



ISEM 2018
Debrecen

14th Congress of the
International Society for
Experimental Microsurgery

23-25 August, 2018 | Debrecen, Hungary

Preliminary programme

www.isem2018.org

General Information

Main Patrons

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Zoltán Szilvássy, MD, PhD, DSc, Rector of the University of Debrecen

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Sun Lee Awardees 2018

István Furka, MD, PhD, DSc (Hungary) and **Mihai Ionac**, MD, PhD (Romania)

Invited Lectures

Robert M. Hoffman, MD, PhD (USA)

Keynote Speakers

Yelena Akelina, DVM, PhD (USA), **Michael Axelsson**, PhD (Sweden), **Francesco Boccardo**, MD, PhD (Italy), **Corradino Campisi**, MD, PhD (Italy), **Corrado C. Campisi**, MD (Italy), **Antonio Di Cataldo**, MD, PhD (Italy), **Huifang Chen**, MD, PhD (Canada), **Alexandru Georgescu**, MD, PhD (Romania), **Eiji Kobayashi**, MD, PhD (Japan), **Wei Li**, MD, PhD (China), **Edna F.S. Montero**, MD, PhD (Brazil), **György Nádasy**, MD, PhD, DSc (Hungary), **Alexandru Nistor**, MD (Romania), **László Novák**, MD, PhD (Hungary), **Mihai Oltean**, MD, PhD (Sweden), **Stefano Puleo**, MD, PhD (Italy), **René H. Tolba**, MD, PhD (Germany), **Shinji Uemoto**, MD, PhD (Japan), **Hao Wang**, MD, PhD (China), **Shintaro Yagi**, MD, PhD (Japan), **Zheng Jenny Zhang**, MD, PhD (USA)

Main Topics

- Transplantation models: new techniques and innovations
- Transplantation immunology
- Microsurgical education
- Advanced microsurgery tools, robotic microsurgery
- Translational research and microsurgery
- Stem cell and tissue/organ fabrication
- Lymphatic microsurgery
- Reconstructive microsurgery
- Microsurgical models in oncological research
- Microsurgery in zoo-biological and veterinary research

Time Table

Time	23 August	24 August		25 August		
	Thursday	Room A	Room A	Room B	Room A	Room B
08:00		SESSION I "Transplantation models, transplantation immunology"			SESSION IX "Lymphatic microsurgery"	SESSION X "Speeding Symposium"
09:00						
09:20						SESSION XI "Microsurgery in zoo-biological research"
10:00		COFFEE BREAK		COFFEE BREAK		
10:15		SESSION II "Microsurgical techniques and models 1"	SESSION III "Microsurgical Education 1"		SESSION XII "Clinical microsurgery 1"	
10:30						
11:00						
11:15		Lunch time ISEM Board Meeting			SESSION XIII "Clinical microsurgery 2"	
12:00						
12:15						
12:30		REGISTRATION	SESSION IV "Microsurgical techniques and models 2"	SESSION V "Microsurgical Education 2"	OPTIONAL POST-CONGRESS TOUR TO TOKAJ OR EGER	
13:00						
14:30			COFFEE BREAK			
14:40			SESSION VI "Mitaka Symposium"			
14:50			SESSION VII "Translational research"	SESSION VIII "Ischemia-reperfusion in microsurgery"		
15:30						
16:50			ISEM GENERAL ASSEMBLY			
17:00	OPENING CEREMONY					
17:30	SUN LEE AWARD SESSION					
18:00						
18:30	PLENARY SESSION					
19:00		GALA DINNER AT TUBA TANYA Buses leave at 19:00				
19:30	WELCOME RECEPTION					

Preliminary Programme

Thursday | 23 August, 2018

17:00 – 17:30 OPENING CEREMONY

17:30 – 18:30 THE SUN LEE AWARD SESSION

TRIBUTE TO THE MEMORY OF PROFESSOR SUN LEE

FURKA I.

Department of Operative Techniques and Surgical Research, Institute of Surgery, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

THE MICROSURGERY TRAINING PROGRAM AT PIUS BRANZEU CENTER IN TIMISOARA, ROMANIA. A 20 YEARS JOURNEY

IONAC M.

Department of Microsurgery, Pius Branzeu Center for Flap Surgery and Microsurgery, Victor Babes University of Medicine and Pharmacy, Timisoara, Romania

18:30 – 19:00 PLENARY SESSION OF INVITED LECTURERS

PATIENT-DERIVED ORTHOTOPIC XENOGRAFTS: BETTER MIMIC OF METASTASIS THAN SUBCUTANEOUS XENOGRAFTS

HOFFMAN R. M.^{1,2}

¹AntiCancer Inc., USA

²Department of Surgery, University of California San Diego, USA

19:30 – 22:00 WELCOME RECEPTION

Friday | 24 August, 2018 | Room A

08:00 – 10:00 SESSION I: TRANSPLANTATION MODELS, TRANSPLANTATION IMMUNOLOGY

Chairmen: MIHAI OLTEAN (SWEDEN), HAO WANG (CHINA),

BALÁZS NEMES (HUNGARY)

08:00 – 08:20 Keynote Speaker:

NONHUMAN PRIMATES IN PRECLINICAL STUDIES

CHEN H.

