

TUESDAY 12 th DECEMBER	
12.00 – 13.00	Registration COLAOB (Registration desk Hotel UTHGRA: 1 st . floor)
13.00	<i>Free shuttle bus from Hotel UTHGRA to INTEMA at 13:00 h</i> <i>Coffee break included</i>
14.00 – 18.00	Pre-Conference Tutorial and training course on Green Nanotechnology Dr. Kattesh Katti Institute of Green Nanotechnology and University of Missouri Cancer Nanotechnology Platform, Missouri, USA Place: INTEMA, Av. Colón 10850, Auditorium 2 nd floor
17.00 – 20.00	Registration COLAOB (Registration desk Hotel UTHGRA: 1 st . floor)
WEDNESDAY 13 th DECEMBER	
8:00 – 9:00	Registration COLAOB (Registration desk Hotel UTHGRA: 1 st floor)
9:00	Opening Ceremony XII COLAOB (Room Alfonsina, 2 nd floor)
9:30 – 12:30	SESSION 1
9:30	Plenary Conference 1 Dr. Yannis Missirlis (University of Patras, Greece) <i>Controversies and key nano insights in long standing physiological and biological concepts</i> (Room Alfonsina) Chair: Dr. Silvia Ceré
10:30 – 11:00	Coffee Break (2 nd floor)

11:00	<p>Opening Plenary Conference (Virtual) Dr. Anthony Atala (Wake Forest Institute for Regenerative Medicine, NC, USA) <i>Regenerative medicine: Current concepts and changing trends</i> (Room Alfonsina) Chairs: Dr. Diego Mantovani and Dr. Gustavo Abraham</p>		
12:30 – 14:30	Lunch		
14:30 – 17:45	SESSION 2		
14:30	<p>Plenary Conference 2 Dr. Kattesh Katti (Institute of Green Nanotechnology and Cancer Nanotechnology Platform, University of Missouri, USA) <i>Next generation of nanobiomaterials are “nano-ayurvedic medicine” drugs - Immunomodulatory holistic medicine approach for cancer therapy— through green nanotechnology</i> (Room Alfonsina). Chair: Dr. Ademar B. Lugão</p>		
	<p>Session 2a Tissue Engineering (Room Alfonsina) Chair: Dr. Rossana Thiré</p>	<p>Session 2b Biomaterials characterization (Room Victoria) Chair: Dr. Josefina Ballarre</p>	<p>Session 2c Nanobiomaterials (Room Silvina) Chair: Dr. Eduardo Bock</p>
15:30	<p>O1 - Ângela Maria Moraes COMPOSITE FILMS OF GELLAN GUM, FIBROIN, CARBOXYMETHYL CHITOSAN AND BIOGLASS AS POTENTIAL SKIN WOUND DRESSINGS</p>	<p>O2 - Katherina Fernandez GRAPHENE OXIDE REDUCTION BY DOPAMINE</p>	<p>O3 - Cássia Priscila Cunha da Cruz DEVELOPMENT OF RADIATION-INDUCED ALBUMIN-BASED NANOPARTICLES</p>
15:45	<p>O4 - Maria Lorena Gómez ANTIMICROBIAL ANTIBIOTIC-FREE DRESSINGS FOR WOUND HEALING OBTAINED BY PHOTOPOLYMERIZATION</p>	<p>O5 - Adriana de Souza Rodrigues SILVER NANOPARTICLES REDUCED BY TANNIC ACID AND SODIUM CITRATE: A SYNERGIC APPROACH WITH ANTIMICROBIAL PROPERTIES</p>	<p>O6 - Rachel Magnago NANOCAPSULES BASED ON POLYCAPROLACTONE-TRIOL-BASED POLYURETHANE FOR A DRUG DELIVERY SYSTEM</p>
