



INTRODUCTION TO TRANSLATIONAL MEDICINE: *from benchside to bedside to the community*

PADUA

January 14-18, 2019

George Mason University,
Dipartimento della Salute della Donna
e del Bambino-Azienda
Ospedaliera-Università di Padova
Istituto di Ricerca Pediatrica

COURSE DESCRIPTION

Translational medicine is a discipline in biomedical research that aims to turn observations in the laboratory, clinic and community into interventions that improve the health of individuals and the public. The new era of personalized therapy and molecular medicine is also perfect example where the functional aspects of genomics, proteomics and bioinformatics can come together at the patient's bedside. This introductory course will introduce attendees to key aspects of translational medicine in the field of oncology, hematology and infectious diseases and focus on the practical use of these three areas for the diagnosis, prevention and treatment of disease. Hands-on technical workshops will be used to illustrate and educate students, as well as touch on issues related to implementation of new platforms and assays and will encourage scientific inquiry through the analysis of "unknown" specimens.

COURSE SCIENTIFIC DIRECTORS

- **Lance A. Liotta**, MD, PhD (George Mason University)
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- **Alessandra Luchini**, PhD (George Mason University)
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- **Raffaella Colombatti**, MD, PhD
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LOCAL ORGANIZING COMMITTEE

- Benedetta Accordi:
benedetta.accordi@unipd.it
- Raffaella Colombatti:
raffaella.colombatti@aopd.veneto.it
- Medi K provider ECM:
<https://www.medik.net>

LECTURES FACULTY

Adriana Albin	<i>University of Milan, Milan, Italy</i>
Gustavo Baldassarre	<i>Centro di Riferimento Oncologico, Aviano, Italy</i>
Pamela Ballotta	<i>Azienda Ospedaliera-University of Padua, Padua, Italy</i>
Giuseppe Basso	<i>Italian Institute for Genomic Medicine, Turin, Italy</i>
Alessandra Biffi	<i>University of Padua, Padua, Italy, Dana Farber Cancer Institute, Boston USA</i>
Silvio Biciato	<i>University of Modena and Reggio-Emilia, Modena, Italy</i>
Gianni Bisogno	<i>Azienda Ospedaliera-University of Padua, Padua, Italy</i>
Barbara Buldini	<i>Azienda Ospedaliera-University of Padua, Padua, Italy</i>
Raffaella Colombatti	<i>Azienda Ospedaliera-University of Padua, Padua, Italy</i>
Lucia De Franceschi	<i>Azienda Ospedaliera-University of Verona, Verona, Italy</i>
Anita De Rossi	<i>University of Padua, Padua, Italy</i>
Gianluca Fincato	<i>Novartis Pharmaceuticals, Italy</i>
Anna Chiara Frigo	<i>University of Padua, Padua, Italy</i>
Carlo Giaquinto	<i>University of Padua, Padua, Italy</i>
Lance Liotta	<i>George Mason University, Manassas, Virginia, USA</i>
Alessandra Luchini	<i>George Mason University, Manassas, Virginia, USA</i>
Renzo Manara	<i>University of Salerno, Italy</i>
Gabriella Pasciullo	<i>BluebirdBio, Italy</i>
Silvia Tusino	<i>University of Padua, Padua, Italy</i>
Giampietro Viola	<i>University of Padua, Padua, Italy</i>
Renato Zambello	<i>Azienda Ospedaliera-University of Padua, Padua, Italy</i>
Theoklis Zaoutis	<i>Children's Hospital of Philadelphia, USA and Penta Foundation, Padua, Italy</i>

LABORATORY HANDS-ON WORKSHOPS FACULTY

Marco Agostini	<i>University of Padua, Pediatric Research Institute, City of Hope</i>
Benedetta Accordi	<i>University of Padua, Pediatric Research Institute, City of Hope</i>
Silvia Bresolin	<i>University of Padua, Pediatric Research Institute, City of Hope</i>
Barbara Buldini	<i>Azienda Ospedaliera-University of Padua, Padua, Italy</i>
Giuseppe Germano	<i>Pediatric Research Institute, City of Hope</i>
Maddalena Paganin	<i>Azienda Ospedaliera-University of Padua, Padua, Italy</i>
Renato Zambello	<i>Azienda Ospedaliera-University of Padua, Padua, Italy</i>

GENERAL INFORMATION DATE & VENUE

January, 14th 2019 - Dipartimento della Salute della
Donna e del Bambino - Azienda Ospedaliera di Padova
Via Giustiniani 3 - 35128 Padova

January, 15th-18th 2019
Istituto di Ricerca Pediatrica
Corso Stati Uniti, 4, 35127 Padova

CONGRESS LANGUAGE

The official language of the Course is English.

ON-LINE REGISTRATION

The course will be limited to 100 participants.

<https://www.medik.net/residenziali/introduction-to-translational-medicine-from-benchside-to-bedside-to-the-community/>

CME (only for italian participant) - 12 CREDITS

The "INTRODUCTION TO TRANSLATIONAL MEDICINE: FROM BENCHSIDE TO BEDSIDE TO THE COMMUNITY" has been accredited for CME - Continuing Medical Education, by the Italian Ministry of Health.

