



Giornata della Ricerca e dell'Innovazione in Medicina Umana della Svizzera italiana



Program 27.09.2024

Università della Svizzera italiana
East Campus
Via la Santa 1
Lugano

With the support and collaboration of:



Institutes EOC

Istituto Cantonale di Patologia
Istituto Cardiocentro Ticino
Istituto di Imaging della Svizzera Italiana
Istituto di Neuroscienze Cliniche della Svizzera Italiana
Istituto di Scienze Farmacologiche della Svizzera Italiana
Istituto Oncologico della Svizzera Italiana
Istituto Pediatrico della Svizzera Italiana

And the:

Laboratories for Translational Research LRT-EOC



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Biomedicine



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of
Oncology
Research



Farma Industria Ticino



Fondazione
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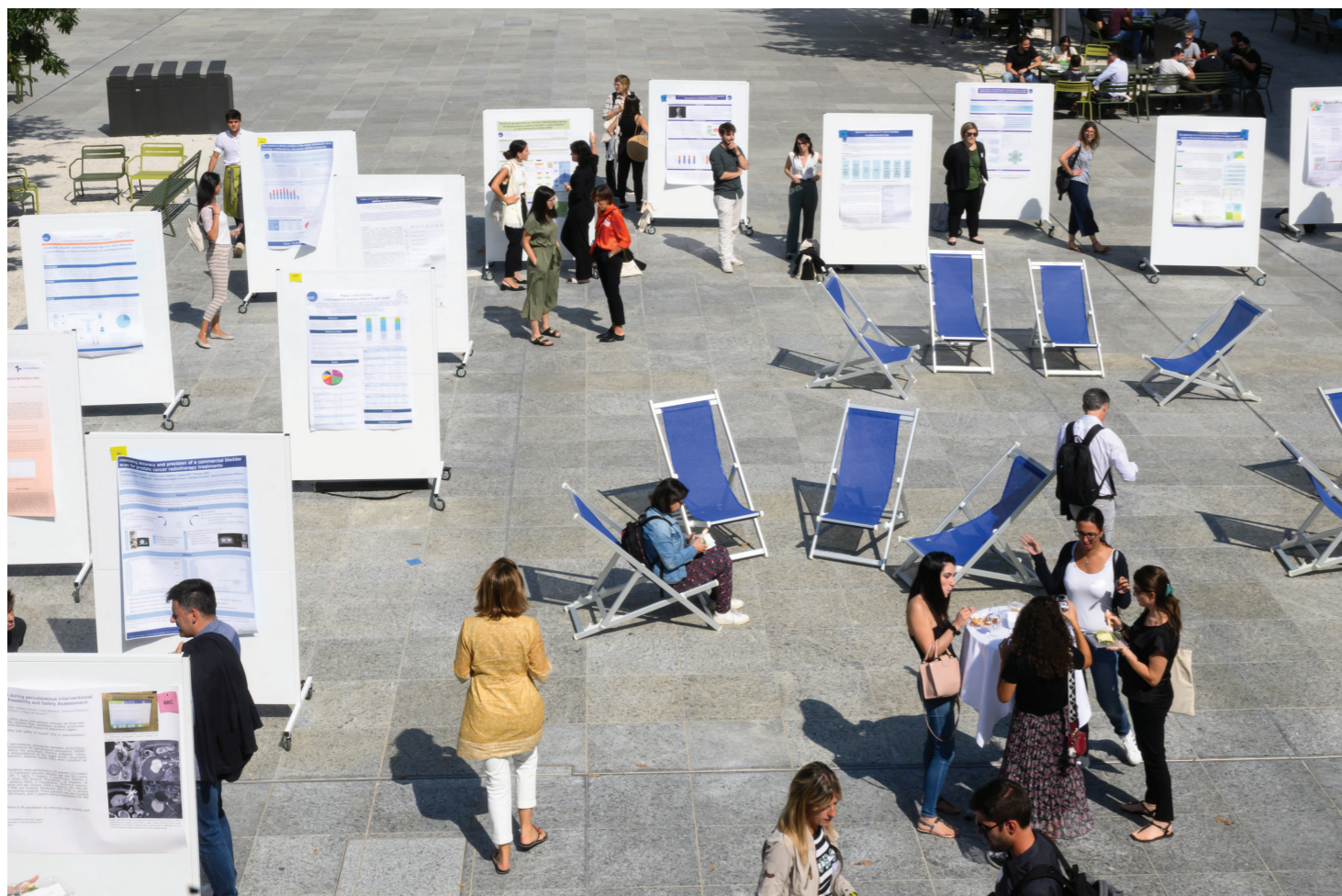
REHA
TICINO

