4th Conference of translational medicine on pathogenesis and therapy of immune-mediated diseases

Innate immunity, inflammation and human models of diseases.

Auto-inflammation/Autoimmunity, Cancer and Viral Infections

March 27th - 29th, 2017
Palermo, Italy

www.translationalimmunology.it

preliminary program

VENUE
Aula Magna della Scuola Politecnica University of Palermo,
Campus Viale delle Scienze - 90128 Palermo
Under the patronage of

This meeting is supported by the joint Ph.D. program between UNIPA (University of Palermo) and HUNIMED (Humanitas University)

Comune di Palermo
Monday 27th, March 2017
OPENING DAY

11:00  **REGISTRATION & WELCOME LUNCH**

**SATELLITE SYMPOSIA**  
**APPLICATION OF ADVANCED FLOW CYTOMETRY**

*Supported by BD Biosciences*

Chairs:  
Enrico Lugli, Humanitas Research Hospital, Milan, Italy  
Silvia Della Bella, University of Milan and Humanitas Research Hospital, Italy

**Speakers:**

12:00  Mario Roederer, NIAIMS, NIH, Bethesda, MD, USA  
Leukocyte Trafficking in Primates: More Regulation Than Green, Yellow, Red

12:35  Ido Amit, Immunology Department, Weizmann Institute of Science, Israel  
The power of ONE: Immunology in the age of single cell genomics

13:05  Edoardo Fiorillo, Genetic and Biomedic Research Institute (IRGB), CNR, Monserrato, Italy  
Immune system dissection and its genetic regulation: impact on complex diseases

13:35  Robert Balderas, Vice President, R&D at BD Biosciences, USA  
Integration of receptor proteome in Panel Design for HP flow

14:05  **DISCUSSION PANEL**

**MN SATELLITE SYMPOSIA**  
**DRIVING EXCELLENCE AND INNOVATION IN TAKING BIOMARKERS FROM BENCH TO BEDSIDE**

*Supported by Thermo Fisher Scientific*

Chair: Joanna Mikulak, Humanitas Research Hospital, Milan, Italy

14:50  **Speaker:** Mike Evans, Business Development Manager  
RNA biomarkers: Choosing the right tool for the job

15:20  **Speaker:** Gauri Ganpule, Associated Director Product Management - Oncology  
Next Generation Sequencing advances Immuno-Oncology translational research

15:50  **DISCUSSION PANEL**

16:10  **COFFEE BREAK**
16:30 MEET THE EXPERT  
Sponsored by Charles River
Chair: Anna Villa, National Research Council IRGB Institute and Humanitas Research Hospital, Milan, Italy
Speaker: Guillaume Pavlovic, Genetic Engineering and Model Validation Department, Institut Clinique de la Souris, France

18:00 OPENING CEREMONY AND WELCOME
Domenico Mavilio, University of Milan and Humanitas Research Hospital, Italy
Francesco Dieli, University of Palermo, Palermo, Italy
Fabrizio Micari, Magnifico Rettore University of Palermo, Italy

18:20 Opening Lecture
TOPIC: IL-1 FAMILY CYTOKINES IN THERAPY
Chair: Antonio Sica, Humanitas Research Hospital, Milan, Italy
Speaker: Charles Dinarello, University of Colorado School of Medicine, Colorado, USA
Blocking IL-1 Family Cytokines to Treat Disease

19:05 OPENING RECEPTION, POSTER SESSION - BUILDING 19
SICILIAN APERICENA
Tuesday 28th, March 2017
AUTO-INFLAMMATION AND AUTO-IMMUNITY

9:00 Opening Lecture

SOME LESSONS FROM AUTOINFLAMMATORY DISEASES
Chair: Alberto Martini, G. Gaslini Institute, Genoa, Italy
Speaker: Dan Kastner, NHGRI, NIH, Bethesda, MD, USA

