

Wednesday, May 8th 2024

KEYNOTE LECTURE 5		
NATURAL AND SUSTAINABLE POLYMERS OF BACTERIAL ORIGIN FOR NERVE TISSUE ENGINEERING		
<i>Ipsita Roy (Sheffield, UK)</i>		
Chair: Federica Fregnan		
14.15 - 14.45		
14.45 – 16.15	Session 5 BIOMATERIALS Chairs: Yuki Shiroasaki & Ilaria Tonazzini	EVALUATING SPIDER SILK FIBERS FOR PERIPHERAL NERVE REGENERATION USING A MULTICELLULAR MODEL <i>Sarah Stadlmayr (Vienna, Austria)</i>
		FIRST CLINICAL APPLICATION OF SPIDER SILK FOR REPAIR OF PERIPHERAL NERVE DEFECTS <i>Peter Vogt (Hannover, Germany)</i>
		INTERACTION OF GRAPHENE AND WS2 WITH NEURAL CELLS, NEUTROPHILS AND MESENCHYMAL STEM CELLS: IMPLICATIONS FOR PERIPHERAL NERVE REGENERATION <i>Domenica Convertino (Pisa, Italy)</i>
		ADVANCEMENTS IN SYNTHETIC NERVE CONDUITS FOR ENHANCED PERIPHERAL NERVE REGENERATION <i>Flavia Millesi (Vienna, Austria)</i>
		IMPROVING SCHWANN CELL WOUND HEALING AND AXONAL GUIDANCE WITH SOFT MICROSTRUCTURED GLYCEROL-BLENDED CHITOSAN MEMBRANES <i>Luca Scaccini (Pisa, Italy)</i>
		FOREIGN BODY RESPONSE HAMPERS TISSUE INTEGRATION OF A POLYCAPROLACTONE NANOFIBRE-CONTAINING SCAFFOLD FOR PERIPHERAL NERVE REPAIR <i>Pascal Achenbach (Aachen, Germany)</i>
		A PARTIALLY OXIDIZED POLYVINYL ALCOHOL CONDUIT ENHANCED BY MULTIWALLED CARBON NANOTUBES FOR PERIPHERAL NERVE REGENERATION <i>Elena Stocco (Padova, Italy)</i>
		16.15 - 16.45
16.45 - 17.50	Session 6 BIOLOGICAL CONDUITS Chairs: Victor Carriel & Alessandro Crosio	BIOLOGICAL TUBULIZATION WITH MUSCLE VEIN COMBINED GRAFT - ACTUAL INDICATIONS AND SURGICAL TECHNIQUES <i>Alice Clemente (Milano, Italy)</i>
		THE ROLE OF MUSCULAR FIBRES IN THE EARLY STAGE OF NERVE REGENERATION WITHIN A MUSCLE-IN-VEIN GRAFT <i>Federica Zen (Torino, Italy)</i>
		VALIDATION OF A CLEANROOM COMPLIANT SONICATION-BASED DECELLULARIZATION TECHNIQUE: A NEW CONCEPT IN ACELLULAR NERVE ALLOGRAFT PRODUCTION <i>Federico Bolognesi (Milano & Bologna, Italy)</i>
		COMPARATIVE IN VIVO STUDY OF DIFFERENT NERVE-REPAIR STRATEGIES IN THE TREATMENT OF 15-MM NERVE DEFECTS IN RATS <i>Oscar García-García (Granada, Spain)</i>
		REPAIR OF A RAT MEDIAN NERVE INJURY USING A NOVEL DECELLULARIZED PORCINE NERVE GRAFT: A PRELIMINARY IN VIVO STUDY <i>Luisa Muratori (Torino, Italy)</i>
17.50 - 18.30	Session 7 NEUROMUSCULAR SYSTEM Chairs: Michela Rigoni & Kirsten Haastert-Talini	USING THE NEUROMUSCULAR JUNCTION CELLULAR RESPONSE TO PREDICT FUNCTIONAL RECOVERY AFTER NERVE GRAFTING IN A MICE EXPERIMENTAL MODEL <i>Johnny Chuieng-Yi Lu (Taoyuan, Taiwan)</i>
		INVESTIGATING THE REGENERATION COMPETENCE OF PERIPHERAL MOTOR NEURONS IN ALS <i>Samuele Negro (Padova, Italy)</i>
		GUT MICROBIOTA IMPACTS ON NEWBORN AND ADULT NEUROMUSCULAR SYSTEM <i>Sonia Calabrò (Padova, Italy)</i>

