



Happy Holidays

Message from the President



Dr Mihai Oltean
ISEM president

Dear colleagues and friends,

Another year is coming to an end, and hopefully the new year 2022 will bring us closer to the normal life. The increasing international travel and the resumption of hands-on courses and “in person” meetings are all promising signs of recovery, but the pandemic seems far from over. In spite of the many current challenges, our Society has had a very active year and reached several important milestones, as shown in this issue of Scope. The two webinars held in the early spring and the successful 15th ISEM Congress held as an online event on September 10, 2021 signal the continuous collective commitment of ISEM members not only to pull the society through these challenging times but to also to develop and revive it.

This year also marks the first “general elections” for all the eligible positions in ISEM. Although the concept of electing the leadership is common to most professional and scientific societies, it has been customary that the members of the ISEM executive board were appointed by the most senior members rather than elected. In my opinion, allowing all the members to have an equal voice in matters pertaining the Society, promoting inclusion and showing transparency are essential to recruiting and retaining members and ensuring a pool of members from which the future leaders will be selected. Unfortunately, the “lack of election traditions” in ISEM resulted both in few nominations and a relatively low turnout at a first tentative election held in August 2021. Some members also complained about not being able to vote due to outstanding membership fees - that otherwise could have been paid on site during the Congress. As such, on October 4th the ISEM Board has decided to repeat the elections and offer more members the opportunity to participate after paying the 2021 yearly fee, regardless of earlier outstanding yearly fees. Please take this opportunity to make YOUR voice heard and decide the future of ISEM. I am thoroughly convinced that these elections are by far the most significant event in the life of ISEM since the passing of our Founding President Dr. Sun Lee.

Thank you all for your efforts of keeping ISEM active and thriving!



The 15th ISEM Congress Report

The 15th ISEM congress took place online on Sep 10, 2021. Even if this event could not provide the usual friendly face-to-face atmosphere that characteristically is associated with our meetings, our most recent event became very successful. The big time differences between attendees across the globe, from the Americas to the far east of Asia, was overcome by positive attitude and the willingness to sacrifice sleep and family time to listen to the recent scientific advancements made among members of our society.



Dr. Mats Hellström, The congress secretary

The keynote speaker, Professor **Paulo Martins**, a clinically active transplant surgeon in the USA delivered a fantastic talk with the title: “Designer Organs” for Transplantation: Ex-situ graft genetic manipulation. This was followed by 23 high quality oral presentations coming authors from 17 different countries. The talks were delivered in five different sessions: Clinical microsurgery, Basic Science, Microsurgical Training and Education, Ischemia-Reperfusion Injury, and New Experimental Concepts. Although the talks were prerecorded, the presenters were also available online to answer any questions from moderators or the online attendees. This arrangement allowed for an interactive meeting while meticulously keeping the schedule and keeping the audience spread across 15 time zones actively engaged.

Indeed, our congress also included this year’s awardees for the honorable recognition of extraordinary achievements and commitments to microsurgery:

The 2021 Sun Lee award went to Professors **Zheng Jenny Zhang** (USA) and **Mihai Olteanu** (Sweden) for their valuable, long time contributions to experimental microsurgery and the development of ISEM.

The 2021 Gelin Award was presented to Professor **Gabriel Gondolessi** (Argentina) for his pioneering contributions to clinical and experimental...*next page*



Participants at a virtual session of the 15th ISEM Congress

*Cont'd from p2...*transplantation in South America and distinguished mentorship in transplantation research.

The 2021 Robert Zhong Award went to Dr. **Alberto Ballestin** (Spain) for his excellent abstract “Extracellular vesicles from adipose-derived mesenchymal stem cells enhance flap survival in an ischemia-reperfusion injury free skin flap preclinical model”.

The ISEM scientific committee also awarded the following young presenters with the Best Abstract Award certificate: **Ryo Ataka, MD (Japan)**, **Jasmine Bagge, MD (Sweden)**, **Mathias Clarysse, MD (Belgium)**, **Masaaki Hirata, MD (Japan)**, **Zhi Yang Ng, MBChB, MRCS (UK)**, **Edina Sehic, MSc (Sweden)** and **Hengcheng Zhang, MD (USA)**.

