



BioMed 2025

25-28 August 2025

Programme

Event promoted in the frame of the Biomedical Research Hub - Ca' Foscari University of Venice and Kansai Medical University

In collaboration with: San Camillo IRCCS and Department of Medical Sciences, University of Ferrara

August 25, 2025 - Ca' Foscari University of Venice

Aula Magna Silvio Trentin, Ca' Dolfin

Venice, Dorsoduro 3825/D

9.30 **Institutional greetings**

Prof. **Tiziana Lippiello**, Rector of Ca' Foscari University of Venice

Prof. **Tatsuo Kinashi**, President of Kansai Medical University

Prof. **Pier Franco Conte**, Scientific Director of the IRCCS San Camillo Hospital

Dr. **Maurizio Gasparin**, Secretary General of the Veneto Region

Dr. **Mario Bassano**, AD of the IRCCS San Camillo

Dr. **Edgardo Contato**, Director General ULSS 3 Serenissima

Dr. **Francesca Russo**, Director of the Department for Prevention, Food Safety, and Veterinary Services at the Veneto Region

Prof. **Giuseppe Pezzotti** and Prof. **Flavio Rizzolio**, Directors of the Biomedical Research Hub - Ca' Foscari University of Venice and Kansai Medical University

10.15 **Presentation of Setsunan University, Osaka**

Prof. **Shinji Sakuma**, Vicepresident of Setsunan University, Head of the Department of Pharmaceutical Science

Prof. **Takashi Shiina**, Assistant President of Setsunan University, Faculty of Agriculture

10.30 **Presentation of the Double PhD Degree programme**

Prof. **Hirofumi Hitomi**, Coordinator of the PhD Programme in Bioengineering and Medical Science Department of iPS Stem cells Regenerative Medicine, Kansai Medical University

Prof. **Flavio Rizzolio**, Coordinator of the PhD Programme in Engineering Physics and Materials, Department of Molecular Sciences and Nanosystems, Ca' Foscari University of Venice

10.45 **Scientific presentations**

Chairs: Prof. **Paolo Pinton** and Prof. **Carlotta Giorgi**

10.45 Prof. **Giuseppe Pezzotti**, Kansai Medical University

Raman spectroscopy: the sleeping giant in molecular medicine

11.15 Prof. **Hirofumi Hitomi**, Kansai Medical University

Clinical applications and disease models using induced pluripotent stem (iPS) cells

11.45 Prof. **Marco Nobile**, Department of Environmental Sciences, Computer Science and Statistics, Ca' Foscari University of Venice
AI in biomedicine: Ethical and computational challenges

12.15 Prof. **Achille Giacometti**, Department of Molecular Sciences and Nanosystems, Ca' Foscari University of Venice

The unbearable lightness of computer simulations

12.45 Prof. **Robert Carlyle Pullar**, Department of Molecular Sciences and Nanosystems, Ca' Foscari University of Venice

3D printed ceramic bone scaffolds for osseoregenerative implants

13.15 Prof. **Stefano Campostrini**, Department of Economics, Ca' Foscari University of Venice.
E-health and virtual hospitals

New opportunities and challenges for healthcare in aging societies

Closing remarks

Prof. **Maurizio Selva** and Prof. **Salvatore Orlando**, Directors of the Departments of the Scientific Area, Ca' Foscari University of Venice

Prof. **Tatsuo Kinashi**, President of Kansai Medical University

Prof. **Tiziana Lippiello**, Rector of Ca' Foscari University of Venice

13.50 Networking lunch

15.00 **Student presentations from KMU**

Ms. **Saki Ikegami**, Biomedical Engineering Center

Raman spectroscopic analysis of neurodegenerative tissues

Ms. **Midori Orikawa**, Department of Genome Analysis

The chemical origin of the superior attitude of Cnm-positive Streptococcus mutans to stick on collagen IV

Ms. **Junko Hirase**, Department of Genome Analysis
Establishment of a rapid and highly accurate diagnostic method for repeat expansion diseases using nanopore sequencing technology

