

PADUA LYMPHATIC FORUM



**2024
Summer
School**

16-20 SETTEMBRE



“Padua Lymphatic Forum” Summer School is a unique international event, focused on a commonly neglected part of the vasculature: the **Lymphatic System**. Recent advances in our understanding of lymphatics in health and disease have opened up **exciting new research avenues and therapeutic opportunities** in diverse disease settings.

The school program brings together a **diverse range of esteemed speakers and discussion leaders** from Padua and from many institutions and organizations worldwide.

During the 5 days, all themed around different topics, these experts will discuss the state-of-the-art and latest advances in this evolving field, covering aspects of **vascular and mechano-biology; lymphatic pathophysiology** in **cardiovascular-metabolic, renal, lung and CNS disease; inflammation**; clinical diagnosis management of **lymphatic disorders; genetics**; point-of-care, advanced and interventional **imaging**; optimal **physical, medical and surgical/interventional**, as well as novel and upcoming, **therapeutics; research opportunities** and models of disease. The program was designed to facilitate **interdisciplinary exchange** across all these topics, and out-of-the-box thinking, accordingly.

Participants, selected among **Master Students in Biomedical disciplines, Medical Residents and PhD Students**, will also be involved in **practical workshops** covering **bench-to-bedside** approaches to lymphatic vessels, will have designated free time for **networking** and will be involved in **informal social and cultural events**, all meant to generate opportunities for professional development.

Thanks to the support by the **University of Padua** and the Department of Medicine (**DIMED**), and to the contributions from partner Departments (**DNS, DCTV, DEI, DMM**), we welcome you all to this exciting week.

Prof. Giacomo Rossitto

All scientific sessions, other than **WORKSHOPS** and **EVENTS** are **FREE** to attend and open to all interested students and professionals. Recording in any form is forbidden.

SEDI:

DAY 1 - September 16th / DAY 5 - September 20th
(AULA MAGNA, Collegio “Morgagni”, via S. Massimo)

DAYS 2,3,4 - September 17th-19th
(AULA RAMAZZINI, Policlinico Universitario)

RESPONSABILE SCIENTIFICO:

Giacomo Rossitto, MD, PhD

Associate Professor of Internal Medicine, Università degli Studi di Padova

ORGANIZING SECRETARY:

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Con il patrocinio e il contributo di:



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



DNS
Dipartimento
NeuroScienze



DAY 1 – September 16th

(AULA MAGNA, Collegio “Morgagni”, via S. Massimo)

09:00-10:00 *Opening*

Local Authorities; G. Rossitto, G.P Rossi, A. Zanatta

UNDERSTANDING LYMPHATICS

10:00-11:30 *Discussion Leaders: Prof Teresa Maria Seccia, Giovanna Albertin (UNIPD)*

VASCULAR GROWTH FACTORS IN LYMPHANGIOGENESIS

Kari Alitalo (Helsinki)

LYMPHATIC ANATOMY IN HUMANS

Jean Paul Belgrado (Bruxelles)

LYMPHATIC VESSELS IN THE SUPERFICIAL FASCIA

Giovanna Albertin (UNIPD)

11:30-11:45 *Coffee break*

11:45-12:30 **LYMPHATIC CONTRACTILE FUNCTION**

Michael J. Davis (Columbia, MO), Visiting Professor; KEYNOTE LECTURE

12:30-13:00 *Discussion Leader: Giuseppe Maiolino (AOUPD)*

LYMPHATIC DRAINAGE IN CHOLESTEROL TRANSPORT

Veronique Angeli (Singapore)

13:00-14:00 *Lunch*

LYMPHATICS IN DIFFERENT ORGANS/SYSTEMS

14:00-14:15 **INTRO: (LYMPH)EDEMA AND COMORBIDITIES**

Stanley Rockson (Stanford, CA)

14:15-15:05 *Discussion Leader: Lorenzo A. Calò (UNIPD)*

(KIDNEYS)