Autoinflammatory Diseases: Modern-Day Shadows on an Ancient Wall

FIRST SESSION
FROM AUTO-INFLAMMATION TO AUTOIMMUNITY

Chairs: Richard Siegel, NIAIMS, NIH, Bethesda, MD, USA
       Mariana Kaplan, NIAIMS, NIH, Bethesda, MD, USA

Speakers:
10:00  Richard Siegel, NIAIMS, NIH, Bethesda, MD, USA
       Auto-Inflammation to Autoimmunity:
       Innate Immune Cell Influences on Autoimmune Disease
10:20  Mariana Kaplan, NIAIMS, NIH, Bethesda, MD, USA
       Neutrophil subsets and NETs in the pathogenesis of systemic rheumatic diseases
10:40  Alberto Martini, G. Gaslini Institute, Genoa, Italy
       Some lessons from autoinflammatory diseases
11:00  Yenan Bryceson, Karolinska Institutet, Karolinska University Hospital Huddinge Center for Hematology and Regenerative Medicine (HERM), Huddinge, Sweden
       SAMD9L: at the cross-roads of infection, inflammation, and cancer

11:20  SHORT TALK
Natalia Dmitrieva
Studies of Mechanisms Involved in Autosomal Dominant Hyper-IgE Syndrome:
Case for Hypoxia Inducible Factor 1α Stabilization as a Possible Therapy Option for Impaired Ability to Support Angiogenesis

11:30  DISCUSSION PANEL

11:40 - 12:10  COFFEE BREAK & POSTER VIEW
12:10  NEW PERSPECTIVE IN THE TREATMENT OF PERIODIC FEVERS AND OTHER AUTOINFLAMMATORY DISEASES
Chair: Ivona Aksentijevich, National Human Research Genome Institute, Bethesda, USA
Speaker: Marco Gattorno, G. Gaslini Institute, Genoa, Italy

13:00  LUNCH & POSTER VIEW - BUILDING 19

13:50  AMNIS IMAGING FLOW CYTOMETRY: AN INNOVATIVE AND POWERFUL TOOL FOR UNCONVENTIONAL FLOW CYTOMETRY ASSAYS
Chair: Silvia Della Bella, University of Milan and Humanitas Research Hospital, Italy
Speaker: Carlo Raviolo, Merck, spA

SECOND SESSION
FROM AUTO-INFLAMMATION TO CARDIOVASCULAR DISEASES
Chairs: Manfred Boehm, Center for Molecular Medicine, NHLBI-NIH, Bethesda, USA
       Fabio Malavasi, University of Torino Medical School, Italy
Speakers:
14:30  Manfred Boehm, Center for Molecular Medicine, NHLBI-NIH, Bethesda, USA
       Vascular endothelium inflammation: from genetic insights to therapeutic perspectives
14:50  Ivona Aksentijevich, National Human Research Genome Institute, Bethesda, USA
       Vascular endothelium inflammation: from genetic insights to therapeutic perspectives
15:10  Min Ae Lee-Kirsch, University Carl Gustav Carus Technische Universität Dresden, Germany
       Nucleic acid-mediated autoinflammation and autoimmunity - type I interferonopathies
15:30  Connie Weyand, Stanford University School of Medicine, Stanford, USA
       T-Cell Immunity in Large Vessel Vasculitis
15:50  SHORT TALK
       Marinos Kallikourdis
       T cell costimulation blockade blunts pressure overload-induced heart failure

16:00  DISCUSSION PANEL

16:10 - 16:40  COFFEE BREAK & POSTER VIEW
THIRD SESSION
AUTOINFLAMMATION TO PRIMARY IMMUNO DEFICIENCIES AT THE BORDERS WITH INFECTIONS

Chairs:  Anna Villa, National Research Council IRGB Institute and Humanitas Research Hospital, Milan, Italy
        Steven Holland, NIAD, Bethesda, MD, USA

Speakers:
16:40  Steven Holland, NIAD, Bethesda, MD, USA
      Leukocyte Adhesion Deficiency Type 1: More than tissue neutropenia

17:00  Anna Villa, National Research Council IRGB Institute and Humanitas Research Hospital, Milan, Italy
      Wiskott-Aldrich deficient platelets at the border of inflammation and autoimmunity

17:20  Ridha Barbouche, Institut Pasteur de Tunis, Tunis
      PGM3 deficiency: from molecular basis to intervention approaches

17:40  SHORT TALK
      Francesca Conti
      Epstein-Barr virus chronic infection in two patients with APDS syndrome: a combined risk factor for developing lymphoproliferative disorders.