Ms. **Yukina Hiramatsu**, Department of iPS Stem cell Regenerative Medicine
Application of Raman spectroscopy for gene editing and metabolic evaluation using iPS cells from patients with citrin deficiency

Mr. **Shuhei Ikeda**, Department of Neurology
Cnm-positive Streptococcus mutans as a predictive biomarker for hemorrhagic transformation: A novel approach using Raman spectroscopy

16.30 **Concluding remarks**

Organizers: Prof. Giuseppe Pezzotti and Prof. Flavio Rizzolio

August 26, 2025 - Ca' Foscari University of Venice Eta Building, Scientific Campus Mestre, Via Torino 155

9.00 Meet & greet in Piazzale Roma bus terminal (private vans scheduled departure)

9.30 **Lab sessions in ETA Building**

Prof. **Leonardo Puppulin**, Department of Molecular Sciences and Nanosystems, Ca' Foscari University of Venice

Prof. **Michele Back**, Department of Molecular Sciences and Nanosystems, Ca' Foscari University of Venice

Dr.ssa **Martina Marchiori**, Department of Molecular Sciences and Nanosystems, Ca' Foscari University of Venice

Prof. **Robert Pullar**, Department of Molecular Sciences and Nanosystems, Ca' Foscari University of Venice

12.45 **Concluding remarks in Conference Room Orio Zanetto, Alfa Building**

13.00 Networking lunch

15.00 Return in Piazzale Roma bus terminal (private vans scheduled departure)

Organizers: Prof. Giuseppe Pezzotti and Prof. Flavio Rizzolio

August 27, 2025 - IRCCS San Camillo

Venezia Lido, via Alberoni 70

8.30 from Venezia Santa Lucia railway station to San Camillo (private speedboat scheduled departure)

16.30 from San Camillo to railroad Santa Lucia railway station (private speedboat scheduled departure)

KANSAI MEDICAL UNIVERSITY AND IRCCS SAN CAMILLO SCIENTIFIC COLLABORATION

Opening of Collaboration and Summer School IRCCS San Camillo - August 27, 2025

9.30 – 10.00 **Welcome Coffee**

Welcome in the IRCCS San Camillo garden
Transfer to “Sala Teatro” meeting room

10.00 – 10.40 **Opening Session**

Prof. **Pierfranco Conte**, Research Director, IRCCS San Camillo

San Camillo Hospital & Research Institute: Main Research Lines and the KMU–San Camillo Collaboration Hub

Prof. **Tatsuo Kinashi**, President, Kansai Medical University (KMU)

Prof. **Rumi Tanemura**, Head, Dept. of Occupational Therapy, Faculty of Rehabilitation, KMU

Introduction to Kansai Medical University and Faculty of Rehabilitation and Graduate School of Life Health Science, KMU

10.40 – 11.30 **Summer School Opening**

Dr. **Davide Franceschini**, Research Pharmacist, IRCCS San Camillo

Overview of the Seminar Program

Prof. **Yusuke Yakushiji**, Department of Neurology, KMU

Clinical Relevance of Cerebral Small Vessel Disease

Dr. **Leonardo Rigon**, Neurologist, IRCCS San Camillo

Rehabilitation in Parkinson's Disease: Current Concepts and Future Challenges

11.30 – 12.10 **Presentation of the HUB Meeting Room**

12.10 – 13.40 Lunch in the San Camillo Garden

13.40 – 15.00 **Afternoon Scientific Session**

Asst. Prof. **Kimihiko Mori**, Rehabilitation Medicine, KMU

Innovation in Physical Therapy Education Using Robotics and Artificial Intelligence Strategies for Developing Advanced Medical Professionals and Advancing Clinical Practice

Mr. **Fumiya Suzuki**, Rehabilitation Medicine, KMU

Elastic Net and Ridge Regression Model-Based Extraction of Three-Dimensional Biomechanical Features that Contribute to Post-Stroke Gait Balance in Community-dwelling Adults: A Retrospective Study