LYMPHATICS AND ANGIOTENSIN II

Giovanni Bertoldi (UNIPD)

LYMPHATICS AND LYMPHANGIOGENESIS IN RENAL DISEASE

Joe Rutkowsky (Texas A&M, TX)

15:05-16:15 *Discussion Leader: Roberto Vettor (UNIPD)*

(CKM sdr)

LYMPHATICS AND OBESITY

Jorge A. Castorena (New Orleans, LA)

CARDIAC LYMPHATICS IN HEALTH AND DISEASE

Ebba Brakenhielm (INSERM, Rouen)

LYMPHATICS IN HYPERTENSION TO HEART FAILURE

Giacomo Rossitto (UNIPD)

16:15-17:00 *Coffee break*

17:00-17:35 *Discussion Leader: Elisabetta Cocconcelli (AOUPD)*

(LUNGS)

PLEURAL/DIAPHRAGMATIC LYMPHATIC VESSELS

Andrea Moriondo (Università dell'Insubria)

LUNG LYMPHATICS

Scott Zawieja (Columbia, MO)

17:35-18:30 *Discussion Leader: Mattia Veronese (UNIPD)*

(CNS)

CNS LYMPHATIC CLEARANCE IN NEUROLOGICAL DISEASE

Steven Proulx (Bern)

PET IMAGING FOR CNS FLUID DYNAMICS

Julia Schubert (London; DEI UNIPD)

DAY 2 – September 17th

(AULA RAMAZZINI, Policlinico Universitario)

08:45-10:15 **HANDS-ON VISIT to the Vascular Myography LAB (Group 1)**
Giovanni Bertoldi (UNIPD)

LYMPHEDEMA

10:30-11:15 **UNDERSTANDING LYMPHEDEMA**
Christian Ure (Wolfsberg), LECTURE

11:15-12:15 **HUB DIAGNOSTICO/TERAPEUTICO REGIONALE VENETO**
Silvia Fontana (AULSS 7)

IL CENTRO AOPD

Stefano Masiero, Lara Bonaldo/Stefano Masiero (UNIPD, AUOPD)

DISCUSSION: COMPREHENSIVE CURE/CARE OF LYMPHEDEMA - Plenary

11:45-12:00 **AN EDUCATIONAL OPPORTUNITY “MASTER DI LINFOLOGIA A PADOVA”**
Luciana Caenazzo (UNIPD)

12:20-13:00 *Discussion Leader: Eva Trevisson (UNIPD)*

PRIMARY LYMPHEDEMA AND MALFORMATIONS: FROM GENETICS TO CARE
Isabelle Quéré (Montpellier)

13:00-14:00 **Lunch + Master Theses POSTER exhibition**

14:00-15:30 *Discussion Leaders: Lara Bonaldo (AOUPD), Luciana Caenazzo (UNIPD)*

STATE-OF-THE-ART DECONGESTIVE THERAPY
Silvia Fontana/Sara Troncon (AULSS 7, IOV)

NOVEL STRATEGIES FOR DECONGESTION
Maria Chiara Maccarone (AUOPD)

ARTIFICIAL LYMPHATIC BYPASS FOR LYMPHEDEMA
Valentina Triacca (Lausanne)

NOVEL ANTI-INFLAMMATORY AND GENE THERAPY
Barbara Garmy-Susini (Toulouse)

15:30-16:00 **PERSPECTIVES FROM THE EDITOR IN CHIEF: AVENUES AND AWARENESS**
Stanley Rockson (Stanford, CA), LECTURE

16:30-18:00 **HANDS-ON NEAR INFRARED LYMPHOGRAPHY WORKSHOP**
Anna Poretto (AOUPD), Silvia Fontana (AULSS7), Jean Paul Belgrado (Bruxelles)

DAY 3 – September 18th

(AULA RAMAZZINI, Policlinico Universitario)

08:45-10:15 **HANDS-ON VISIT to the Vascular Myography LAB (Group 2)**
Giovanni Bertoldi (UNIPD)