Scuola universitaria professionale
della Svizzera italiana

SUPSI

SWISS MEDTECH





08h00 **WELCOME AND REGISTRATION**
Welcome Coffee

PLENARY
ROOM POLIVALENTE

08h30 **OPENING AND SPECIAL THANKS**
Greta Guarda, Chair Scientific committee 2024
Giorgio Treglia, Chair Scientific committee 2024

Glauco Martinetti, EOC General Director
Patrick Gagliardini, USI Pro Rector for Research

Special thanks and Communications from the Chief of Medical Education and Research Area, General Directorate EOC,
Prof. Alessandro Ceschi

Presentation of:
Farma Industria Ticino, Piero Poli (Rivopharm SA), Chair
Swiss Medtech, Giuseppe Perale, Executive VP & Founder I.B.I. SA, Regenera SA, Chair Swiss Medtech Ticino

09h00 **TOP RATED ORAL PRESENTATIONS: SESSION 1 (Voting Session)**
Chairs: Giorgia Melli and Marco Valgimigli
7 Oral presentations (Presentation 7 min + Discussion 3 min)

Loris Bonetti - Psychometric characteristics of the NURsing Behavioural Engagement (NUBE) Scale: a two-phases validation study
Marco Fabbro - Monitoring the activity of Halo-tagged ER-phagy receptors
Antonio Landi - Abbreviated or Standard Antiplatelet Therapy After PCI In HBR Patients with Chronic Kidney Disease
Andrea Milzi - Validation of different acute kidney injury scores in patients undergoing transcatheter aortic valve replacement
Stefano Panella - Extracellular Vesicles as Biomarkers for Monitoring Cellular Rejection after Heart Transplant
Greta Rizzi - Unveiling the metaphors of care: understanding dementia through language
Elena Vacchi - Tau seeding activity in skin biopsy is a novel diagnostic tool for brain neurodegenerative diseases

10h10 Coffee Break

10h30 **KEYNOTE LECTURE**
Discussant: Alessandro Ceschi
Title: Advanced X-ray imaging for improved diagnostic
Prof. Dr. Marco Stampanoni, Center For Photon Science at Paul Scherrer Institut and Institute for Biomedical Engineering at ETH Zürich

PARALLEL SESSION
ROOM POLIVALENTE

11h00 **ONCOLOGY 1**
Chairs: Arianna Calcinotto and Alessandra Franzetti-Pellanda
8 Oral presentations (Presentation 6 min + Discussion 2 min)

Clemence Aellen - Efficacy of intraoperative widening of surgical resection margins of non-palpable breast cancer
Gaston Fabian Dellaferriera - Recurrence after resection for non-small cell lung cancer: risk factors by stage molecular profile
Chiara Fasana - The immune landscape of epithelial ovarian cancer
Maria Luisa Gasparri - Radar localization for targeted axillary dissection in breast cancer patients undergoing primary systemic treatment
Cindy Garda - Myeloid cells impact HER2 expression in breast cancer, affecting response to HER2-targeted therapy
Concetta Guerra - An antibody-based strategy targeting oncogenic mERG in prostate cancer
Giuseppe Salfi - Prognostic Implications of Early Treatment-Emergent Hypertension in de Novo Metastatic Hormone-Sensitive Prostate Cancer
Jean Philippe Theurillat - The Prostate Cancer Atlas: A Next Generation Tool to Investigate Cancer Progression for Biomarker and Drug Target Discovery and Validation