University of Montreal, Montreal, Canada

08:20 – 08:35 EFFECT OF ASP2409 MONO AND COMBINATION THERAPY IN THE PROLONGATION OF MONKEY RENAL ALLOGRAFT SURVIVAL

SONG L.¹, MA A.¹, DUN H.¹, HU Y.¹, YASUTOMO F.², KINUGASA F.², OSHIMA S.², HIGASHI Y.², DALOZE P.¹, CHEN H.¹

¹University of Montreal, Montreal, Canada

²Astellas Pharma Inc., Tokyo, Japan

- 08:35 – 08:50** **Keynote Speaker:**
MODELING DELAYED GRAFT FUNCTION IN KIDNEY TRANSPLANTATION IN MICE
 QIU L. H., WANG J. J., YEAP X. Y., ABECASSIS M., ZHANG Z. J.
 Comprehensive Transplant Center, Northwestern University, Feinberg School of Medicine, Chicago, IL, USA
- 08:50 – 09:10** **Keynote Speaker: MICROSURGERY TRANSPLANTATION MODELS IN THE RAT: LIVER AND SMALL BOWEL TRANSPLANTATION. FROM EDUCATION TO TRANSLATION**
 TOLBA R.H.
 Institute for Laboratory Animal Science and Experimental Surgery, RWTH Aachen, University, Aachen, Germany
- 09:10 – 09:30** **Keynote Speaker:**
LIVER BUD TRANSPLANTATION IN RATS
 KOBAYASHI E.
 Keio University School of Medicine, Tokyo, Japan
- 09:30 – 09:40** **LIVER GRAFT PRESERVATION USING PERFLUOROCARBON WITH OXYGENATION IMPROVES THE OUTCOMES OF SIMULATED DONATION AFTER CARDIAC DEATH LIVER TRANSPLANTATION IN RATS**
 OKUMURA S.¹, YAGI S.¹, UEMURA T.¹, MASANO Y.¹, IIDA T.¹, KAIDO T.¹, KOBAYASHI E.², UEMOTO S.¹
¹Division of Hepato-Biliary-Pancreatic Surgery and Transplantation, Kyoto University, Kyoto, Japan
²Keio University, Tokyo, Japan
- 09:40 – 09:50** **MELATONIN PROMOTES SMALL-FOR-SIZE LIVER GRAFT REGENERATION BY INFILTRATING MONOCYTES RELEASED INTERLEUKIN-6**
 SONG Z., TIAN Y., HUMAR B., GUPTA A., MAURIZIO E., GRAF R., CLAVIEN P-A.
 Department of Visceral and Transplantation Surgery, University Hospital of Zürich, Zürich, Switzerland
- 09:50 – 10:00** **THE MORPHOLOGIC AND MOLECULAR PATTERN OF MUCOSAL REPAIR AFTER INTESTINAL TRANSPLANTATION IN THE RAT**
 PADMA A., MAGNUSSON A., HELLSTRÖM M., OLTEAN M.
 The Laboratory for Transplantation and Regenerative Medicine, Sahlgrenska Academy at the University of Gothenburg, Gothenburg, Sweden
- 10:00-10:30** **Coffee break**
- 10:30 – 12:00** **SESSION II: MICROSURGICAL TECHNIQUES AND MODELS 1**
 Chairmen: EIJI KOBAYASHI (JAPAN), HUIFANG CHEN (CANADA)
- 10:30 – 10:50** **Keynote Speaker:**
MICROSURGICAL PREPARATION OF INTRAMURAL CORONARY RESISTANCE ARTERIES FROM THE RAT AND MICE
 NÁDASY GY., SZEKERES M., SOERHEIM A., ROSHOLT V.
 Physiology Department, Semmelweis University, Budapest, Hungary

10:50 – 11:00

ANIMAL MODEL OF HUMAN LEG VARICOSITY PRODUCED BY MICROSURGERY: INCOMPETENT PERFORANTES AND TRIBUTARIES, RETICULAR AND SPIDER VEINS

PATAI B. B.¹, DÖRNYEI G.², MONOS E.³, NÁDASY GY.¹

¹Department of Physiology, Semmelweis University, Budapest, Hungary

²Department of Morphology and Physiology, Health Education Faculty, Semmelweis University, Budapest, Hungary

³Department of Clinical Experimental Research, Medical Faculty, Budapest, Hungary

11:00 – 11:10

CONTINUOUS VERSUS INTERRUPTED SUTURE TECHNIQUE IN MICROVENOUS ANASTOMOSIS: EXPERIMENTAL STUDY

GRANHEN H. D.^{1,2}, SILVA, D. F.^{2,3}, CARNEIRO F. R.^{2,4}, TEIXEIRA R. K. C.^{2,3}, FEIJÓ D. H.^{2,3}, VALENTE A. L.^{2,3}, CARVALHO L. T. F.^{2,5}, BARROS R. S. M.^{2,3}, REIS J. M. C.^{2,1}

¹Faculdade Metropolitana da Amazônia (FAMAZ), Belém, Brazil

²Laboratório de Cirurgia Experimental da Universidade Estadual do Pará (LCE-UEPA), Belém, Brazil

³Universidade Estadual do Pará (UEPA), Belém, Brazil

⁴Centro Universitário do Pará (CESUPA), Belém, Brazil

⁵Universidade Federal do Pará (UFPA), Belém, Brazil

11:10 – 11:20

EXAMINING SHEAR-STRENGTH OF MICRO-VASCULAR ANASTOMOSES PERFORMED BY DIFFERENT SUTURING TECHNIQUES

SZABÓ B.¹, FAZEKAS L.¹, GHANEM S.¹, GODÓ Z. A.², MADAR J.², APRÓ A.², NÉMETH N.¹

¹Department of Operative Techniques and Surgical Research, Institute of Surgery, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

²Department of Information Technology, Faculty of Informatics, University of Debrecen, Debrecen, Hungary

11:20 – 11:30

PRELIMINARY STUDY ON INFERIOR SUPERFICIAL EPIGASTRIC VEIN LOOP INTERPOSITIONING INTO THE FEMORAL ARTERY IN THE RAT

SZABÓ B., TÁNCZOS B., GHANEM S., NÉMETH N.