16:00 – 16:30	Coffee Break		

16:30 – 17:45	SESSION 3		
	<p>Session 3a Tissue Engineering (Room Alfonsina) Chair: Dr. Pablo Cortez Tornello</p>	<p>Session 3b Medical implants and medical devices (Room Victoria) Chair: Dr. Gianina Kloster</p>	<p>Session 3c Nanobiomaterials / Modeling & simulations (Room Silvina) Chair: Dr. Ana Paula Rosifini Alves Claro</p>
16:30	<p>O7 - Emilio Satoshi Hara CELL MEMBRANE AS A POTENTIAL CELL-FREE THERAPEUTIC FOR RAPID BONE TISSUE ENGINEERING</p>	<p>O8 - Melina Hankovits MAGNESIUM ALLOY (AZ91) FUNCTIONALIZATION WITH SILICA-GENTAMICIN NANOPARTICLES FOR BIODEGRADABLE IMPLANTS</p>	<p>O9 - Sara Feldman OSTEOGENIC EFFECT OF COMPOSITE NANOFIBROUS SCAFFOLDS WITH OSTEOSTATIN</p>
16:45	<p>O10 - Paula A. Zapata FABRICATION AND ASSESSMENT OF FUNCTIONAL POLYCAPROLACTONE/STARCH/CAO SCAFFOLDS FOR BONE TISSUE ENGINEERING APPLICATION</p>	<p>O11 - Taynah Pereira Galdino CHITOSAN/JATROPHA MOLLISSIMA-BASED HEMOSTATIC DRESSINGS</p>	<p>O12 - Rosana Nunes dos Santos STUDIES FOR THE DEVELOPMENT OF POLYMERIC BIOABSORBABLE STENT FOR COARCTATION OF THE AORTA - COA</p>
17:00	<p>O13 - Daniel Canales Arevalo BIOLOGICAL EVALUATION OF ELECTROSPUN FIBERS BASED ON POLYACRYLONITRILE/CALCIUM OXIDE NANOCOMPOSITES AS A BIOACTIVE SCAFFOLD FOR BONE TISSUE ENGINEERING</p>	<p>O14 - Milton Flávio de Macedo USE OF BIOMATERIALS IN REGENERATIVE MEDICINE – OUTPATIENT CELLULAR THERAPY – NEW PROTOCOLS AND EQUIPMENT</p>	<p>O15 - Isadora Spadrezano ANTITUMORAL EFFICACY OF GOLD NANOPARTICLES WITH POLYPHENOLS IN BREAST CANCER AND METASTATIC CELLS IN VITRO</p>
17:15	<p>O16 - Diego Eterno de Oliveira Mendonça CHARACTERIZATION OF THE PLA-BIOAISr GLASS COMPOSITE WITH POSSIBLE CANDIDATE FOR BONE AND TENDINOUS REGENERATION APPLICATIONS</p>	<p>O17 - Jean Mendes Nascimento CHILD ROBOTIC REHABILITATION SYSTEM WITH ASSESSMENT OF MUSCLE STRENGTH PROGRESSION</p>	<p>O18 - Santiago Sarasola STIFFNESS AND DIMENSIONAL ACCURACY EXPERIMENTAL VALIDATION OF METALLIC 3D PRINTED LATTICE STRUCTURES</p>
17:30	<p>O19 - Bruno Henrique Costa PRODUCTION OF BIONANOCOMPOSITES OF CARBON AND DIETARY PROTEINS AS A PROMISING DRESSING MODULATOR OF INFLAMMATION IN BONE REPAIR</p>	<p>O20 - Maria A. Lopes HYBRID STRUCTURES FOR ACHILLES' TENDON REPAIR</p>	
17:45 – 18:45	Poster Session I (1 st floor)		

THURSDAY 14 th DECEMBER			
8:30 – 12:30	SESSION 4		
8:30	Plenary Conference 3 Dr. Lorenzo Moroni (MERLN Institute for Technology-Inspired Regenerative Medicine, Maastrich, The Netherlands) <i>Form and function in Tissue regeneration: which role can biofabrication play?</i> (Room Alfonsina) Chair: Dr. Ketul Popat		