Thursday, May 9th 2024

8.30 – 8.50	KEYNOTE LECTURE 6 NERVE GRAFTS VERSUS PERIPHERAL NERVE FIBRE TRANSFER- A CHANGE OF PARADIGM? <i>Robert Schmidhammer (Vienna, Austria)</i> Chair: Bruno Battiston	
8.50 - 9.40	Session 8 – Part I NERVE INJURY AND REPAIR - SHORT AND LONG GAPS - WHERE WE ARE Chairs: Jean-Noel Goubier & Kirsten Haastert-Talini	ACUTE RECONSTRUCTION OF THE TRAUMATIC NERVE GAP: INDICATIONS FOR NERVE ALLOGRAFT <i>Safa Bauback (San Francisco, CA, USA)</i>
		A MULTICENTER PROSPECTIVE RANDOMIZED COMPARISON OF CONDUITS VERSUS PROCESSED ACELLULAR NERVE ALLOGRAFT FOR DIGITAL NERVE REPAIRS <i>Isaacs Jonathan (Richmond, VA, USA)</i>
		FASCICULAR SHIFT- A NOVEL CONCEPT TO OVERCOME LARGE NERVE DEFECTS <i>Oskar Aszmann (Vienna, Austria)</i>
		NERVE GAP RECONSTRUCTION <i>Daniel Kalbermatten (Geneva, Switzerland)</i>
		RECONSTRUCTION OF DIGITAL NERVE DEFECTS WITH MUSCLE-IN-VEIN CONDUITS <i>Ines Ederer (Tuebingen & Frankfurt, Germany)</i>
		TARGETED NERVE REGENERATION FOR NAC SENSORY RESTORATION IN GENDER AFFIRMING CHEST MASCULINIZATION VIA THE USE OF NERVE ALLOGRAFT: LONG TERM SENSORY OUTCOMES <i>Keith Jonathan (Newark, NJ, USA)</i>
9.40 - 9.50	BREAK	
9.50 – 10.50	Session 8 – Part II NERVE INJURY AND REPAIR - SHORT AND LONG GAPS - WHERE WE ARE Chairs: Stefania Raimondo & Lars Dahlin	EXTREMITY RESTORATION AFTER PERIPHERAL NERVE LESION: NERVE GRAFTING, NEUROTIZATIONS AND FUNCTIONAL MUSCLE TRANSFER <i>Christine Radtke (Vienna, Austria)</i>
		IN SITU PREVASCULARIZATION STRATEGY WITH THREE-DIMENSIONAL POROUS CONDUITS FOR NEURAL TISSUE ENGINEERING <i>Shen Junjie (Shanghai & Hainan, China)</i>
		THE IMPACT OF EXERCISE ON MOTOR RECOVERY AFTER LONG NERVE GRAFTING-EXPERIMENTAL RAT STUDY <i>Olivier Camuzard (Taipei, Taiwan & Nice, France)</i>
		LONG-TERM FOLLOW-UP AFTER DIGITAL NERVE RECONSTRUCTION WITH HYBRID MICRO- AND NANOSTRUCTURED SILK FIBROIN NERVE CONDUIT SILKBRIDGE® <i>Maurizio Calcagni (Zurich, Switzerland)</i>
		REPAIR OF NERVE DEFECTS. AN UPTODATE <i>Daniel Camporro (Oviedo, Spain)</i>
		PRE-CLINICAL MODELS OF BRACHIAL PLEXUS INJURY <i>Diogo Casal (Lisbon, Portugal)</i>
		STRATEGIES IN PERINEURAL SCARS REDUCTION: OUR APPROACH AND LITERATURE REVIEW <i>Pierfrancesco Pugliese (Palermo, Italy)</i>
10.50 - 11.20	COFFEE BREAK	
11.20 - 11.50	KEYNOTE LECTURE 7 REGENERATIVE NEURAL INTERFACES FOR BIONICS AND BIOELECTRONIC MEDICINE <i>Silvestro Micera (Pisa, Italy & Lausanne, Switzerland)</i> Chair: Giovanna Gambarotta	
11.50 - 13.00	Session 9 PAIN MANAGEMENT IN PERIPHERAL NERVE	THE ROLE OF THE BIOMATERIALS IN THE SURGICAL MANAGEMENT OF PAIN <i>Ivica Ducic (McLean, VA, USA)</i>
		TARGETED MUSCLE REINNERVATION (TMR): PAST, PRESENT, AND FUTURE <i>Jason Ko (Chicago, IL, USA)</i>

	Chairs: Ivica Ducic, Letizia Marvaldi & Joaquim Casanas	PERSISTING NEUROPATHIC PAIN FOLLOWING TMR: TECHNIQUE FAILURE, CONSTRAINTS OR CONCEPT DRAWBACKS? <i>Olga Politikou (Zurich, Switzerland)</i>
		NEUROPATHIC PAIN MANAGEMENT <i>Joaquim Casanas (Barcelona, Spain)</i>
		TARGETED MUSCLE REINNERVATION- EVOLUTION AND EXPERIENCE <i>Chim Harvey (Gainesville, FL, USA)</i>
		SURGICAL TREATMENTS FOR POSTAMPUTATION PAIN: PROTOCOL FOR AN INTERNATIONAL, MULTICENTER, RANDOMIZED CONTROLLED TRIAL <i>Emily Pettersen (Möln dal, Sweden)</i>
		IMPORTIN ALPHA3 CONTROLS AGE-DEPENDENT AXONAL BRANCHING BY MODULATING RIBOSOMAL PROTEIN EXPRESSION <i>Sofia Dotta (Torino, Italy)</i>
		FACTORS THAT INFLUENCE THE SEVERITY OF SYMPTOMATIC NEUROMA <i>Erick DeVinney (Alachua, FL, USA)</i>
13.00 - 13.30	AWARDS AND CLOSING REMARKS ISPNR2024	