Department of Operative Techniques and Surgical Research, Institute of Surgery, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

11:30 – 11:40

EVALUATION OF MICROCIRCULATION AND MICRO-RHEOLOGICAL PARAMETERS IN THE PRESENCE OF CAROTID-JUGULAR FISTULA IN THE RAT

GHANEM S., TÁNCZOS B., SOMOGYI V., DEÁK Á., NÉMETH N.

Department of Operative Techniques and Surgical Research, Institute of Surgery, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

11:40 – 11:50

FOLLOWING-UP HEMORHEOLOGICAL, HEMATOLOGICAL AND METABOLIC STATUS IN A 5/6 NEPHRECTOMY MODEL IN THE RAT

GHANEM S.¹, FAZEKAS L.¹, SZABÓ B.¹, TÁNCZOS B.¹, SOMOGYI V.¹, BARÁTH B.¹, DEÁK Á.¹, BIDIGA L.², NÉMETH N.¹

¹Department of Operative Techniques and Surgical Research, Institute of Surgery, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

²Department of Pathology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

11:50 – 12:00

COMPUTATIONAL FLUID DYNAMICS ASSESSMENT OF AORTIC ANEURYSM MODEL IN RAT

VARGA P., GEDEI A., MAROTI P., NYITRAI M., RUSZICS D., GASZ B.

University of Pécs, Pécs, Hungary

12:00 – 13:00 Lunch break
ISEM Board Meeting

(The Board Members will be informed about the venue)

13:00 – 14:40 SESSION IV: MICROSURGICAL TECHNIQUES AND MODELS 2

Chairmen: EDNA MONTERO (BRAZIL), JENNY Z. ZHANG (USA)

13:00 – 13:10 ANATOMICAL DESCRIPTION AND VARIATIONS OF BRAQUIAL PLEXUS IN WISTAR RATS

BARROS R. S. M.^{1,2}, CARNEIRO F. R.^{1,3}, GRANHEN H. D.^{1,4}, SILVA D. F.^{1,2}, MORIYA F. V.¹, SILVA G. R. S.¹, TEIXEIRA R. K. C.^{1,2}, VALENTE A. L.^{1,2}

¹Laboratório de Cirurgia Experimental - UEPA, Belém, Brazil

²Universidade do Estado do Pará - UEPA, Belém, Brazil

³Centro Universitário do Estado do Pará - CESUPA, Belém, Brazil

⁴Faculdade Metropolitana da Amazônia - FAMAZ, Belém, Brazil

13:10 – 13:20 COMPARATIVE EXPERIMENTAL STUDY OF PERIPHERAL NEURAL RECONSTRUCTION WITH BIOLOGICAL AND SYNTHETIC NEUROTUBE

BARROS R. S. M.^{1,2}, SILVA, D. F.^{1,2}, CARNEIRO F. R.^{1,3}, GRANHEN H. D.^{1,4}, VALENTE A. L.^{1,2}, HABER FEIJÓ D.^{1,2}, TEIXEIRA R. K. C.^{1,2}, SOMENSI D. N.¹, REIS J. M. C.¹

¹Laboratório de Cirurgia Experimental da Universidade do Estado do Pará (LCE-UEPA), Belém, Brazil

²Universidade do Estado do Pará, Belém, Brazil

³Centro Universitário do Pará, Belém, Brazil

⁴Faculdade Metropolitana da Amazônia, Belém, Brazil

13:20 – 13:30 RAT ALPPS: INSIGHTS INTO THE OPERATIVE PROCEDURE
TIHANYI D. K., BUDAI A., FÜLÖP A., KOVÁCS T., KECZER B., SZIJÁRTÓ A.
1st Department of Surgery, Semmelweis University, Budapest, Hungary

13:30 – 13:40 PEDICLED TEMPOROPARIETAL FASCIAL FLAP FOR TRACHEAL RECONSTRUCTION ON RAT ANIMAL MODEL – FEASIBILITY STUDY
WALCZAK D.¹, MIGACZ E.², CICHÓN T.³, BULA D.¹, KUKWA W.², MACIEJEWSKI A.¹, KRAKOWYCZK Ł.¹

¹Department of Oncological and Reconstructive Surgery, Maria Skłodowska-Curie Memorial Cancer Centre and Institute of Oncology, Gliwice, Poland

²Department of Otorhinolaryngology, Medical University of Warsaw, Warsaw, Poland

³Center for Translational Research and Molecular Biology of Cancer, Maria Skłodowska-Curie Memorial Cancer Center and Institute of Oncology, Gliwice, Poland

13:40 – 13:50 PREGNANCY IS A RISK FACTOR FOR CORNEAL STROMAL HAZE AFTER LASER REFRACTIVE SURGERY IN RABBITS

CSUTAK A.¹, SILVER D.², TÓZSÉR, J.³, HASSAN Z.⁴, BERTA A.¹

¹Department of Ophthalmology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

²Retired from Applied Physics Laboratory, Johns Hopkins University, Maryland, USA

³Department of Biochemistry and Molecular Biology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