9:30	Keynote Conference 1 Dr. Ademar B. Lugão <i>New trends in advanced dressings</i> (Room Alfonsina) Chair: Dr. Carlos R. Grandini	Keynote Conference 2 Dr. Ketul Popat <i>Biomimetic micro/nano-engineering of material surfaces for cardiovascular implants</i> (Room Victoria) Chair: Dr. Silvia Ceré	Keynote Conference 3 Dr. Paulo Picciani <i>Polymer-based nanostructures for tissue engineering</i> (Room Silvina) Chair: Dr. Angela Moraes
10:00 – 10:30	Coffee Break		
10:30	Plenary conference 4 Dr. Diego Mantovani (Université Laval, Québec, Canada) <i>Nanocoatings, degradable metals and in vitro models for the next generation of biomaterials for reparative and regenerative medicine</i> (Room Alfonsina) Chair: Dr. Silvia Ceré		
	Session 4a Tissue Engineering (Room Alfonsina) Chair: Dr. Sara Feldman	Session 4b Biomaterials characterization (Room Victoria) Chair: Dr. Cecilia Amelia de Carvalho Zavaglia	Session 4c Key enabling technologies (Room Silvina) Chair: Dr. Aron José Pazin de Andrade
11:30	O21 - Sergio Martin Saldaña NANOGEL-BASED ADVANCED THERAPEUTIC FOR NOSE-TO-BRAIN DELIVERY TO TACKLE OXIDATIVE STRESS	O22 - Murilo Alison Vigilato Rodrigues ULTRATHIN COLLAGEN AND GELATIN FIBERS: BENIGN SOLVENTS TO PRODUCE POTENTIAL BIOMIMETIC BIOMATERIALS BY SOLUTION BLOW SPINNING	O23 - Antonio Arleques Gomes MICROFLUIDIC CIRCUIT APPLIED TO THE CONCENTRATION OF 18F FOR THE PRODUCTION OF RADIOPHARMACEUTICALS
11:45	O24 - Erika Costa Alvarenga BIOGEL WITH PIEZOELECTRIC NANOPARTICLES AS OSTEOINDUCTIVE BIOMATERIAL	O25 - William Henrique Oliveira de Souza STUDY OF POWDER METALLURGY TECHNIQUE FOR OBTAINING MG-ZN SYSTEM ALLOYS FOR BIOMEDICAL APPLICATIONS	O26 - Eduardo Bock ALGORITHM FOR RECONSTRUCTION OF TIME SIGNALS AND ARTIFICIAL NEURAL NETWORKS FOR TAXONOMY OF THROMBI IN VENTRICULAR ASSIST DEVICES

12:00 – 14:00	Lunch		
14:00 – 17:00	SESSION 5		
14:00	<p>Plenary Conference 5 Dr. Sergio Moya (Soft Matter Nanotechnology Lab, CIC biomaGUNE, San Sebastian, Spain) <i>Biological fate of nanomaterials in nanotoxicity and nanomedicine research</i> (Room Alfonsina). Chair: Dr. Silvestre Bongiovanni Abel</p>		
	<p>Session 5a Tissue Engineering (Room Alfonsina) Chair: Dr. Silvestre Bongiovanni Abel</p>	<p>Session 5b Tissue Engineering / Biomaterials characterization (Room Victoria) Chair: Dr. Alejandra Fanovich</p>	<p>Session 5c Functionalization of Biomaterials (Room Silvina) Chair: Dr. Carlos R. Grandini</p>
15:00	<p>O27 - Merari Tumin Chevalier ELASTIN LIKE HYDROGELS FOR BRAIN REPAIR AFTER ICHEMIC STROKE</p>	<p>O28 - Isabela Louise Pereira Lopes NEW BIOMATERIAL BASED ON DECELLULARIZED EXTRACELLULAR MATRIX FUNCTIONALIZED WITH NANOCHITOSAN TO ELABORATE BIODRESSING</p>	<p>O29 - Paulo Soares SYNERGISTIC EFFECT OF PEO-POLYMER HYBRID COATINGS WITH NANOPARTICLES INCORPORATION FOR IMPROVED TRIBOLOGICAL, BIOACTIVITY, AND BACTERICIDAL PROPERTIES ON TITANIUM IMPLANTS</p>