PARALLEL SESSION
ROOM A1.03

11h00 **CARDIOLOGY**
Chairs: Lucio Barile and Giulio Conte
8 Oral presentations (Presentation 6 min + Discussion 2 min)

Azucena Rendon-Angel (Claudia Altomare) - Senescence-induced electrical instability: from single cell to monolayer tissue functional properties
Luigi Biasco - Derivation and validation of an AI based score to predict mortality at 12, 24, 36 and 48 months in patients with primary and secondary mitral regurgitation treated by transcatheter edge-to-edge repair.
Marialuce Caputo - Release velocity Improvement with a new Metronome-guided chest COMpression protocol: results of the multicenter RITMICO study
David Constantin Filip - Prognostic impact of right ventricle-pulmonary artery coupling improvement after mitral valve transcatheter edge-to-edge repair
Sven Lifka - Prognostic significance of left atrial function in patients with severe aortic stenosis undergoing transcatheter aortic valve replacement.
Giuliana Monachino - Life-Threatening Arrhythmias detection: learning from a massive dataset
Alessia D'Alto (Tardu Özkartal) - Impact of comorbidity on complication rates and life expectancy in patients with a leadless pacemaker
Anna Giulia Pavon - Cardio-Hepatic Axis in STEMI: evaluating Hepatic T1 mapping as a novel biomarker for early detection and prognostication of Heart Failure.

PARALLEL SESSION ROOM A1.04	
11h00	NEUROLOGICAL SCIENCES 1 Chairs: Silvia Miano and Chiara Zecca 6 Oral presentations (Presentation 6 min + Discussion 2 min) Marco Barbero (Daniele Lonati) - Validation of a digital dynamometer for assessing the cranio-cervical flexion test in volunteers with and without neck pain Rudolf Kälin - The prognostic value of plasma-derived extracellular vesicle surface antigens in Parkinson's disease patients Alessandro Puiatti - Assistive Device for Autonomous Navigation for blind and visually impaired people Rosaria Sacco - Memory B cell-guided extended interval dosing of ocrelizumab in multiple sclerosis Radoslava Švihrová - Wearables and sleep: effect of circadian rhythm disruption on sleep quality, recovery and well-being Giorgia Melli (Ankush Yadav) - Plasma-derived extracellular vesicles of patients with Parkinson's disease cause neurodegeneration through microglia activation Michele Pio Fabrizio - Growth and rupture of an intracranial aneurysm: the role of wall aneurysmal enhancement and CD68

PARALLEL SESSION ROOM A1.05	
11h00	NURSING 1 Chairs: Loris Bonetti and Sarah Liptrott 6 Oral presentations (Presentation 6 min + Discussion 3 min) Marta Aramini - Development of the Advanced Practice Nurse (APN) role for peritoneal dialysis patients: a qualitative research study Loris Bonetti (Isabelle Ballabio Messina) - Alimentazione degli infermieri turnisti in Ticino e fattori influenzanti le scelte alimentari: studio osservazionale trasversale Celine Beffa - Experiences of non-specialized emergency nurses awaiting specialization in a pre-training path: a qualitative descriptive study Corina Elena Luca - Development of a complex intervention to promote civil workplaces among hospital nursing teams: a multi-stage sequential explanatory mixed-method framework study Rachele Baudino (Claudio Speroni) - Implementation of a flexible nurse staffing "Team Fix" model at the Regional Hospital of Lugano Vania Pedroia - Improving care of dysphagic patient in the Department of Internal Medicine 2 (EOC-OSG)