⁴Orbident Ltd, Debrecen, Hungary

- 13:50 – 14:00** **INVESTIGATION OF BODY COMPOSITION AND IMMUNOLOGICAL STATUS IN SARCOPENIA RATS**
IWAMURA S., KAIDO T., YAGI S., MIYACHI Y., YOH S., SHIRAI H., OKUMURA S., UEMOTO S.
Department of Surgery, Graduate School of Medicine, Kyoto University, Kyoto Prefecture, Japan
- 14:00 – 14:10** **PARTIAL FREEZING: WHOLE LIVER PRESERVATION INSPIRED BY NATURE**
PENDEXTER C.^{1,2}, CRONIN S.^{1,2}, DEVRIES R.^{1,2,3}, OZER S.^{1,2}, BANIK P.^{1,2}, NAGPAL S.^{1,2}, TESSIER S.^{1,2}, UYGUN K.^{1,2}, TONER M.^{1,2}
¹Massachusetts General Hospital Department of Surgery, Boston, USA
²Harvard Medical School Center for Engineering in Medicine, Boston, USA
³Academic Medical Center Department of Surgery, Amsterdam, Netherlands
- 14:10 – 14:20** **RAPID PROTOTYPING USING ADDITIVE MANUFACTURING APPLIED IN MICROSURGERY: A 3D-PRINTED RETRACTOR FOR OPEN SURGERY ON RATS**
BERKEN J., HOINOIU B., IONAC M., NISTOR A.
Department of Microsurgery, Pius Branzu Center for Flap Surgery and Microsurgery, Victor Babes University of Medicine and Pharmacy, Timisoara, Romania
- 14:20 – 14:30** **SMARTPHONE-OPERATED NEAR-INFRARED THERMAL IMAGING AS MONITORING AND SURVIVAL PREDICTION TOOL IN PERFORATOR FLAPS. AN EXPERIMENTAL MODEL ON PIGS**
SCHMIDT J., HOINOIU B., IONAC M., NISTOR A.
Department of Microsurgery, Pius Branzu Center for Flap Surgery and Microsurgery, Victor Babes University of Medicine and Pharmacy, Timisoara, Romania
- 14:30 – 14:40** **TRANSIT TIME ULTRASOUND FLOW MEASUREMENT AS INTRAOPERATIVE DECISIONAL TOOL FOR FLAP REVISION AND MONITORING IN SUB-MILLIMETER FLAP VESSELS. AN EXPERIMENTAL MODEL IN RATS.**
MEIBERT P.¹, NISTOR H. A.², HOINOIU B.², IONAC M.², NISTOR A.²
¹General, Visceral and Transplant Surgery Department, Köln, Germany
²Department of Microsurgery, Pius Branzu Center for Flap Surgery and Microsurgery, Victor Babes University of Medicine and Pharmacy, Timisoara, Romania
- 14:40 – 14:50** **Coffee break**
- 14:50 – 15:30** **SESSION VI: MITAKA SYMPOSIUM**
Chairmen: SHINJI UEMOTO (JAPAN)
- 14:50 – 15:00** **INTRODUCTION: A NEW WIND FOR MICROSURGERY – 3D VIDEO MICROSCOPE**
KOBAYASHI E.
Keio University School of Medicine, Tokyo, Japan
- 15:00 – 15:10** **ROBOT-ASSISTED SURGERY: A NEW WIND FOR MICROSURGERY**
KOBAYASHI E.
Keio University School of Medicine, Tokyo, Japan
- 15:10 – 15:25** **MICRO- AND MACRO- BORDERLESS HBPT SURGERY USING NOVEL 3D-4K VIDEO SYSTEM**
YAGI S.¹, UEMOTO S.¹, KOBAYASHI E.²
¹Kyoto University, Kyoto, Japan
²Keio University, Tokyo, Japan

15:25 – 15:30 TOOLS AND EQUIPMENTS

NAKAMURA K.
Mitaka Ltd., Japan

15:30 – 16:50 SESSION VII: TRANSLATIONAL RESEARCH

Chairmen: ROBERT HOFFMAN (USA), RENÉ H. TOLBA (GERMANY)

15:30 – 15:50

Keynote Speaker:

MIND THE GAPS! FROM DISCOVERY TO BIOMEDICAL INNOVATION AND CLINICAL TRANSLATION

OLTEAN M.

Sahlgrenska Academy at the University of Gothenburg, Gothenburg, Sweden

15:50 – 16:10

Keynote Speaker

THE ROLE OF ENDOMETRIAL REGENERATIVE CELLS IN TRANSLATIONAL MEDICINE

WANG H.^{1,2}

¹Department of General Surgery, Tianjin Medical University General Hospital,

²Tianjin General Surgery Institute, Tianjin, China

16:10 – 16:30

Keynote Speaker:

PATIENT-DERIVED-HCC TUMOR MODEL IN MICE

LI W.

China-Japan Union Hospital of Jilin University, Changchun, China

16:30 – 16:50

Keynote Speaker:

TRANSLATIONAL RESEARCH IN HEPATIC FIBROSIS AND LIVER REGENERATION

PULEO S., PESCE A.

Department of Medical and Surgical Sciences and Advanced Technologies "G.F. Ingrassia", University of Catania, Catania, Italy

17:00 – 18:00 GENERAL ASSEMBLY OF THE ISEM

Friday | 24 August, 2018 | Room B

10:30-12:00 SESSION III: MICROSURGICAL EDUCATION 1 (EDUCATIONAL PROGRAMS)

Chairmen: MIHAI IONAC (ROMANIA), IRÉN MIKÓ (HUNGARY), ANDREA SZABÓ (HUNGARY)

10:30 – 10:45

Keynote Speaker:

PRESENT CONSIDERATIONS ABOUT THE ROLE OF MICROSURGERY IN GENERAL SURGERY

DI CATALDO A.