15:15	<p>O30 - Lais Caroline Souza e Silva USE OF ALGINATE HYDROGEL TO IMPROVE GAIT IN ANIMALS WITH OSTEOARTHRITIS</p>	<p>O31 - Daniel Prada HOMOGENISATION OF TITANIUM SCAFFOLDS USING MICROCT AND FEM</p>	<p>O32 - Hernane Barud BACTERIAL NANOCELLULOSE AS A NEW ALTERNATIVE FOR CELL CULTURE PLATFORM</p>
15:30	<p>O33 - Camila Lourdes Frosasco BIOLOGICAL EVALUATION OF BIODEGRADABLE POLYMER (PLA/B-TCP) IMPLANTS FOR THEIR POTENTIAL APPLICATION IN BONE TISSUE ENGINEERING</p>	<p>O34 - Larissa Sabino dos Santos PRODUCTION OF POLYCAPROLACTONE/CURCUMIN MEMBRANES AND ITS EFFECTIVENESS IN CELLS GROWTH, PH SENSITIVITY AND RELEASE OF CURCUMIN</p>	<p>O35 - Luís Alberto Loureiro dos Santos DEVELOPMENT OF CALCIUM PHOSPHATE CEMENT COATINGS ON Ti6Al4V</p>
15:45	<p>O36 - Octavio Santiago IN VITRO AND IN VIVO COMPATIBILITY OF ELASTIN-LIKE RECOMBINAMER-BASED HYDROGELS</p>	<p>O37 - Viviane do Socorro da Costa EFFECT OF ZINC IN THE PROCESS OF HIGH ENERGY MILLING OF POWDERS TO OBTAIN THE ALLOY OF THE MG-ZN SYSTEM AIMING FOR BIOMEDICAL APPLICATIONS</p>	<p>O38 - Alexis Wolfel A BIOINSPIRED STRATEGY FOR CHEMO- SELECTIVE BIO-FUNCTIONALIZATION OF POLYACRYLAMIDE HYDROGELS WITH CELL-ADHESIVE LIGANDS</p>
16:00 – 16:30	Coffee Break		

	Session 5d Cell-biomaterial interactions (Room Alfonsina) Chair: Dr. Marcus Vinicius Lia Fook	Session 5e Drug release systems (Room Victoria) Chair: Dr. María Rosa Katunar	
16:30	O39 - Rafael Palma CHARACTERIZATION OF PECVD THIN DLC FILMS ON ALUMINUM SUBSTRATE AND CELL ADHESION TEST	O40 - Aryel Heitor Ferreira MUCOADHESIVE DRUG DELIVERY SYSTEM WITH ENHANCED PERMEABILITY CAPACITY FOR INTRAVESICAL THERAPY	
16:45	O41 - Yuki Shirosaki THE EFFECT OF DEGRADATION PRODUCTS FROM CHITOSAN-SILOXANE HYBRID SOLID MEMBRANES ON THE CYTOCOMPATIBILITY	O42 - Henrique Nunes da Silva EVALUATION OF CHITOSAN/N-ACETYL-D-GLUCOSAMINE SUTURE THREADS IN WOUND HEALING IN RAT SKIN (RATTUS NORVEGICUS)	
17:00 – 18:00	Poster Session II (1st floor)		
18:00 – 19:00	SLABO Meeting (Room Alfonsina) hybrid format LINK 1: https://meet.google.com/auc-wvig-ezz LINK 2: https://meet.google.com/pfz-eett-byc		
21:00	Gala Dinner Complejo Mirador del Cabo <u>(Paseo Jesús de Galíndez 207 at the corner of Cabo Corrientes)</u>		

FRIDAY 15 th DECEMBER			
9:00 – 12:30	SESSION 6		
