1 Experience in biomedical research: young minds at work

Desenzano del Garda (BS) • Park Hotel 25th-26th October, 2019



Faculty

CHIARA BERTAGNIN ALICE BONETTI DARIA BORTOLOTTI **ALESSIA BURATIN** LAURA CIOETTO MAZZABÒ **ALFONSO CORCIONE ELISA DAL CIN** MARTA DE ANGELIS **WEN-HUI FANG** ROBERTO FERRARESE VALENTINA GENTILI **ELISABETTA GRILLO** ADWAID MANU KRISHNA CHANDRAN MATTIA LAFFRANCHI MICHELE LAI MARTINA LIBERA **GIOVANNI LORENZIN** HANIEH GHASSABIAN EKTA MANOCHA

ANITA F. MEIER SERENA MESSALI PIETRO MAZZUCA **CASTRESE MORRONE** ISABEL PAGANI IVANA PALUCCI **ELISE RAMIA** ALBERTO REALE **GIULIA RIZZO** SARA ROVERSI PAOLA QUARANTA **SOFIA SISTI FABIO SALIU ERIKA SCALTRITI** MARIAM SHALLAK MICHAEL SEYFFER MARK SLEVIN **IRENE SOFFRITTI SEREINA O. SUTTER SARA TARANTO GIULIA TURRIN** ALBERTO ZANI CARLA ZANNELLA



Dear Friends,

We are very pleased to host you here in Desenzano del Garda at the 7th Annual Experience in Biomedical Research: Young Minds at Work.

During the conference, you will be in touch with peers (PhD students, postgraduates, Post-Doctoral Scientists, etc.) from across all biomedical disciplines encompassing the latest and hottest frontiers of research and their innovative translational applications. We want you to take this opportunity and to make this conference very special. Be participative! Be curious! Ask! Be ready to share your knowledge! Even more importantly: Think! Think of possible new scenarios for your research! Think of how fascinating and intriguing is the work we are all involved in!

Your peers are not here to judge you, but to give you a fantastic opportunity to share your data in an extremely informal environment.

Your active participation is important to us and for the real effectiveness of the conference. We also hope it is important to you!

Kind regards,

Francesca Caccuri Claudia Del Vecchio Nicasio Mancini

Friday, October 25th



PARTICIPANTS REGISTRATION

h 12.30-13.30

WELCOME AND INTRODUCTION TO THE MAIN LECTURE

Francesca Caccuri, Claudia Del Vecchio and Nicasio Mancini

h 14.00-14.45 Mark Slevin, Manchester Metropolitan University, Manchester, UK Snakes and Ladders

DELIVERY SYSTEMS AND ANTI-CANCER THERAPY

Chairman: Wen-Hui Fang, Adwaid Manu Krishna Chandran

h 14.45-15.00 Mattia Laffranchi, Department of Molecular and Translational Medicine, University of Brescia, Brescia Structural analysis of alpha-1 antitrypsin polymers extracted from an explanted MZ heterozygote liver

h 15.00-15.15 Michele Lai, Retrovirus Center and Virology Section,
Department of Translational Research and New Technologies
in Medicine and Surgery, University of Pisa, Pisa
Acid Ceramidase gene delivery protects against doxorubicin-induced
cardiotoxicity

h 15.15-15.30 Adwaid Manu Krishna Chandran, Department of Molecular and Translational Medicine, University of Brescia, Brescia Epiretinal Membrane: Glial-to-Mesenchymal Transition in MIO-M1 Müller Glial Cells

h 15.30-15.45 Wen-Hui Fang, Department of Life Sciences, Faculty of Science and Engineering, Manchester Metropolitan University, Manchester, UK

The simple way to load the small molecule compounds into mesenchymal stem cells as the drug carrier

h 15.45-16.00 Ekta Manocha, Section of Microbiology, Department of Molecular and Translational Medicine, University of Brescia, Brescia Avian Reovirus p17 inhibits motility, migration and angiogenesis of human endothelial cells

h 16.00-16.15 Alberto Reale, Department of Molecular Medicine, University of Padua, Padua Immuno-oncolytic HSV-1-based viruses for the treatment of solid tumors resistant to current immunotherapies

h 16.15-16.30 Alberto Zani, Section of Microbiology, Department of Molecular and Translational Medicine, University of Brescia, Brescia Induction of apoptosis and inhibition of DNA repair mechanisms on triple negative breast cancer cells by U94 of Human Herpes Virus 6