POSTER SESSION HALL 1° Floor/ Outside TBD and ONLINE	
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12h10	SURGERY AND CRITICAL CARE 28C Davide Milani - Defining the Learning Curve of the Exoscope in Spine Surgery 38B Giorgio Prouse - Modeling Vessel Wall Compliance to Analyze Haemodynamics in Arteriovenous Fistulas 43B Giulio Saroglia - Test bench for in vitro simulation of an Abdominal Aortic Aneurysm
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ONCOLOGY	
2C Pamela Agazzi - Sex related differences in glioblastoma: a single center retrospective cohort study 7C Carlotta Bertolina - First attempt of MMR protein expression quantification as a prognostic factor in colorectal cancer 10B Luciano Cascione - The "Majority Illusion" in cancer: how lessons we have learned from social media can help us to identify biomarkers in cancer 14C Barbara Barozzi (Roberto Dossi) - Breast cancer recurrence rate after mastectomy for invasive disease and anesthesia 21C Cesare Michele Iacovitti - Switching from standard to personalized dosimetry for HCC patients treated with Y-90 SIRT. A real-life experience 27C Sabrina Marini - Outcome of Patients with Non-Small Cell Lung Cancer and Brain Metastases 34C Alessio Pagani - Dermatological adverse events due to oncotherapy: the necessity for a new classification 35C Sara Merler (Gaetano Paone) - How different treatments performed in hormone-sensitive prostate cancer could influence PSMA-PET/CT findings in resistant phase 41C Patrizia Urso - Sparing the heart in left breast cancer radiation therapy with the latest VOLO(TM) Ultra optimizer 46B Filippo Spriano - FFO1 is a novel humanized camelid nanobody targeting endogenous retroviruses with anti-lymphoma activity 53B Alex Zadro - A high-throughput bone marrow 3D co-culture system to develop resistance to targeted agents in marginal zone lymphoma	

NURSING	
4N Andrea Battistini - Creazione di un corso basic life support (BLS) interprofessionale e orientato all'oncologia 10N Sabrina Maria Fiala - Simulazione in sito con un attore per migliorare la comunicazione tra paziente e operatore sanitario 12N Stephanie Maier Bastide - Simulando s'impara: Apprendo interattivo per gli infermieri nella "Camera degli error" 13N Pietro Monti - Realtà virtuale durante l'intervento di pacemaker: protocollo di ricerca di uno studio randomizzato e controllato 15N Stefano Ongaro - Dunque a che punto eravamo rimasti? Conseguenze dopo interruzione training in ecografia infermieristica causa Covid-19 18N Fabrizio Pelagagge - Sviluppo di un percorso d'educazione terapeutica per pazienti con ictus: un intervento di prevenzione secondaria	

NEUROSCIENCES	
12C Cinzia Cruder - Profiling muscle stiffness among musicians with and without playing-related musculoskeletal disorders 16B Alvise Dei Rossi - Evaluating Sleep Metric Consistency of Wearables: A Multi-Device Comparison 26B Jessica Demarchi (Sara Levati) - A digital health platform for home cognitive training and monitoring of seniors in Southern Switzerland 31C Lucia Morellini and Lisa Arnaud - MCI and Empathy: A Clinical Comparative Study Using the Interpersonal Reactivity Index (IRI) 34B Jacopo Pagnoncelli - In vivo tissue impedance analyzer 40C Alessandro Schneebeli (Alessandro Sangiorgio) - Shear wave speed, mechanical and morphological comparison in conservatively treated and uninjured Achilles tendon	

PHARMACOLOGY	
5C Victor Alexander Daniel Bättig - β -lactam allergy: a still-neglected aspect that should be fundamental for the antimicrobial stewardship programs 30C Roberta Nosedà (Sarah Mondada) - Pregabalin Safety in Pregnancy: A Disproportionality Analysis of the VigiBase Spontaneous Reporting System 32C Roberta Nosedà - Reporting of late-onset immune-related adverse events with immune checkpoint inhibitors in Vigibase	

INFECTIOUS DISEASES	
8C Giorgia Piceni (Marta Betti) - Evaluation of treatment outcomes in Tuberculosis patients diagnosed before, during, after SARS-CoV-2 pandemic, North Italy 17C Alessia Francese - HealthcAre sUppoRt fOr Remote HIV pAtients: utilizzo di una applicazione a supporto dei pazienti HIV+ 20C Ruth Hersche - EMERGE; Energy Management Education for people living with Long Covid Fatigue. A Study protocol	

