

# 6<sup>th</sup> INTERNATIONAL SYMPOSIUM ON BIOMATERIALS

## PRELIMINARY PROGRAM

May 9, 2025, UMC Orthopaedic Clinic, Ljubljana

9:00	OPENING	BOŠTJAN KOCJANČIČ, MIHA VODIČAR, UMC Ljubljana
		<b>Boštjan KOCJANČIČ, Veronika KRALJ IGLIČ</b>
Plenary 9:10	Drago Dolinar	OVERVIEW OF BIOMATERIALS IN ORTHOPAEDICS - CLINICAL PERSPECTIVE
Invited 9:25	Veronika Kralj Igljč	OPTIMIZATION OF THERAPEUTIC PLASMA PREPARATION
Plenary 9:32	G. Spera, G Costa, F. Pegreff, A. Russo	MODIFIED TRANSTIBIAL TECHNIQUE FOR ACL RECONSTRUCTION. BACK TO THE FUTURE
Invited 9:44	Blaž Mavčič	IMPLANT-RELATED RISK OF PERIPROSTHETIC PROXIMAL FEMORAL FRACTURE AFTER PRIMARY THA IN PATIENTS AGED 65–80 YEARS
Invited 9:56	Mojca Debeljak	TECHNOLOGIES FOR ASSESMENT AND TRAINING IN REHABILITATION
Invited 10:08	Špela Tadel Kocjančič	PREDICTIVE VALUE OF NEURON SPECIFIC ENOLASE (NSE) FOR GOOD NEUROLOGICAL OUTCOME OF PATIENTS AFTER CARDIAC ARREST
Invited 10:20	Andrej Trampuž	IMPLANT ASSOCIATED INFECTION -DEVELOPMENT OF NOVEL DIAGNOSTIC AND TREATMENT METHODS
Invited 10:32	Andrej Coer	THE ROLE OF BACTERIOPHAGES IN ORTHOPEDIC AND DENTAL IMPLANTOLOGY
Invited 10:44	Miha Vodičar	BIOMECHANICAL GAIT ANALYSIS IN SPINAL DEFORMITY
Invited 10:56	Boštjan Kocjančič, Monika Jenko, Drago Dolinar	EVALUATION OF BIOMATERIALS SURFACES IN ORTHOPAEDICS
<b>11:10 11:30</b>	<b>Coffe break</b>	
		<b>Boštjan KOCJANČIČ, Mojca DEBELJAK</b>
Invited 11:30	Carlo Dottino	WHY 3D PRINTING IS BECOMING SO IMPORTANT FOR CERTAIN ORTHOPAEDIC APPLICATIONS
Invited 11:45	Carlo Dottino	THE PROCESS TO DEVELOP CUSTOM MADE IMPLANTS FROM THE CT-SCAN ACQUISITION TO THE SURGERY TOGETHER WITH POSSIBLE FUTURE ENHANCEMENTS (ES. AI IMPLEMENTATION)
Invited 12:00	Igor Belič, Boštjan Kocjančič	THE SONIC RESONANCE OF FEMORAL PART OF HIP ENDOPROTHESIS – EXPERIMENTAL SETUP
Invited 12:12	Aleš Igljč, Veronika Kralj-Igljč	ON THE ROLE OF CURVED PROTEINS AND CYTOSKELETON FORCES IN ENCAPSULATION OF NANOPARTICLES
Invited 12:24	G. Zocco, I. Caravotta, F. Pegreff, A. Russo	CINEMATIC ALIGNMENT BEYOND TRADITIONAL MECHANICAL CONCEPTS IN TKA
Invited 12:36	Ingrid Milošev P. Rodič, B. Kapun, D. Sačer, R. Trebše, K. Šuster, Č. Oblak, R. Gašperšič, K. Škulj, S. Horvat, A. Nair, D. Kramar, A. Jeromen, E. Govekar	ADDITIVE MANUFACTURING OF Ti6Al4V ALLOY AIMING FOR ANTIBACTERIAL PROPERTIES
Invited 12:48	Samo Roškar	CHANGES OF PHYSICAL CHEMISTRY PROPERTIES OF SYNOVIAL FLUID RELATED TO SEPTIC AND ASEPTIC CONDITIONS - VISCOSITY AS A POTENTIAL MARKER FOR PJI DIAGNOSTICS
Invited 13:00	Klemen Avsec	ANALYSIS OF TAPER CORROSION IN Ti6Al7Nb FEMORAL COMPONENTS OF CEMENTLESS HIP ENDOPROTHESES