University of Catania, Italy, Catania, Italy

10:45 – 11:00

Keynote Speaker:

STUDYING DIFFERENT CLINICALLY RELEVANT MICROSURGICAL PROBLEMS AS MY STUDENT'S RESEARCH

AKELINA Y., LEVI M., HARB A.

Columbia University, New York, USA

11:00 – 11:10

OBJECTIVE EVALUATION OF MICROSURGERY SKILLS AT THE SCANDINAVIAN MICROSURGERY ACADEMY - CAN THIS LEAD TO BETTER MICROSURGEONS?

AXELSSON M.^{1,6}, HELLSTRÖM M.^{2,6}, SASSU P.^{3,6}, AXELSSON P.^{3,6}, EWALDSSON L.^{5,6}, NILSSON A. G.^{3,6}, OLTEAN M.^{2,4,6}

¹Department of Biological and Environmental Sciences, University of Gothenburg, Gothenburg, Sweden

²The Laboratory for Transplantation and Regenerative Medicine, Sahlgrenska Academy at the University of Gothenburg, Gothenburg, Sweden

³Plastic and Hand Surgery Department, Sahlgrenska University Hospital, Gothenburg, Sweden

⁴The Transplant Institute, Sahlgrenska University Hospital, Gothenburg, Sweden

⁵Experimental Biomedicine Department, University of Gothenburg, Gothenburg, Sweden

⁶Scandinavian Microsurgery Academy, University of Gothenburg, Gothenburg, Sweden

11:10 – 11:20

NATIONAL PROJECT OF THE HANDS-ON SEMINAR FOR MICROSURGICAL TRAINING FOR YOUNG SURGEON CONDUCTED BY ISEM JAPAN

GABATA R.¹, YAGI S.², TAKAMURA H.¹, UEMOTO S.², KOBAYASHI E.³, OHTA T.¹

¹Kanazawa University, Department of Gastroenterological Surgery, Kanazawa, Ishikawa, Japan

²Kyoto University, Department of Hepatobiliary Pancreas and Transplant Surgery, Kyoto, Japan

³Keio University School of Medicine, Department of Organ Fabrication, Tokyo, Japan

11:20 – 11:30

MICROSURGICAL TRAINING PROGRAMS BETWEEN 2013-2018 AT THE DEPARTMENT OF OPERATIVE TECHNIQUES AND SURGICAL RESEARCH, FACULTY OF MEDICINE, UNIVERSITY OF DEBRECEN NÉMETH N., MIKÓ I., FURKA I.

Department of Operative Techniques and Surgical Research, Institute of Surgery, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

11:30 – 11:40

MICROSURGICAL EDUCATION FOR RESIDENCY ON THE SEMMELWEIS UNIVERSITY

FERENCZ A., SZABÓ GY., FEHÉR D., JUHOS K., CSUKÁS D., SÁNDOR J., WÉBER GY.

Department of Surgical Research and Techniques, Faculty of Medicine, Semmelweis University, Budapest, Hungary

11:40 – 11:50

OPHTHALMOLOGICAL MICROSURGERY-RELATED HANDS-ON TRAINING FOR MEDICAL STUDENTS

CSUTAK A., UJHELYI B.

Department of Ophthalmology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

11:50 – 12:00

HANDS-ON TRAINING OF MICROSURGERY FOR VETERINARY STUDENTS IN JAPAN

SATO M., ENDO K., ISHII H., KOBAYASHI E.

Keio University School of Medicine, Tokyo, Japan

12:00 – 13:00 Lunch break

13:00 – 14:40 SESSION V: MICROSURGICAL EDUCATION 2 (TRAINING MODELS)

Chairmen: YELENA AKELINA (USA), MICHAEL AXELSSON (SWEDEN),
ANDREA FERENCZ (HUNGARY)