IMAGING	
30B Fabio Mattiussi - Noise Reduction in CT Images Using a Combined Artificial Neural Network – ErisNet	

REGENERATIVE MEDICINE	
4B Chiara Arrigoni - Biofabrication in space: the new ESA 3DBiosystem and the Bio-Orbit Ground Based Facility 13B Mattia Cenciari - Biofabrication of human 3D organ-specific models for the study of vascular aging 27B Raffaele Luongo - Generation of human cerebral organoids with a structured outer subventricular zone 36B Dalila Petta - Investigation of methylation patterns in osteoarthritic and healthy knee joint cell populations	

OTHER	
14B Luca Clivio - Harnessing the power of Statistical Analyses in Clinical Research: reproducibility and alterability of data analyses 28B Daniele Malpetti - FPLIER: a Federated Learning method for transcriptomics 37B Neelima Pradeep - Human pluripotent stem cells-model to address Merkel cell biology in human health and disease 37C Giovanna Pedroni - Parents' and young athlete's knowledge of sports-related concussion in Ticino	

PLENARY ROOM POLIVALENTE	
13h10	KEYNOTE LECTURE Discussant: Emiliano Albanese Title: Transparent reporting of health research: challenges and solutions Erik von Elm, MD MSc FMH, Director Cochrane Switzerland Centre universitaire de médecine générale et santé publique (Unisanté)

13h30	TOP RATED ORAL PRESENTATIONS: SESSION 2 Chairs: Greta Guarda and Anastasios Stathis 7 Oral presentations (Presentation 7 min + Discussion 3 min) Domenico Albino - Proteomic analysis of extracellular vesicles reveals novel markers of prostate cancer progression Maria Teresa Balia - Exploring the immunomodulatory functions of PARP Inhibitors in ER-Positive Breast Cancer Letizia Boffa - Exploring the contribution of the immune compartment in BRCA-dependent cancer onset Marco Bongiovanni - The CARbapenem-Sparing-Antimicrobial-Stewardship (CASAS) Project: an innovative approach to reduce carbapenem consumption in low-users hospital settings Manuel Colucci - Retinoic acid receptor activation reprograms senescence response and enhances anti-tumor activity of natural killer cells Daniela Impellizzieri - Antibody-based therapeutics for metastatic hormone-refractory prostate cancer Ji Zhang - An Integrated Proteomic Portrait of Prostate Cancer Progression Reveals New Therapeutic Opportunities
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14h40	Coffee Break
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PARALLEL SESSION ROOM POLIVALENTE	
15h00	ONCOLOGY 2 AND MISCELLANEOUS Chairs: Arianna Baggiolini and Mattia Rizzi 8 Oral presentations (Presentation 6 min + Discussion 2 min) Alberto Arribas - CRISPR/Cas9 screening identifies genes affecting the sensitivity to the copanlisib/venetoclax combination in lymphoma Camilla Sculco (Beatrice Bano) - (Fear of) SARS-CoV-2 infection and psychological distress: prospective seroprevalence study in southern Switzerland Martina Bellafante - Defining the epigenetic landscape regulating a progenitor signature in development and melanoma initiation and progression Lorenzo Cavallini - Design and Feasibility Study of an Aortic Turbine for Self-Powered Implantable Medical Devices Elisa Federici - Novel treatment strategies for hepatocellular carcinoma: rewiring the cancer cell transcriptome by CDK9 inhibition Fabio Bergamini (Bernhard Gerber) - 3 years follow-up of Venetoclax in Relapsed or Refractory AL Amyloidosis with t(11;14) and BCL2 expression Lorenzo Ruinelli - Electronic Health Records to recognize and predict Acute Kidney Injury and Disease Antonietta Verrillo - The role of neuronal-cancer crosstalk in human melanoma brain metastases