IMAGING

10:30-11:20 *Discussion Leaders: Anna Poretto, Giampiero Avruscio (AOUPD)*

RULING OUT VENOUS DISEASE
Anna Poretto (AUOPD/UNIPD)

TISSUE ULTRASOUND
Lara Bonaldo (AUOPD)

TISSUE ELASTOGRAPHY
Filippo Crimi (UNIPD)

11:20-12:00 **NEAR INFRARED LYMPHOGRAPHY: WHO? HOW? WHEN? WITH?**
Jean Paul Belgrado (Bruxelles), LECTURE

- 12:00-13:00** *Discussion Leader: Giacomo Rossitto (UNIPD)*
OPTOACOUSTICS IMAGING: A NEW FRONTIER IN ASSESSMENT OF THE MICROVASCULATURE AND LYMPHATIC DISEASE
 Thomas Sardella (IThera, Munich)
ADVANCED LYMPHATIC IMAGING WITH OPTOACOUSTICS AND ULTRA-HF US
 Guido Giacalone (Leuven)
- 13:00-14:00** **Lunch**
- 14:00-14:45** *Discussion Leaders: Diego Cecchin, Filippo Crimi (UNIPD)*
LYMPHOSCINTIGRAPHY TODAY
 Gaia Grassetto (AOUPD)
NUCLEAR MEDICINE 4.0: NOVEL PROTOCOLS AND TECHNOLOGIES
 Diego Cecchin (UNIPD)
- 14:45-15:30** *Discussion Leaders: Filippi Crimi, Giulio Cabrelle (UNIPD)*
LYMPHATIC MAGNETIC RESONANCE IMAGING
 Claus Pieper (Bonn)
LYMPHATIC CT: WHY AND HOW IN MODERN SUITES
 Filippo Crimi (UNIPD)
- 15:30-16:15** **ADVANCED IMAGING AND INTERVENTIONS**
 Maxim Itkin (Philadelphia, PA), LECTURE
- 16:30-18:00** **IMAGING: TISSUE/VASCULAR US and VR WORKSHOP**
 Filippo Crimi (UNIPD) and Barbara Kager (Guerbet)

DAY 4 – September 19th

(AULA RAMAZZINI, Policlinico Universitario)

- 08:45-10:15** **HANDS-ON VISIT to the Vascular Myography LAB (Group 3)**
 Giovanni Bertoldi (UNIPD)

SURGERY

- 10:30-11:50** *Discussion Leader: Fabrizio Meggiolaro (AOUPD)*
SURGICAL LYMPHEDEMA: SIZE AND PRIMARY PREVENTION
 Andrea Varotto (AOUPD)
FACILIFLOW: A NEW PRIMARY PREVENTION TOOL
 James E. Moore (London)
A UNIQUE CLINICAL CASE: LYMPHATIC COLLATERAL ROUTES
 Silvia Fontana (AULSS 7)
- 11:50-13:00** *Discussion Leader: Franco Bassetto (UNIPD)*
INTRA- (AND POST-) OPERATIVE IMAGING OF LYMPHATIC COLLECTORS
 Alfio Costa (AOUPD)
LINFODIEP: PADUA EXPERIENCE
 Vincenzo Vindigni (UNIPD)
LYMPHATIC SURGERY FOR LYMPHEDEMA
 Francesco Boccardo (Genova)
- 13:00-14:00** **Lunch**
- 14:00-15:05** *Discussion Leader: Giacomo Rossitto (UNIPD)*
A STAND-ALONE ENTITY: LIPEDEMA
 Andrej Szuba (Wroclaw)
GENTLE LIPO-SUCTION FOR LYMPHEDEMA
 Franco Bassetto (UNIPD)
MINI-INVASIVE SURGICAL APPROACHES FOR UNDERSTANDING LYMPHATICS
 Eva Kohlscheen (UNIPD)