- 13:00 – 13:20 Keynote Speaker:
MICROSURGICAL EDUCATION IN THE 21ST CENTURY - QUO VADIS?**
NISTOR A.
Department of Microsurgery, Pius Branzeu Center for Flap Surgery and Microsurgery,
Victor Babes University of Medicine and Pharmacy, Timisoara, Romania
- 13:10 – 13:20 ERGONOMICS AND FEASIBILITY OF SMARTPHONE-ASSISTED
VERSUS OPERATIVE MICROSCOPE MAGNIFICATION IN
MICROSURGICAL TRAINING. AN EXPERIMENTAL STUDY**
SCHMIDT J, OHNTRUPP J. N., BERKEN J, HOINOIU B., IONAC M., NISTOR A.
Department of Microsurgery, Pius Branzeu Center for Flap Surgery and Microsurgery,
Victor Babes University of Medicine and Pharmacy, Timisoara, Romania
- 13:20 – 13:30 OBJECTIVE ASSESSMENT OF MICROSURGICAL SKILL ACQUISITION
USING SOFTWARE-ASSISTED SCORING SYSTEM AND TRANSIT
TIME ULTRASOUND FLOW MEASUREMENT**
TOMA C., OHNTRUPP J. N., BERKEN J., TEICU B., AL-BARRI L., HOINOIU B.,
IONAC M., NISTOR A.
Department of Microsurgery, Pius Branzeu Center for Flap Surgery and Microsurgery,
Victor Babes University of Medicine and Pharmacy, Timisoara, Romania
- 13:30 – 13:40 DO-IT-YOURSELF HOME TRAINING TOOL FOR IMPROVEMENT OF
MICROSURGICAL SKILL ACQUISITION**
MAN T., IONAC M., NISTOR A.
Department of Microsurgery, Pius Branzeu Center for Flap Surgery and Microsurgery,
Victor Babes University of Medicine and Pharmacy, Timisoara, Romania
- 13:40 – 13:50 LOW DOSE PROPRANOLOL SIGNIFICANTLY DECREASES SURGICAL
HAND TREMOR IN MICROSURGERY – A RANDOMISED, DOUBLE-
BLINDED, PLACEBO-CONTROLLED EXPERIMENTAL STUDY**
CIURA A.¹, IONAC A.², IONAC M.¹, NISTOR A.¹
¹Department of Microsurgery, Pius Branzeu Center for Flap Surgery and Microsurgery,
Victor Babes University of Medicine and Pharmacy, Timisoara, Romania
²Department of Cardiology, Victor Babes University of Medicine and Pharmacy,
Timisoara, Romania
- 13:50 – 14:00 INNERVATED MUSCULOCUTANEOUS LATISSIMUS DORSI FREE
FLAP PHALLOPLASTY TRANSPOSITION MODEL IN PIGS.
AN AFFORDABLE LEARNING TOOL FOR GENITO-URINARY
RECONSTRUCTIVE SURGEONS**
KOJOVIC V.¹, NISTOR H. A.², PIEKNY R.², HOINOIU B.², IONAC M.², NISTOR A.²
¹Department of Urology, Institute for Mother and Child Health Care, University of
Belgrade, Belgrade, Serbia
²Department of Microsurgery, Pius Branzeu Center for Flap Surgery and Microsurgery,
Victor Babes University of Medicine and Pharmacy, Timisoara, Romania
- 14:00 – 14:10 ANTEROLATERAL THIGH FLAP IN A CHICKEN MODEL: A NOVEL
PERFORATOR TRAINING MODEL**
COSTA A. L.¹, CUCINOTTA F.², FAZIO A.¹, DELIA G.¹, GALEANO M.¹,
D'ALCONTRES F. S.¹, BATTISTON B.³, TOS P.⁴, GEORGESCU A.⁵,
COLONNA M. R.¹
¹Department of Human Pathology of the Adult, the Child and the Adolescent, University
of Messina, Messina, Italy

² Department of Engineering, University of Messina, Messina, Italy

³ Azienda Ospedaliero-Universitaria Citta della Salute e della Scienza di Torino, Department of Traumatology, Turin, Italy

⁴ Hand Surgery and Reconstructive Microsurgery Unit, ASST G Pini-CTO, Milano, Italy

⁵ Department of Plastic Surgery, Rehabilitation Hospital, Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania

14:10 – 14:20

DETAILED SIMULATION-BASED METHOD FOR IMPROVING SKILLS IN MICROSURGICAL EDUCATION

GASZ B.^{1,2}, VARGA P.^{1,2}, BARABÁS I.^{2,3}, MARÓTI P.², GEDEI A.¹, JANCÓS G.¹

¹ Department of Surgical Research and Techniques, Pécs, Hungary

² 3D Centre, University of Pécs, Pécs, Hungary

³ Heart and Vascular Centre, Semmelweis University, Budapest, Hungary

14:20 – 14:30

LEARN MICROSURGERY ON CADAVERS - A NEW WAY FOR RESIDENTS

JANCÓS M.¹, TAMÁS R.¹, NEMESKÉRI Á.², FEKETE A.¹, KATZ S.², DEÁK B.¹, SZUÁK A.²

¹ Medical Centre, Hungarian Defence Forces (MH EK Honvédkórház), Budapest, Hungary

² Department of Anatomy, Histology and Embryology, Semmelweis University, Faculty of Medicine, Budapest, Hungary

14:40 – 14:50 Coffee break

15:30 – 16:50 SESSION VIII: ISCHEMIA-REPERFUSION IN MICROSURGERY

Chairmen: EDNA MONTERO (BRAZIL), FRANCESCO BOCCARDO (ITALY), NORBERT NÉMETH (HUNGARY)

15:30 – 15:50

Keynote Speaker:

N-ACETYL CYSTEINE ON IMMUNE RESPONSE OF FETAL INTESTINAL TRANSPLANTATION

MONTERO E. F.

Faculdade de Medicina da Universidade de São Paulo - LIM-62, São Paulo, Brazil

15:50 – 16:00

N-ACETYL CYSTEINE ON THE INFLAMMATORY RESPONSE AND BACTERIAL TRANSLOCATION IN A MODEL OF INTESTINAL OBSTRUCTION AND ISCHEMIA IN RATS

COSTA R. I. D. D.^{1,2}, RASSLAN R.², KOIKE M. K.³, JACYSYN J. F.², UTIYAMA E. M.², MONTERO E. F.²

¹ Universidade Federal de São Carlos, São Carlos, Brazil

² Faculdade de Medicina da Universidade de São Paulo - LIM-62, São Paulo, Brazil

³ Faculdade de Medicina da Universidade de São Paulo - LIM-51, São Paulo, Brazil

16:00 – 16:10

N-ACETYL CYSTEINE ON INFLAMMATION, OXIDATIVE STRESS, AND CELL DEATH IN MICE WITH STEATOHEPATITIS SUBMITTED TO HEPATIC ISCHEMIA AND REPERFUSION