Asst. Prof. **Shingo Hashimoto**, Department of Occupational Therapy, KMU

Intervention in Cognitive and Higher Brain Functions Using New Technologies

Dr. **Konstantinos Koutsikos**, Physical and Rehabilitation Medicine, IRCCS San Camillo
Neurological Rehabilitation: Classical and Innovative Therapies

15.00 – 16.00 **PRACTICAL SESSION: IRCCS San Camillo Laboratories Visits**

Dr. **Enrico Dal Pozzo**, Human-Centered Designer

Dr. **Sara Zago**, Neurorehabilitation Methodologies Laboratory

Dr. **Francesca Burgio** & Dr. **Laura Danesin**, Neuropsychology Laboratory

Dr. **Pawel Kiper**, Healthcare Innovation Technologies Laboratory

Guided tour of the rehabilitation laboratories and ongoing projects.

16.00 – 16.20 **Closing Session**

Final Discussion and Closing Remarks
Return to Venice (approx. 16.30)

Organizers: Prof. Giuseppe Pezzotti and Dr. Davide Franceschini

August 28, 2025 - University of Ferrara

Chiostro Santa Maria di Mortara

Ferrara, Via Fossato di Mortara 17

Summer School at University of Ferrara, Chiostro Santa Maria di Mortara

8.03 – 8.30 Arrival at Ferrara railway station by train FR8801 (Venezia S. Lucia 06.53 – Ferrara 08.03)

Participants will book their train tickets independently in advance (www.trenitalia.com/en.html)

Participants will be picked up at Ferrara railway station and transferred to the University of Ferrara by car

8.30 – 9.00 Opening Refreshment – at “Chiostro Santa Maria di Mortara”, 17 Fossato di Mortara Street

9.00 – 9.15 Opening Presentation of Collaboration and Institutional Welcome

MC: Prof. **Carlotta Giorgi**, University of Ferrara

Opening Speech

Prof. **Stefano Volpato**, Head of Department of Medical Sciences, University of Ferrara

Prof. **Tatsuo Kinashi**, President, Kansai Medical University

Scientific meeting

Chair: Prof. **Paolo Pinton**, University of Ferrara

9.15 - 10.15 Prof. **Giuseppe Pezzotti**, Biomedical Engineering Center, Kansai Medical University
Raman spectroscopy in cell physiology and microbiology

10.15 – 10.40 Prof. **Barbara Zavan**, Department of Medical Sciences, Laboratories of Tissue Engineering and Regenerative Medicine Laboratory, University of Ferrara

Tiny Messengers, Big Impact: The Expanding World of Extracellular Vesicles

10.40 – 11.05 Prof. **Naoyuki Kondo**, Department of Molecular Genetics, Institute of Biomedical Science, Kansai Medical University

Immune “HANA-BI” to regulate the symphony of immune response

11.05 – 11.30 Prof. **Massimo Bonora**, Department Medical Sciences, Signal Transduction Laboratory, University of Ferrara

Illuminating Mitochondrial Pathophysiology: Integrating Imaging Modalities

11.30- 11.55 Prof. **Yoshiki Yasukochi**, Department of Genome Analysis, Kansai Medical University
Introduction to Human Genetics: Relationship between genetic variation and phenotypic variation

11.55 - 12.00 Closing remarks

Prof. **Giuseppe Pezzotti**, Kansai Medical University
Prof. **Paolo Pinton**, University of Ferrara

12.00 - 13.30 Light lunch

13.30 - 15.00 **Signal Transduction Lab Tour** at “CUBO” building, 70 Fossato di Mortara street, University of Ferrara

Coordinator: Prof. **Massimo Bonora**, University of Ferrara

15.00 - 18.00 Ferrara City Center Guided Tour

18.00 - 18.29 Transfer to Ferrara railway station by car

Train to Venice FR9426 (Ferrara 18.29 - Venezia S. Lucia 19.34)

Participants will book their train tickets independently in advance (www.trenitalia.com/en.html)

Organizers: Prof. Giuseppe Pezzotti, Prof. Carlotta Giorgi and Prof. Paolo Pinton