MONDAY JANUARY 14, 2019

No CME Session

Azienda Ospedaliera-University of Padua

- | 09:00 - 09:30
| 09:30 - 11:45
- Greetings from local Authorities**
The Need for Personalized Molecular Medicine
- | 09:30 - 10:00
- The upcoming revolution in translational medicine. Introduction to the course.
Review of cancer medicine and the basics of cancer molecular biology and cancer metastasis
Discussion of basic principles of molecular medicine, including the definition and the need for individualized diagnostics and therapeutics - **Lance Liotta** *Virginia, USA*
- | 10:00 - 10:30
- PLENARY LECTURE**
A success story: Childhood Leukemia - **Giuseppe Basso** *Turin*
- | 10:30 - 11:00
| 11:00 - 11:30
- Coffee Break
Biological and clinical features of chronic lymphoproliferative disorders of granular lymphocytes - **Renato Zambello** *Padua*
- | 11:30 - 12:00
| 12:00 - 12:30
- Flow cytometry and the diagnosis of leukemia - **Barbara Buldini** *Padua*
Angiogenesis and Tumor Microenvironment - **Adriana Albini** *Milan*
- | 12:30 - 13:00
| 13:15 - 16:45
- Lunch for those attending Laboratory Hands-on workshop**
Laboratory Hand-on workshops

TUESDAY JANUARY 15, 2019

Institute of Pediatric Research (IRP)

- | 09:00 - 12:15
- MORNING LECTURES**
How translational research is revolutionizing cancer treatment
- | 09:00 - 10:00
| 10:00 - 10:30
- Protein protein interactions/Protein Painting - **Alessandra Luchini** *Virginia, USA*
Mechanisms for activating cell death in cancer cells: implication for therapeutic targeting
Giampietro Viola *Padua*
- | 10:30 - 10:45
| 10:45 - 11:15
- Coffee break
Translational research in ovarian cancer: the MITO experience - **Gustavo Baldassarre** *Aviano*
- | 11:15 - 11:45
| 11:45 - 12:15
- Translational research in breast cancer - **Lance Liotta** *Virginia, USA*
Challenges in Pediatric Clinical Research - **Gianni Bisogno** *Padua*
- | 12:15 - 12:30
| 12:30 - 13:15
| 13:15 - 16:45
- Discussion
Lunch for those attending Laboratory Hands-on workshop
Laboratory Hands-on workshop (no ECM)

WEDNESDAY JANUARY 16, 2019

Institute of Pediatric Research

- | 09:00 - 12:15
- MORNING LECTURES**
Translational research for dissection of host-pathogen interaction, infectious disease diagnostics and treatment.
- | 09:00 - 09:30
| 09:30 - 10:00
- Antibiotic Resistance and Stewardship - **Theoklis Zaoutis** *Padua*
Update on the Management of Infectious Diseases in Pediatric Oncology Patients
Theoklis Zaoutis *Padua*
- | 10:00 - 10:45
| 10:45 - 11:00
| 11:00 - 12:00
- Novel strategies for tuberculosis and neglected disease detection and diagnosis in developing countries - **Alessandra Luchini** *Virginia, USA* - **Raffaella Colombatti** *Padua*
Coffee break
Update on Translational medicine in HIV research and virology
Carlo Giaquinto, Anita de Rossi *Padua*
- | 12:00 - 12:30
| 12:30 - 14:30
| 14:30 - 17:30
- Bioinformatics and Data analysis - **Silvio Biccato** *Modena*
Lunch for those attending Laboratory Hands-on workshop
Laboratory Hands-on workshop (no ECM)

THURSDAY JANUARY 17, 2019

Institute of Pediatric Research

- | 09:00 - 12:30
- MORNING LECTURES**
Genetic hematologic disorders
- | 09:00 - 09:30
| 09:30 - 10:00
| 10:00 - 10:30
| 10:30 - 10:45
| 10:45 - 11:15
- From clinical questions to the design of Clinical Trials in Sickle cell anemia: new therapeutic molecules in SCD - **Raffaella Colombatti** *Padua*
Murine models of sickle cell anemia and hematologic disorders - **Lucia de Franceschi** *Verona*
Gene editing and gene therapy in genetic disorders - **Alessandra Biffi** *Padua*
Coffee break
Unraveling the brain: advanced imaging and "old" techniques in hematologic disorders - **Renzo Manara** *Salerno*
- | 11:15 - 11:45
| 11:45 - 12:15
| 12:15 - 12:30
| 12:30 - 14:30
| 14:30 - 17:30
- Patient perspective: Associazione Malattia Drepanocitica patient advocacy group
Patient perspective: Associazione Italiana Leucemia (AIL) patient advocacy group
Discussion
Lunch for those attending Laboratory Hands-on workshop
Laboratory Hands-on workshop (no ECM)

FRIDAY JANUARY 18, 2019

Institute of Pediatric Research

- | 09:00 - 12:15
- MORNING LECTURES**
Pharma perspective Bioethics Patent and Intellectual property
- | 09:00 - 09:30
| 09:30 - 10:00
| 10:00 - 10:30
- The role of Ethics in Biomedical Research: past, present and future - **Silvia Tusino** *Padua*
The role of ethics committees in biomedical research - **Anna Chiara Frigo** *Padua*
Patient care from the nurse perspective in the era of precision medicine
Pamela Ballotta *Padua*
- | 10:30 - 11:00
| 11:00 - 11:15
| 11:15 - 11:45
- Intellectual property - **Lance Liotta** *Virginia, USA*
Coffee Break
From research to the community: the case of gene therapy development
Gabriella Pasciullo *Blue Bird Bio* (no ECM)
- | 11:45 - 12:15
- Translational medicine: focus and approach from a big pharma
Fincato Gianluca *Novartis Pharmaceuticals* (no ECM)
- | 12:15 - 12:30
| 12:30 - 14:00
| 14:00 - 18:00
- Concluding remarks - Delivery of certificates**
Lunch for those attending Laboratory Hands-on workshop
Laboratory Hands-on workshop + Final Essay Preparation (no ECM)