FERREIRA N. C.¹, MONTERO E. F.¹, KOIKE M. K.², JACYSYN, J. F.¹, DINIZ J. A. I.³

¹ Faculdade de Medicina da Universidade de São Paulo - LIM-62, São Paulo, Brazil

² Faculdade de Medicina da Universidade de São Paulo - LIM-51, São Paulo, Brazil

³ Instituto Evandro Chagas - Laboratory of Electron Microscopy, Belém, Brazil

16:10 – 16:20

EFFECTS OF GIT-27NO, A NO DONATING COMPOUND, ON HEPATIC ISCHEMIA/REPERFUSION INJURY

LANTERI R.¹, MANGANO K.², BASILE M. S.², LATINO R.¹, FAGONE P.², CALTABIANO R.¹, DI CATALDO A.¹

¹Department of Surgical Sciences, Organ Transplantation and Advanced Technologies, University of Catania, Catania, Italy

²Department of Biomedical and Biotechnological Sciences, University of Catania, Catania, Italy

16:20 – 16:30

PHARMACOLOGICAL STIMULATION OF THE NO/SGC/CGMP PATHWAY REDUCES ISCHEMIA-REPERFUSION INJURY AND IMPROVES DONOR ORGAN FUNCTION IN A RAT MODEL OF HETEROTOPIC HEART TRANSPLANTATION

BENKE K., NÉMETH B. T., SAYOUR A. A., STARK K., SZABOLCS Z., HARTYÁNSZKY I., MERKELY B., RADOVITS T.

Heart and Vascular Center, Semmelweis University, Budapest, Hungary

16:30 – 16:40

BENEFICIAL EFFECTS OF REMOTE ORGAN ISCHEMIC PRECONDITIONING ON MICRO-RHEOLOGICAL PARAMETERS AND MICROCIRCULATION IN PARTIAL LIVER ISCHEMIA-REPERFUSION IN THE RAT

MAGYAR ZS.¹, MESTER A.¹, NADUBINSZKY G.¹, VARGA G.¹, GHANEM S.¹, SOMOGYI V.¹, TÁNCZOS B.¹, DEÁK Á.¹, BIDIGA L.², OLTEAN M.³, PETŐ K.¹, NÉMETH N.¹

¹Department of Operative Techniques and Surgical Research, Institute of Surgery, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

²Department of Pathology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

³The Transplantation Institute, Sahlgrenska University Hospital, Gothenburg, Sweden

16:40 – 16:50

EARLY OR DELAYED REMOTE ORGAN ISCHEMIC PRECONDITIONING IS THE BETTER REGARDING TO MICROCIRCULATORY AND MICRO-RHEOLOGICAL ALTERATIONS IN RENAL ISCHEMIA-REPERFUSION OF RATS?

VARGA G.¹, NAGY K.¹, PÁL N.¹, NADUBINSZKY G.¹, SZABÓ B.¹, TÁNCZOS B.¹, SOMOGYI V.¹, DEÁK Á.¹, BIDIGA L.², PETŐ K.¹, NÉMETH N.¹

¹Department of Operative Techniques and Surgical Research, Institute of Surgery, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

²Department of Pathology, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

Saturday | 25 August, 2018 | Room A

09:00 – 10:00 SESSION IX: LYMPHATIC MICROSURGERY

Chairmen: HAO WANG (CHINA), YINGHUA TIAN (SWITZERLAND)

09:00 – 09:20

Keynote Speaker:

SEQUENTIAL SELECTIVE FIBRO-LIPO-LYMPH-ASPIRATION BY LYMPH VESSEL SPARING PROCEDURE (FLLA-LVSP) FOR THE EFFECTIVE TREATMENT OF ADVANCED STAGES OF PERIPHERAL LYMPHEDEMA

CAMPISI C. C.

Plastic Surgery University School of Catania, Italy Consultant of Plastic, Reconstructive and Aesthetic Surgery GVM Care&Research, Genoa, Italy

09:20 – 09:40

Keynote Speaker:

SINGLE-SITE MULTIPLE LYMPHATIC VENOUS ANASTOMOSIS (SS-MLVA) FOR THE STAGING-GUIDED PERIPHERAL LYMPHEDEMA TREATMENT AND BEST LONG-TERM CLINICAL OUTCOME

CAMPISI C.

Operative Unit of Lymphatic Surgery Department of Surgery, DISC "Ospedale Policlinico San Martino" University School, Genoa, Italy

09:40 – 10:00

Keynote Speaker:

PRIMARY AND EARLY SECONDARY PREVENTION OF LYMPHEDEMA FOLLOWING AXILLARY AND GROIN LYMPH NODE DISSECTION

BOCCARDO F.¹, DESSALVI S.¹, VILLA G.², DE CIAN F.³, FRIEDMAN D.⁴, VALENZANO M.⁵, CASABONA F.⁵, CAMPISI C.C.⁶, CAMPISI C.¹

¹Unit of Lymphatic Surgery, University Hospital San Martino, Genoa, Italy

²Unit of Nuclear Medicine, University Hospital San Martino, Genoa, Italy

³Unit of Surgical Oncology, University Hospital San Martino, Genoa, Italy

⁴Breast Unit, University Hospital San Martino, Genoa, Italy

⁵Unit of Gynecology, University Hospital San Martino, Genoa, Italy

⁶Plastic Surgery, Genoa, Italy

10:00 – 10:15 **Coffee break**

10:15 – 11:15 **SESSION XII: CLINICAL MICROSURGERY 1**

Chairmen: HEINZ-JOCHEN GASSEL (GERMANY),

ALEXANDRU NISTOR (ROMANIA), RÓBERT TAMÁS (HUNGARY)

10:15 – 10:35

Keynote Speaker:

PERFORATOR FLAPS: EXPERIMENTAL AND CLINICAL CONSIDERATIONS

GEORGESCU A. V.