PARALLEL SESSION ROOM A1.03	
15h00	<p>IMMUNOLOGY AND BEYOND Chairs: Giandomenica Iezzi and Luca Varani 8 Oral presentations (Presentation 6 min + Discussion 2 min)</p> <p>Vanessa Biemmi - Syndecan-Syntenin-Alix complex mediates SRC function in macrophages' small-EV release Carolyn Hoefner - Investigating Lysosomal Clearance of Endoplasmic Reticulum Domains as Induced by accumulation of Membrane-Bound Misfolded Proteins Veronica Martini - A CD8 T-cell subset with osteogenic and cytotoxic properties: a potential therapeutic target in ankylosing spondylitis Diego Morone - Role of autophagy in T cell homeostasis Francesca Righetti - Dissect the role of intracellular bacteria in cancer neutrophil evolution Anna Rinaldi - Identification of a novel senolytic compound to prevent chronic kidney injury and fibrosis Francesca Silini - Understanding the connections between cellular metabolism, MHCII regulation, and the immune response Virginia Sitta - The Impact of Gut Microbiota on Anastomotic Leakage After Colorectal Surgery (MicrobAL)</p>
PARALLEL SESSION ROOM A1.04	
15h00	<p>NEUROLOGICAL SCIENCES 2 Chairs: Marco Barbero and Matteo Moretti 6 Oral presentations (Presentation 6 min + Discussion 2 min)</p> <p>Marco Barbero - Concurrent validity and reliability of a novel algometer for measuring pressure pain thresholds in healthy volunteers Stefano Vercelli (Matteo Beretta-Piccoli) - Cross-cultural translation, validation, reliability, and minimal clinically important difference of the Italian Pittsburgh Fatigability Scale Laura Guerricchio - Extracellular Vesicles from II Trimester Amniotic Fluid: Novel Therapeutic for Skeletal and Cardiac Muscle Injury Megi Ishmaku - Biofabrication of a 3D model of human skeletal muscle for the study of fibrosis Eva Koetsier - Lumbar Facet Joint Radiofrequency Ablation with a 3-Tined Cannula, a Technical Report and Observational Study Michele Pio Fabrizio (Ismail Zaed) - Long-Term Follow-Up of Custom-Made Porous Hydroxyapatite Cranioplasties: Analysis of Infections in Adult and Pediatric Patients</p>
PARALLEL SESSION ROOM A1.05	
15h00	<p>NURSING 2 Chairs: Loris Bonetti and Michele Villa 5 Oral presentations (Presentation 6 min + Discussion 3 min)</p> <p>Menada Gardalini (Tatiana Bolgeo) - Anorectal Malformation and Hirschsprung's Disease: assessing the effectiveness of faecal incontinence rehabilitation in paediatric patients. Anna Bottani - A qualitative study of obstetric violence in Western Switzerland. Midwifery students report their representations and needs regarding "obstetric violence" Susanna Calcaterra - "Imparare facendo": acquire competenze nell'ambulatorio di emodialisi dell'Ospedale Regionale di Lugano attraverso le simulazioni Simone Nasi - Migliorare nella presa a carico di pazienti con ferite/lesioni presso la sede di Acquarossa Antonio Palermo - Components of a complex intervention to develop clinical leadership of the specialist Nurse: qualitative study</p>
PLENARY ROOM POLIVALENTE	
16h20	<p>AWARDS CEREMONY Chairs: Greta Guarda e Giorgio Treglia with</p> <p>Farma Industria Ticino, Piero Poli (Rivopharm SA), Chair Swiss Medtech, Giuseppe Perale, Executive VP & Founder I.B.I. SA, Regenera SA, Chair Swiss Medtech Ticino</p> <p>- Best poster clinical and epidemiological research* - Best poster basic, translational and computational research* - Best poster nursing research*</p> <p>*These awards are assigned during the event by the Jury (Guarda / Treglia / Bonetti / Di Tanna)</p> <p>- Best oral presentation clinical and epidemiological research** - Best oral presentatio basic, translational and computational research** - Best oral presentation nursing research**</p> <p>**These awards are assigned during the TOP RATED SESSION 1 AND 2 by vote of participants in presence and online</p>
16h40	<p>CLOSING Greta Guarda e Giorgio Treglia</p>
17h00	Aperitif