9:00 - 9:30	Keynote Conference 4 Dr. Ana Paula Rosifini Alves <i>Biomaterials: sustainability and challenges</i> (Room Alfonsina) Chair: Dr. Rossana Thiré	Keynote Conference 5 Dr. Angela Moraes <i>Teaming up polysaccharide-based biomaterials and stem cells: joining attributes for enhanced lesion repair and tissue construction</i> (Room Victoria) Chair: Dr. Guadalupe Rivero	Keynote Conference 6 Dr. Sara Feldman <i>Recombinant proteins for bone regeneration</i> (Room Silvina) Chair: Dr. José Luis Álvarez
	Session 6a Additive manufacturing (Room Alfonsina) Chair: Dr. Pablo Caracciolo	Session 6b Tissue Engineering (Room Victoria) Chair: Dr. Josefina Ballarre	Session 6c Modeling and simulations / Tissue & organ models (Room Silvina) Chair: Dr. Florencia Montini
9:45	O43 - Clara Soubelet RHEOLOGICAL AND CURING PROPERTIES OPTIMIZATION ZrO ₂ /BIOACTIVE GLASS NANOCOMPOSITE PHOTOCURABLE SLURRIES	O44 - Júlia Bünecker Cassel HIGH STRENGTH INJECTABLE PRE-MIXED SILK FIBROIN/A-TRICALCIUM PHOSPHATE BONE CEMENT	O45 - Guilherme Barbosa Lopes Jr COMPUTATIONAL HEMODYNAMICS ON AN AXIAL BLOOD PUMP FLOW
10:00	O46 - Conrado Ramos Moreira Afonso IN-SITU ALLOYING THROUGH SELECTIVE LASER MELTING OF B Ti-15Nb ATOMIZED PURE POWDERS FOR IMPLANT APPLICATIONS	O47 - Rossana Thiré POTENTIAL IODOPHOR-BASED WOUND DRESSINGS VIA SOLUTION BLOW SPINNING	O48 - Luis Eduardo Javier Amato ESTIMACIÓN DE LA FRACCIÓN SÓLIDA DEL HUESO TRABECULAR MEDIANTE ENSAYOS ULTRASONICOS DE TRANSMISIÓN
10:15	O49 - Giovanna do Espiritu Santo MANUFACTURE OF 3D BIOSILICA SCAFFOLDS FOR BONE TISSUE REPAIR: PHYSICAL-CHEMICAL EVALUATION	O50 - Cecília Zavaglia ROTARY JET SPINNING – A VERSATILE TECHNIQUE: SCAFFOLDS OF PCL WITH BIOCERAMICS OR PHYTOTHERAPICS FOR TISSUE ENGINEERING	O51 - Patrícia Lima Falcão ACTIVATION OF STAT-3 SIGNALLING BY UPREGULATION OF IL-6 AS POTENTIAL TARGET FOR DECREASING CLONOGENESIS OF RADIORESISTANT MDAMB-23
10:30	O52 - Ângela Maria Moraes ASSESSMENT OF IN VITRO CYTOTOXICITY OF DIFFERENT HYDROGEL FORMULATIONS AND CROSSLINKING SOLUTIONS AIMING AT 3D BIOPRINTING APPLICATIONS	O53 - Rachel Faverzani Magnago POLYCAPROLACTONE TRIOL-BASED POLYURETHANE FILM EMBEDDED WITH CITRUS OILY: ANTIBACTERIAL AND UV-BLOCKER PROPERTIES	O54 - Guilherme Barbosa Lopes Jr LARGE EDDY SIMULATION APPLIED TO REACH CRITICAL ZONES IN A CENTRIFUGAL BLOOD PUMP SIMULATION
10:45	O55 - Alexis Wolfel HIGH RESOLUTION VOLUMETRIC BIOPRINTING OF LARGE ENGINEERED TISSUES	O56 - Wellington Luís CHITOSAN FILMS RETICULATED WITH LACTIC ACID AND FUNCTIONALIZED WITH NANO CHITOSAN, AS A PROMISING BIOMATERIAL FOR BIODRESSINGS	

11:00	O57 - Flavia Pedrini UNLOCKING THE POTENTIAL OF POLY(L-CO-D,L-LACTIC ACID-CO-TRIMETHYLENE CARBONATE) FOR EXTRUSION-BASED 3D PRINTING	O58 – Marcelo Sá ASSESSMENT OF PURE-PHASE B – TRICALCIUM PHOSPHATE (β – TCP) CYLINDRICAL CERAMIC IMPLANT OSSEOINTEGRATION USED IN CRITICAL SEGMENTAL BONE DEFECTS OF THE RADIUS OF RABBITS	