BREAK **h 16.30-16.45**

EXPERIMENTAL ONCOLOGY

Chairman: Elise Ramia, Alessia Buratin

h 16.45-17.00 Sara Taranto, Department of Molecular and Translational Medicine, University of Brescia, Brescia
Development of FGF trap molecules for the treatment of FGF-dependent cancers

h 17.00-17.15 Elisabetta Grillo, Department of Molecular and Translational Medicine, University of Brescia, Brescia
A novel recurrent activating mutation of VEGFR2 drives melanoma progression through energy metabolism rewiring

h 17.15-17.30 Elise Ramia, Laboratories of General Pathology and Immunology "Giovanna Tosi", Department of Medicine and Surgery, University of Insubria, Varese

Orthotopic vaccination of CIITA-driven MHC class II-positive GL261 glioma cells confers protection against GL261 parental tumor

h 17.30-17.45 Alessia Buratin, Department of Biology, University of Padua, Padua The circRNAs landscape of T-cell Acute Lymphoblastic Leukemia

Saturday, October 26th

VIROLOGY AND CLINICAL VIROLOGY

Chairman: Anita F. Meier, Giovanni Lorenzin

h 08.30-08.45 Irene Soffritti, Section of Microbiology and Medical Genetics, Department of Chemical and Pharmaceutical Sciences, University of Ferrara, Ferrara

HHV-6A infection and autoimmune systemic sclerosis: clue of a possible association

h 08.45-09.00 Valentina Gentili, Department of Chemical and Pharmaceutical Sciences, University of Ferrara, Ferrara

HHV-6A infection of endometrial epithelial cells affects immune profile and trophoblast invasion

h 09.00-09.15 Anita F. Meier, Virologisches Institut, Universität Zürich, Zürich, Switzerland

Herpes simplex virus-mediated inhibition of adeno-associated virus genome circularization

h 09.15-09.30 Giovanni Lorenzin, Section of Microbiology, Department of Molecular and Translational Medicine, University of Brescia, Brescia Prevalence of non B HIV-1 subtypes in north Italy and analysis of transmission clusters BASED on sequence data analysis

VIRAL PATHOGENICITY

Chairman: Daria Bortolotti, Mariam Shallak

h 09.30-09.45 Elisa Dal Cin, Department of Otorhinolaryngology and Head and Neck Surgery, Azienda Sanitaria Universitaria Integrata di Trieste-ASUITS, Trieste

Detection of HPV16/18 E6 oncoproteins in carcinoma of the oropharynx or metastatic carcinoma of unknown origin in the cervical lymph nodes

h 09.45-10.00 Daria Bortolotti, Department of Chemical and Pharmaceutical Sciences, University of Ferrara, Ferrara

HHV-6A infection induces amyloid-beta expression and activation of microglial cells

h 10.00-10.15 Pietro Mazzuca, Section of Microbiology, Department of Molecular and Translational Medicine, University of Brescia, Brescia The HIV-1 matrix protein p17 infiltrates the central nervous system crossing the Blood-Brain Barrier

h 10.15-10.30 Mariam Shallak, Laboratories of General Pathology and Immunology "Giovanna Tosi", Department of Medicine and Surgery, University of Insubria, Varese

HTLV-1 Tax and HBZ oncoproteins expression and subcellular localization in infection and disease progression: implications for immune-based therapeutic approaches



h 10.30-10.45 Martina Libera, Laboratory of Microbiology and Virology, "Vita-Salute San Raffaele" University, Milan Extracellular vesicles as an alternative model for HCV glycoproteins structural study

BREAK h 10.45-11.00

INTRODUCTION TO THE MAIN LECTURE

Francesca Caccuri, Claudia Del Vecchio and Nicasio Mancini

h 11.00-11.45 Michael Seyffert, Virologisches Institut, Universität Zürich, Zürich, Switzerland Nuclear HSV-1 Replication Compartments are Liquid-liquid phaseseparated Condensates

ANTIVIRAL MECHANISMS

Chairman: Sereina O. Sutter, Hanieh Ghassabian

h 11.45-12.00 Paola Quaranta, Retrovirus Centre, Department of Traslational Research, University of Pisa, Pisa
The effect of human DDX3 helicase inhibitors on virus replication

h 12.00-12.15 Sereina O. Sutter, Virologisches Institut, Universität Zürich, Zürich, Switzerland IFI16 is a restriction factor of AAV2 infection

h 12.15-12.30 Carla Zannella, Department of Experimental Medicine, University of Campania "Luigi Vanvitelli", Naples
A new therapeutic approach in HSV-1 infection: synergic effect of YY11 and HDACi

h 12.30-12.45 Chiara Bertagnin, Department of Molecular Medicine, University of Padua, Padua

Disruption of protein-protein interactions as a new antiviral strategy against influenza virus and human papillomavirus

h 12.45-13.00 Marta De Angelis, Department of Public Health and Infectious Diseases, Sapienza University of Rome, Laboratory affiliated to Istituto Pasteur Italia-Fondazione Cenci Bolognetti, Rome Influenza virus modulates G6PD enzyme to control its replication and host response

h 13.00-13.15 Hanieh Ghassabian, Department of Molecular Medicine, University of Padua, Padua