University of Medicine Iuliu Hatieganu, Cluj Napoca, Romania

10:35 – 10:45

CAN WE USE A FREE OSTEOCUTAN FIBULA FLAP AS A (CHIMERA) FLAP?

FÜZES A.

National Institute of Oncology, Multidisciplinary Centre of Head and Neck Oncology, Budapest, Hungary

10:45 – 10:55

THE EXPERIENCE AND PITFALLS OF FREE FLAP SURGERY IN HEAD AND NECK RECONSTRUCTION FROM A PERSPECTIVE OF A YOUNG PLASTIC SURGICAL RESIDENT

KLÁRIK Z.

Multidisciplinary Centre of Head and Neck Oncology, National Institute of Oncology, Budapest, Hungary

10:55 – 11:05

TOTAL UPPER AND LOWER LIP RECONSTRUCTION WITH A COMBINATION OF FREE FLAP AND STATIC SUSPENSION

KLÁRIK Z., KOLTAI L.

Multidisciplinary Centre of Head and Neck Oncology, National Institute of Oncology, Budapest, Hungary

11:05 – 11:15

RECONSTRUCTED TISSUES FOR FEMALE FERTILITY TREATMENTS
HELLSTRÖM M.¹, TIEMANN T. T.², PADMA A. M.¹, SONG M. J.³, BRÄNNSTRÖM M.¹

¹Laboratory for Transplantation and Regenerative Medicine, Inst. of Clinical Science, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

²Department of Obstetrics and Gynecology, University Hospital Heidelberg, Heidelberg, Germany

³Division of Gynecologic Oncology, Dept. of Obstetrics and Gynecology, Daejeon St. Mary's Hospital, The Catholic University of Korea, Seoul, Korea

11:15 – 12:15 SESSION XIII: CLINICAL MICROSURGERY 2

Chairmen: STEFANO PULEO (ITALY), WEI LI (CHINA), SHINTARO YAGI (JAPAN)

11:15 – 11:35 Keynote Speaker: MICROSURGICAL APPROACH TO THE SKULL BASE TUMORS

NOVÁK L., BOGNÁR L.

Department of Neurosurgery, Faculty of Medicine, University of Debrecen, Debrecen, Hungary

11:35 – 11:55 Keynote Speaker: CLINICAL MICROSURGERY FOR HEPATOBILIARY SURGERY AND LIVER TRANSPLANTATION IN KYOTO UNIVERSITY

UEMOTO S.

Kyoto University, Kyoto, Japan

11:55 – 12:05 EVALUATION OF KCNMA1 AS A BIOMARKER AND THERAPEUTIC TARGET IN COLORECTAL CANCER

PESCE A.¹, FAGONE P.², PULEO S.¹

¹Department of Medical and Surgical Sciences and Advanced Technologies "G.F. Ingrassia", University of Catania, Catania, Italy

²Department of Biomedical and Biotechnological Sciences, University of Catania, Catania, Italy

12:05 – 12:15 EFFECTS OF MODULATION OF THE NRF2/HO-1/CO PATHWAY IN FIBROSIS AND HEPATIC REGENERATION

PESCE A.¹, MANGANO K.², FAGONE P.², PULEO S.¹

¹Department of Medical and Surgical Sciences and Advanced Technologies "G.F. Ingrassia", University of Catania, Catania, Italy

²Department of Biomedical and Biotechnological Sciences, University of Catania, Catania, Italy

12:15-12:30 Closing Ceremony, Announcement of the ISEM 2020 Congress

Saturday | 25 August, 2018 | **Room B**

09:00 – 9:20 SESSION X: SPEEDING SYMPOSIUM

Chairmen: KATALIN PETŐ (HUNGARY)

09:00 – 09:20 HIGH-FIDELITY SIMULATORS (AR/VR) IN GRADUATE AND POSTGRADUATE MEDICAL EDUCATION

VADÁSZI Z.

Speeding Ltd., Budapest, Hungary

09:20 – 10:00 SESSION XI: MICROSURGERY IN ZOO-BIOLOGICAL RESEARCH

Chairmen: MICHAEL AXELSSON (SWEDEN), ÁDÁM DEÁK (HUNGARY)

09:20 – 09:40

Keynote Speaker:

MICROSURGERY FROM A COMPARATIVE BIOLOGY PERSPECTIVE

AXELSSON M.^{1,2}

¹Department of Biological and Environmental Sciences, University of Gothenburg, Gothenburg, Sweden

²Scandinavian Microsurgery Academy, University of Gothenburg, Gothenburg, Sweden

09:40 – 09:50

**THE ROLE OF THE VETERINARY SURGEON IN CREATING
MICROSURGICAL ANIMAL MODELS OF DISEASE FOR
TRANSLATIONAL RESEARCH**

PHILLIPS H.

University of Illinois College of Veterinary Medicine, Urbana, Illinois, USA

09:50 – 10:00

**VALIDATION OF A MODEL OF FELINE URETERAL OBSTRUCTION
AS A TOOL FOR TEACHING MICROSURGERY TO VETERINARY
SURGEONS**

PHILLIPS H.

University of Illinois College of Veterinary Medicine, Urbana, Illinois, USA

10:00 – 10:15 Coffee break



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