11:15 – 11:35	Coffee Break		
11:40 – 12:40	Round Table: “What new challenges is tissue engineering facing?” Coordinator: Dr. Sara Feldman Expositors: Dr. Angela Moraes, Dr. Paulo Picciani, Dr. Alicia Lorenti, Dr. Joaquim Vives (Room Alfonsina)		
12:40 – 14:30	Lunch		
14:30 – 15:30	SESSION 7		
	Session 7a Additive manufacturing (Room Alfonsina) Chair: Dr. Luis Alberto Loureiro dos Santos	Session 7b Tissue Engineering (Room Victoria) Chair: Dr. Maria Rosa Katunar	Session 7c Tissue Engineering / Drug release systems (Room Silvina) Chair: Dr. Guadalupe Rivero
14:30	O59 - Eduardo Bock WIRE ARC ADDITIVE MANUFACTURING USING CONTROLLED SHORT CIRCUIT	O60 - Pablo Antezana LOADING OF CANNABIS SATIVA OIL EXTRACT ON HYDROGELS AND 3D PRINTED SCAFFOLDS FOR WOUND HEALING	O61 - Paulo Rosa APPLICATION OF SUPERCritical TECHNOLOGY IN THE PRODUCTION OF PLA FOAMS AND CETOPROFEN IMPREGNATION FOR CONTROLLED DRUG RELEASE
14:45	O62 - Bruna Nunes Teixeira CELL INTERACTIONS WITH 3D PRINTING PLA/STRONTIUM-SUBSTITUTED HYDROXYAPATITE SCAFFOLDS FOR BONE TISSUE ENGINEERING APPLICATIONS	O63 - Viviana Moreno-Serna BIOACTIVE HYBRID SCAFFOLDS OF POLYCAPROLACTONE/KEFIRÁN CONTAINING CAO NANOPARTICLES OBTAINED FROM EGGHELLS FOR BONE TISSUE ENGINEERING	O64 - Helton José Wiggers CHITOSAN-BASED ANTIBACTERIAL FILMS FOR BIOMEDICAL APPLICATION

15:00	O65 - Marcelo Garrido dos Santos PRODUCTION AND CHARACTERIZATION OF A BIOINK CONTAINING DECELLULARIZED SPINAL CORD TISSUE AND AN ELECTRICAL CONDUCTIVE POLYMER FOR 3D BIOPRINTING	O66 - Claudia Larissa Viana da Silva INFLUENCE OF HUMAN TYPE I COLLAGEN ON THE PERFORMANCE OF ANIMAL-FREE BIOINKS FOR 3D BIOPRINTING: A COMPARATIVE STUDY	O67 - Cecilia Zorzi Bueno CHITOSAN FILMS LOADED WITH DIFFERENT ANTIBIOTIC-POLYMER NANOPARTICLES
15:15		O68 - Bibiana Madeira Melo BIOMIMETIC STICKER GELATIN-BASED HYDROGEL FUNCTIONALIZED BY PHENOLIC COMPOUNDS	O-69 - Rodrigo Vieira BACTERIAL CELLULOSE/ALGINATE SCAFFOLDS FUNCTIONALYZED WITH VITREOUS HUMOR AND EXTRACELLULAR VESICLES FOR WOUND HEALING

15:30	<p align="center">Plenary Conference 6 (confirmation pending) Dr. Alejandro Sosnik (Technion-Israel Institute of Technology, Israel) <i>"Sonodynamic therapy of cancer: Challenges and Opportunities"</i> (Room Alfonsina). Chair: Dr. Gustavo Abraham</p>		
16:30 – 17:00	<p align="center">Closing Ceremony</p> <p align="center">Young Investigator Poster Award Springer</p> <p align="center">"MARCOS PINOTTI BARBOSA" Best Student Research Award</p> <p align="center">(Room Alfonsina)</p>		