Inhibition of HCMV replication by small molecules interfering with the dimerization of DNA polymerase processivity factor UL44

h 13.15-13.30 Isabel Pagani, Division of Immunology, Transplantation and Infectious Diseases, San Raffaele Scientific Institute, Milan Giving drugs a second chance: repurposing heparin to prevent ZIKA virus-induced cell death in human three-dimensional (3D) neurospheres (NS) derived from human induced-pluripotent stem cells (hiPSc)

LUNCH h 13.30-14.30

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BACTERIA PATHOGENICITY AND ANTIBACTERIAL DRUGS

Chairman: Giulia Rizzo, Castrese Morrone

h 14.30-14.45 Giulia Rizzo, San Raffaele Scientific Institute, Division of Immunology, Transplantation, and Infectious Diseases, Milan Unravelling the role of IL-17 receptors during chronic respiratory infection by Pseudomonas aeruginosa

h 14.45-15.00 Sara Roversi, Section of Microbiology, Department of Molecular and Translational Medicine, University of Brescia, Brescia Longitudinal genomic analysis of Pseudomonas aeruginosa as a tool for the definition of persistence/reinfection in the airways of Cystic Fibrosis patients

h 15.00-15.15 Serena Messali, Section of Microbiology, Department of Molecular and Translational Medicine, University of Brescia, Brescia Temporal dynamics of airway microbiome in a cystic fibrosis patient chronically infected by Nocardia otitidiscaviarum

h 15.15-15.30 Fabio Saliu, Division of Immunology, Transplantation, and Infectious Diseases, San Raffaele Scientific Institute, Milan Tracking down the pro-inflammatory potential of nontypeable Haemophilus influenzae in chronic respiratory infections

h 15.30-15.45 Laura Cioetto Mazzabò, Department of Molecular Medicine University of Padua, Padua

Characterization of the activation process that induces an increase in the expression of the sigma factor σE in Mycobacterium smegmatis under surface stress condition

h 15.45-16.00 Castrese Morrone, Department of Pharmaceutical Sciences, University of Piemonte Orientale, Novara
The Nucleotide Excision Repair (NER) in Mycobacterium tuberculosis: biochemical and structural studies

h 16.00-16.15 Ivana Palucci, Fondazione Policlinico Universitario A. Gemelli IRCCS and Institute of Microbiology, Università Cattolica del Sacro Cuore, Rome

Inhibition of transglutaminase 2 as a potential host-directed therapy against *Mycobacterium tuberculosis*

h 16.15-16.30 Giulia Turrin, Department of Chemical and Pharmaceutical Sciences, University of Ferrara, Ferrara Synthesis and microbiological evaluation of novel ascorbic acid conjugates as biofilm inhibitors active against Pseudomonas aeruginosa

BREAK h 16.30-16.45

NEW TRENDS IN MICROBIOLOGICAL DIAGNOSIS

Chairman: Alfonso Corcione, Erika Scaltriti

h 16.45-17.00 Roberto Ferrarese, Laboratory of Microbiology and Virology, Ospedale San Raffaele, Milan
Characterization of fecal and oral microbiota associated with Lynch syndrome

17.00-17.15 Erika Scaltriti, Risk analysis and genomic epidemiology unit, Istituto zooprofilattico sperimentale della Lombardia e dell'Emilia Romagna (IZSLER), Parma

Clonal contamination of laying hens farm by *Salmonella enterica* serovar Enteritidis responsible for a multi-annual outbreak demonstrated through phylodynamic reconstruction

h 17.15-17.30 Sofia Sisti, Laboratory of Microbiology and Virology, "Vita-Salute San Raffaele" University, Milan

Study of colistin resistance related genes in *Klebsiella pneumoniae* clinical isolates using Next Generation Sequencing (NGS) approaches

h 17.30-17.45 Alfonso Corcione, Clinical Surgical Diagnostic and Pediatrics Science Department University of Pavia, Pavia
Diagnostic accuracy of toxoplasma western blot test in suspected seroconversion in pregnancy: a multicentric study

h 17.45-18.00 Alice Bonetti, Department of Clinical-Surgical, Diagnostic and Pediatric Sciences, University of Pavia, Pavia

Congenital toxoplasmosis: outcomes of newborns from mothers with documented seroconversion out of a multicenter cohort in two tertiary referral hospitals

DESENZANO AWARDS

h 18.00-18.15
Francesca Caccuri, Claudia Del Vecchio
and Nicasio Mancini



Note



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WE THANK