15:05-15:30 **THE MULTIDISCIPLINARY APPROACH TO LYMPHEDEMA**
Sandrine Mestre (Montpellier), LECTURE

15:30-16:00 **Coffee break**

16:00-17:00 *Discussion Leaders: Lucrezia Furian, Giacomo Rossitto (UNIPD)*

LYMPHATICS AND RENAL TRANSPLANTATION: THE SURGEON'S VIEW
Lucrezia Furian (UNIPD)

LYMPHATICS AND TRANSPLANTATION: PATHOPHYSIOLOGICAL CONUNDRUM
Domenico Bagordo (UNIPD)

TOOLS AND FACILITIES FOR LARGE ANIMAL RENAL STUDIES
Alejandro Chade (Columbia, MO)

**LATE PM – EVENING: VISIT TO PALAZZO BO
FREE TIME, PIZZA AND FUN**

DAY 5 – September 20th
(AULA MAGNA, Collegio “Morgagni”, via S. Massimo)

08:45-10:15 **HANDS-ON VISIT to the Vascular Myography LAB (Group 4)**
Giovanni Bertoldi (UNIPD)

LYMPHATIC BONANZA

10:30-13:00 **MECHANOBIOLOGY**
Discussion Leader: Giacomo Rossitto (UNIPD), Michael J Davis (Columbia, MO)

THE MECHANOBIOLOGY OF THE EXTRACELLULAR MATRIX
Sirio Dupont (UNIPD)

VASCULAR MECHANOTRANSDUCTION
Michael J. Davis (Columbia, MO; VISITING PROFESSOR)

LEC JUNCTIONS AND cGMP-DEPENDENT NOTCH SIGNALING
Claudia Carlantoni (Hamburg)

THE BIOLOGY OF LYMPHATIC VALVES
Joshua Scallan (Tampa, FL)

13:00-14:00 **Lunch**

14:00-15:15 **CONGENITAL HEART DISEASE AND LYMPHATICS**
Discussion Leader: Giovanni Di Salvo

WHAT IN COMMON?
Giovanni Di Salvo (UNIPD)

A “LEAFLET” DESIGN
Gabriele Egidy Assenza (Bologna)

LYMPHATICS IN OVINE MODELS OF CONGENITAL HEART DISEASE
Sanjeev Datar (San Francisco, CA)

15:15-16:30 **IMMUNO-INFLAMMATION**
Discussion Leader: Anna Scanu (UNIPD)

LYMPHATIC FUNCTION IN EXPERIMENTAL INFLAMMATORY ARTHRITIS
Michael Davis (Columbia, MO)

DELINEARE: DECONGESTION VIA LYMPHATICS FOR RA
Giacomo Rossitto, on behalf of Dina Facchin (UNIPD)

ANTI-INFLAMMATORY APPROACHES FOR LYMPHATIC DYSFUNCTION
Dongeon Kim (Stanford, CA)

16:30-17:00 **Closing Ceremony: Aperitivo + String Quartet**

17:30-18:30 **PADUA BOTANICAL GARDEN GUIDED TOUR**



Giacomo Rossitto, MD, PhD; “Padua Lymphatic Forum” Summer School organizer

Associate Professor of Internal Medicine;
Department of Medicine (DIMED), Università degli Studi di Padova
Honorary Research Fellow,
School of Cardiovascular & Metabolic Health, University of Glasgow, UK



Michael J. Davis, PhD; VISITING PROFESSOR

Curators' Distinguished Professor
Margaret Proctor Mulligan Professor in Medical Research
2022 LE&RN-GRC Lifetime Achievement Awards in Lymphatic Research
Dept. of Medical Pharmacology & Physiology; University of Missouri, Columbia (MO)

FACULTY



Gian Paolo Rossi, MD

Full Prof. of Internal Medicine
Chair of Emergency Medicine
DIMED, UNIPD



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Assistant Professor
Dept. Pharmacology,
Tulane University



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Physical Medicine and Rehab
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