SCIENTIFIC COMMITTEE

Chairs:

Prof. Dr. Greta Guarda, Vice Decana per la Ricerca, Facoltà di scienze biomediche USI, Lugano e Responsabile del Laboratorio di "Immune Mechanisms", IRB, Bellinzona
Prof. Dr. med. Giorgio Treglia, Responsabile Servizio Ricerca, Area Formazione medica e Ricerca, Direzione generale EOC, e Caposervizio di Medicina Nucleare, Istituto di Imaging della Svizzera Italiana, EOC, Bellinzona

Members:

Prof. Dr. med. Emiliano Albanese, Direttore dell'Istituto di Public Health USI e Professore Ordinario Facoltà di scienze biomediche USI, Lugano
Prof. Dr. Arianna Baggiolini, Responsabile del Laboratorio di Cellule Staminali e cancro, IOR, Bellinzona
Prof. Dr. Marco Barbero, Direttore del Laboratorio di ricerca in riabilitazione 2rLab, DEASS-SUPSI, Manno
Dr. Loris Bonetti, RN, Responsabile Ricerca infermieristica, EOC, Bellinzona e Docente DEASS-SUPSI, Manno
Dr. med. Sandro Bonetti, Medicina interna generale, medico di famiglia, Dongio
Prof. Dr. Arianna Calcinotto, Responsabile del Laboratorio di Immunoterapia del cancro, IOR, Bellinzona
Prof. Dr. med. Dimitri Christoforidis, Viceprimario Chirurgia e Chirurgia Viscerale, Dipartimento di Chirurgia EOC, Lugano
Prof. Dr. med. Pietro Cippà, Primario Nefrologia e Capo Dipartimento di Medicina EOC, Lugano
Prof. Dr. med. Alessandro Ceschi, MSc, Primario e Direttore medico e scientifico dell'Istituto di Scienze Farmacologiche della Svizzera Italiana EOC, Capo Area Formazione medica e Ricerca, Direzione generale EOC, e Direttore CTU-EOC, Lugano
Prof. Dr. med. Gianluca Di Tanna, Responsabile Servizio Ricerca, DEASS-SUPSI, Manno
Dr. med. Alessandra Franzetti Pellanda, Primario Radioterapia e Responsabile Unità di Ricerca Clinica, Clinica Luganese Moncucco, Lugano
Prof. Dr.ssa med. Giandomenica Iezzi, Responsabile del Laboratorio di ricerca traslazionale del Dipartimento di Chirurgia EOC, Bellinzona
Prof. Dr. Vittorio Limongelli, Responsabile del Laboratorio di Farmacologia computazionale, Istituto Eulero USI e Professore Ordinario Facoltà di scienze biomediche USI, Lugano
Dr. Sarah Jayne Liptrott, RN, Responsabile dell'Unità di Ricerca infermieristica ORBV-IOSI, EOC, Bellinzona
PD Dr. med. Mattia Rizzi, Caposervizio, Responsabile e Specialista Emato-Oncologia pediatrica, Istituto Pediatrico della Svizzera italiana, EOC, Bellinzona
Prof. Dr. med Anastasios Stathis, Responsabile medico della Ricerca clinica, Istituto Oncologico della Svizzera Italiana, EOC, Bellinzona
Prof. Dr. med. Marco Valgimigli, Vice-Primario del Servizio di Cardiologia, Istituto Cardiocentro Ticino EOC, Lugano
Dr. Luca Varani, Responsabile del Laboratorio di biologia strutturale IRB, Bellinzona
Michele Villa, RN, Responsabile dell' Unità di Ricerca Infermieristica, Istituto Cardiocentro Ticino, EOC, Lugano
Prof. Dr. med. Chiara Zecca, Caposervizio Clinica di Neurologia, Istituto di Neuroscienze cliniche della Svizzera Italiana EOC, Lugano

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