	<b>13:15 - 14.15 LUNCH</b>	
Invited 14:15	Matjaž Godec, Črtomir Donik, Aleksandra Kocijan, Irena Paulin, Anna Dobkowska, Jiri Kubásek	ADDITIVE MANUFACTURING FOR BIODEGRADABLE MEDICAL IMPLANTS: KEY ADVANTAGES
14:35	Ita Junkar, M. Benčina, K. Lakota, P. Žigon, V. Kralj Igljič, A. Igljič	MULTIFUNCTIONAL SURFACES FOR ADVANCED WOUND HEALING
	<b>DENTAL MEDICINE</b>	<b>SESSION</b>
		<b>Čedomir OBLAK, Maja OVSENIK</b>
Invited 14:45	Čedomir Oblak	MATERIALS IN PROSTHODONTICS LATEST ADVANCES AND RESEARCH
Invited 14:55	Maja Ovsenik	MATERIALS IN ORTHODONTICS NiTi AND SS
Invited 15:10	Lea Kolenc	BIOCOMPATIBILITY OF MATERIALS – SYSTEMIC EFFECT
Invited 15:22	Jan Oblak	BIOCOMPATIBILITY OF DENTAL MATERIALS – ORAL HEALTH EFFECTS
Invited 15:34	Rok Ovsenik	EFFECT OF LASER PHOTOBIMODULATION ON SURFACE CHANGES OF NiTi ARCHWIRE IN FIXED APPLIANCES
Invited 15:46	Domen Kanduti, Aleksandar Janev, Anton Sculean, Mateja Erdani Kreft, Peter Veranič, Rok Schara, Nataša Resnik, Boris Gašpirc	MAGNESIUM-BASED RESORBABLE MEMBRANES IN PERIODONTAL REGENERATION: IN VITRO EVALUATION OF OSTEOINDUCTIVE POTENTIAL
Invited 16:08	Urška Škof, Rok Schara	RECENT ADVANCES IN BIOMATERIALS FOR PERIODONTAL TISSUE REGENERATION
Invited 16:20	Janet Zimšek Mijovski, Milan Kuhar, Vojko Didanovič, Tadej Dovšak	SUBPERIOSTEAL IMPLANTS FOR SEVERE MAXILLARY BONE LOSS
Invited 16:32	Nina Grguraš, Čedomir Oblak	CLINICAL AND LABORATORY EVALUATION OF TRANSLUCENT ZIRCONIUM OXIDE CERAMICS FOR DENTAL PROSTHETIC REHABILITATION
Invited 15:54	Sonja Žarkovič, Čedomir Oblak	TISSUE VS BONE-LEVEL ZIRCONIA IMPLANTS:2.5 YEAR OUTCOMES FROM AN RCCT
16:10 16:30	<b>COFFE BREAK</b>	
Invited 16:30	Bojana Krneta, Maja Ovsenik	STEREOPTHOGRAPHY IN CLINICAL USE
Invited 16:42	Nika Svetina, Anja Sedej, Maja Ovsenik, Aljaž Golež	EFFECT OF PHOTOBIMODULATION ON TOOTH MOVEMENT IN PATIENTS UNDERGOING ORTHODONTIC TREATMENT
Invited 16:54	Maks Bitenc, Doroteja Hren, Monika Jenko, Maja Ovsenik	DIGITAL PLANING OF RAPID PALATAL EXPANDER
	<b>Young Surgent Session</b> 14:30-16:10	
		<b>Boštjan KOCJANČIČ, Mojca DEBELJAK</b>
	Aljaž Merčun, Matej Drobnič, Elijan Mastnak, Jan Žumer, Srđan Đorđević	REPEATABILITY ANALYSIS OF MECHANICAL MUSCLE ACTIVITY WITH MUSCLE CONTRACTION (MC) SENSORS: A TIME SERIES AND DISCRETE VARIABLE APPROACH FOR THE VASTUS MEDIALIS MUSCLE
	Igor Potparić, Boštjan Kocjančič	TYPES OF MATERIALS USED IN KNEE IMPLANTS
	Igor Potparić Boštjan Kocjančič	KNEE INJECTION THERAPY
	Matic Kolar, Matej Drobnič	BIOMIMETICAL OSTEOCHONDRAL BEARING WITH MSCS ADDITION FOR THE TREATMENT OF KNEE ARTICULAR SURFACE LESIONS

	Matic Kolar, Matej Drobnič	TREATMENT OF OSTEOCHONDRAL LESIONS OF THE TALUS WITH MULTILAYER BIOMIMETIC SCAFFOLDS: A SYSTEMATIC REVIEW OF THE LITERATURE
	Armand Dominik Škapin	GUIDELINES FOR THE TREATMENT OF OSTEOPOROTIC VERTEBRAL FRACTURES
	<b>Young Students Session 16:30 -18:00</b>	
		<b>Špela TADEL KOCJANČIČ Blaž MAVČIČ</b>
	Ema Kocjančič	3D PRINTED POROUS TITANIUM PROSTHESES
	Jurij Marošek	INFECTION RISK ANALYSIS IN SILVER COATED ENDOPROSTHESES
	Žiga Kristan Žigon	PATENT FORAMEN OVALE
	Nina Knoll	VENO-VEINUS ECMO IN COVID-19 PATIENT
	Maja Kodra	CYTOSORB IN SEPSIS: ACASE PRESENTATION
	Aleksander Kostić	SEVERE METALLOSIS AFTER PE LINER DISLOCATION IN THA
	Tadej Mavčič	COMPRESSION NEUROPATHIES
	<b>POSTER SESSION</b>	
S1	Anej Škof, Anna Romolo, Boštjan Korenjak, Aleš Iglic, Veronika Kralj Iglic.	EFFECT OF DILUTION ON NUMBER DENSITY AND SIZE OF EXTRACELLULAR PARTICLES IN BLOOD PREPARATIONS
S2	Nika Svetina, Anja Sedej, Maja Ovsenik, Aljaž Golež	LLLT BIOSTIMULATION TECHNOLOGY AFFECTS THE CLINICAL STATE OF PERIODONTAL TISSUES DURING ORTHODONTIC LEVELLING PHASE
S3	Miha Remec, Drago Dolinar, Monika Jenko	EVALUATION OF BMSC ADHESION DEPENDING ON THE SURFACE ROUGHNESS OF Ti6Al4V FEMORAL COMPONENTS OF HIP ARTHROPLASTY MANUFACTURED BY ADDITIVE TECHNOLOGIES
	<b>Concluding remarks</b>	<b>Chair BOŠTJAN KOCJANČIČ</b>

19.00 CONCERT, Red Hall of the City Hall in Ljubljana, 9.05 2025 at 19:00

Performers: Anita Prelovšek flute, Branko Brezavšček violin, Elena Starčeva Somun piano

Guest Veronika Kralj Iglič piano

Free admission