) rufipes* (De Geer, 1774) (Coleoptera, Carabidae)**
- 11.20-11.40 F. Cavaliere<sup>1</sup>, P. Brandmayr<sup>1</sup>, P.G. Giulianini<sup>2</sup>, M.L. Vommaro<sup>1</sup>, A. Giglio<sup>1</sup>  
<sup>1</sup> *University of Calabria.* <sup>2</sup>*University of Trieste*  
**Herbicide exposure effects on cellular and humoral immunity of soil insects**

11.40

**Concluding remarks**

\*LUNCH: CAFETERIA (MENSA SALA DIPENDENTI) OR DINING AREA (BAR, RESTAURANT AND PIZZERIA)  
NEAR THE BUS TERMINAL

\*\* **SOCIAL DINNER. € 30,00 (PAYABLE AT REGISTRATION)**