17:50  DISCUSSION PANEL

FINAL SESSION
LENTIVIRUS TECHNOLOGY IN GENE THERAPY

18:00  MEET THE EXPERT  Sponsored by Miltenyi Biotec
      Chair: Anna Villa, National Research Council IRGB Institute and Humanitas Research Hospital, Milan, Italy
      Speaker: Boro Dropulic, Lentigen Technology, Inc. a Miltenyi Biotec Company, Gaithersburg, USA
      Generation of Lentiviral-vector modified CAR-T cells targeted to Leukemia using an automated process

18:20-19:20  Closing Lecture
      Chair: Anna Villa, National Research Council IRGB Institute and Humanitas Research Hospital, Milan, Italy
      Speaker: Luigi Naldini, San Raffaele Institute and Telethon Institute, Milan, Italy
      Genetic engineering of hematopoiesis to treat inherited immunodeficiencies and cancer

20:00  SOCIAL DINNER IN DOWNTOWN PALERMO
      @ Hotel Piazza Borsa, Via Cartari, 18, 90133 Palermo
Wednesday 29th, March 2017
CANCER AND VIRAL IMMUNITY

FIRST SESSION
INNATE IMMUNITY AND CANCER I

Chairs:  Raffaella Bonecchi, HUNIMED University and Humanitas Research Hospital, Milan, Italy
         Stefania Vetrano, HUNIMED University and Humanitas Research Hospital, Milan, Italy

Speakers:
9:00  Marco Cassatella, University of Verona, Italy
      Role of slanDCs/CD16+slan+monocytes in human tumors

9:20  Gioacchino Natoli, HUNIMED University and Humanitas Research Hospital, Milan, Italy
      Transcriptional control in inflammation

9:40  Michele de Palma, École Polytechnique Fédérale de Lausanne (EPFL) Lausanne, Switzerland
      Reprogramming the tumor immune microenvironment

10:00 Carola Ries, Roche Innovation Center Munich, Germany
      Targeting macrophages - Of mice and men

10:20 Massimiliano Mazzone, University of Leuven, Leuven, Belgium
      Harnessing tumor inflammation: implications for cancer therapy and diagnosis

10:40 SHORT TALK
      Maria Rosaria Galdiero
      Neutrophil plasticity in thyroid cancer

10:50 DISCUSSION PANEL

11:00 - 11:30  COFFEE BREAK

MIN-SYMPOSIA
INNATE LYMPHOID CELLS AND TRANSLATIONAL MEDICINE

Sponsored by Stemcell – Voden

Chair: Massimo Locati, University of Milan, Humanitas Research Hospital, Milan, Italy

Speakers:
11:30 Francesco Annunziato, University of Florence, Italy
      Phenotypical and functional characterization of human ILC2

11:45 Camilla Jandus, University of Lausanne, Switzerland
      Innate lymphoid cells: new players in anti-tumor immunity?
12:00 Yanet Valdez, StemCell Technologies Vancouver BC Canada
Rapid Isolation of functional Innate Lymphoid Cells

12:20 Lecture

THE YIN YANG OF INNATE IMMUNITY AND CANCER
Chair: Massimo Locati, University of Milan and Humanitas Research Hospital, Italy
Speaker: Alberto Mantovani, HUNIMED University and Humanitas Research Hospital, Milan, Italy

13:20 LUNCH & POSTER VIEW - BUILDING 19

SECOND SESSION
INNATE IMMUNITY AND CANCER II
Chairs: Bruno Silva-Santos, University of Lisbona, Lisbona, Portugal
Francesco Dieli, University of Palermo, Palermo, Italy
Speakers:
14:20 Franco Locatelli, University of Pavia, Pavia, Italy
The role of innate immunity in T-cell depleted HLA-haploidentical hematopoietic cell transplantation in children with hematological malignancies

14:40 Bruno Silva-Santos, University of Lisbona, Lisbona, Portugal
Innate killers in cancer surveillance and immunotherapy

15:00 Dmitry Gabrilovich, Wistar Institute, Philadelphia, PA, USA
Therapeutic targeting of myeloid cells in cancer, more questions than answers

15:20 SHORT TALK
Elena Ciaglia
Nk cells in human brain tumor control: evidence of a distinct phenotypic and functional pattern in tumor vs non tumor infiltrated brain

15:30 DISCUSSION PANEL

15:40 - 16:10 COFFEE BREAK & POSTER VIEW

16:10 IN TRANSITION: FROM CANCER TO INFECTION
Chair: Domenico Mavilio, University of Milan and Humanitas Research Hospital, Italy
Speaker: Elisabeth Murchison, University of Cambridge, U.K.
THIRD SESSION

INNATE IMMUNITY AND VIRAL INFECTIONS

Chairs:  Luis Montaner, Wistar Institute, Philadelphia, PA, USA
        Domenico Mavilio, University of Milan and Humanitas Research Hospital, Italy

Speakers:

16:30  Luis Montaner, Wistar Institute, Philadelphia, PA, USA
       BEAT-HIV Collaboratory: Clinical studies to harness innate and adaptive strategies towards an HIV cure

16:50  Frank Kirchhoff, Ulm University Medical Center, Ulm, Germany
       Innate immune evasion or counteraction by pandemic HIV-1 Strains

17:10  David Weiner, Wistar Institute, Philadelphia, PA, USA
       Synthetic DNA Vaccine strategies for difficult immune targets

17:30  Miguel Lopez-Botet, University Pompeu Fabra, Barcelona, Spain
       Adaptive human NK cell response to cytomegalovirus: implications in pathology

17:50  SHORT TALK
       Daniela Covino
       Whole transcriptome profiling of primary human macrophages identifies an association between CCL2 neutralization-mediated inhibition of HIV replication and deregulation of host genes and pathways involved in antiviral responses

18:00  DISCUSSION PANEL

18:10  Closing Lecture

THUMAN RETROVIRUSES: FROM THEIR DISCOVERIES AND LINKAGE TO DISEASES TO THEIR THERAPY AND CONTROL.

Chair: Domenico Mavilio, University of Milan and Humanitas Research Hospital, Italy
Speaker: Robert Gallo, Institute of Human Virology, University of Maryland School of Medicine, Co-Founder & Scientific Director, Global Virus Network, USA

19:00  CLOSING REMARKS

Domenico Mavilio, University of Milan and Humanitas Research Hospital, Italy
Francesco Dieli, University of Palermo, Palermo, Italy
VENUE
Aula Magna della Scuola Politecnica University of Palermo,
Campus Viale delle Scienze - 90128 Palermo

SCIENTIFIC SECRETARIAT
Chairman Domenico Mavilio
University of Milan and Humanitas Research Hospital, Italy
Local Organizer Francesco Dieli
University of Palermo, Italy

Members of the Scientific Committee
Ivona Aksentijevich, Manfred Boehm, Marco Cassatella,
Marco Gattorno, Steve Holland, Massimo Locati, Enrico Lugli,
Luis Montaner, Richard Siegel, Anna Villa

www.translationalimmunology.it

ORGANIZING SECRETARIAT
MATERIA PRIMA
T. 03631848776 - F. 03631920301
www.materia1a.it - segreteria@materia1a.it