All in all, about 80 participants attended the congress, and on behalf of the organizing committee that consisted of Mihai Oltean (Congress President), Yelena Akelina (Congress Chair), and myself (Congress Secretary), I thank you all for turning this into a successful event.

I look forward to see you at the 16th ISEM Congress in Genoa, Italy in 2023!



Collaboration between the International Society for Experimental Microsurgery (ISEM) and Karger Publishers Journal “European Surgical Research”



As of May 2021, Karger Publisher journal “European Surgical Research” edited by Prof. Brigitte Vollmer, University of Rostock, Germany and Prof. Frank Dor, Imperial College London, UK has become the official journal of the society. The collaboration will greatly benefit both parties in increasing their reach to the scientific community. The journal will provide a platform for research and publishing to members of the society and beyond. European Surgical Research has

been serving scientific research since 50 years with high quality articles that are peer reviewed against the highest scientific publishing standards. European Surgical Research is dedicated to preclinical, clinical, clinical experimental, and translational research in surgery. It features surgery, surgical pathophysiology, evidence-based medicine, and novel surgical techniques. European Surgical Research accepts papers concerning all surgical specialties that apply to its scope. The journal is a valuable resource for all interested in pathophysiological concepts and new techniques, for those interested in introducing these concepts and techniques into clinical practice, and for those evaluating critical decisions in the use of new procedures or drugs.

2021 Robert Zhong Award

Dr. Alberto Ballestín

Devoted to preclinical microsurgery research and surgical education, Dr. Ballestín (DVM, MSc, PhD) is a postdoctoral researcher trained in Spain, Hungary, France and USA.

From 2012 to 2020 he worked at the Microsurgery Unit of the CCMIJU (Cáceres, Spain). In 2015, he completed a pre-doctoral stay at the Microsurgery Laboratory at New York-Presbyterian Hospital, Columbia University (New York, USA). In 2018, he defended the international doctoral thesis "Free tissue transfer in reconstructive microsurgery: use of stem cell therapy to modulate ischemia-reperfusion injury in skin flaps" obtaining the Extraordinary Doctorate Prize with the highest score awarded by the University (100/100). With the desire to learn more about cell and molecular biology, since January 2021 he works at the Tumor Microenvironment Laboratory of the Institut Curie (Orsay - Paris, France), where he studies the underlying molecular mechanisms of chemo and radioresistance, as well as tumor spread and recurrence after microsurgical resection of glioblastoma.



The Robert Zhong Award for outstanding young researchers was established in 2007 at the Executive Committee Meeting the Board of the Society. In 2008 and in 2010 the Award's prize was donated by Prof. Iren Miko, Prof. Istvan Furka, Dr. Norbert Nemeth and Dr. Endre Brath of Hungary. From 2012 the ISEM and the Congress Organizers donates the Award.

New Members

- ◆ **Edina Sehic, Ph.D. candidate:** Institute of Clinical Sciences, Sahlgrenska academy, Gothenburg University, Sweden
- ◆ **Gonzalo Pablo Aljaro Lapolla, DVM:** Nephrourological Microsurgeon Center for Veterinary Medical Specialties VERONA, Chile
- ◆ **Jasmine Bagge, M.D. Ph.D. candidate:** Sahlgrenska University Hospital, Gothenburg University, Gothenburg, Sweden
- ◆ **Alberto Ballestín, DVM, MSc, Ph.D:** Tumor Microenvironment Laboratory, Institut Curie, Orsay - Paris, France



Welcome on Board!

Info for member benefits at www.myisem.org

"Start-up of rat liver transplantation model using microsurgery at Kanazawa University for PhD students"



Shintaro Yagi, MD. PhD.

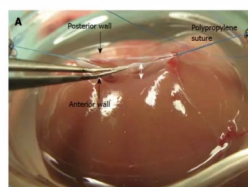
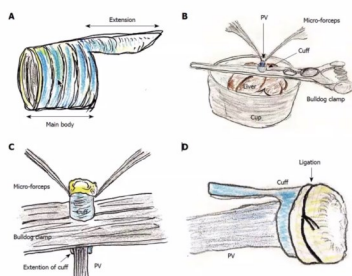
Professor and Chairman, Department of Hepato-Biliary-Pancreatic Surgery and Transplantation, Kanazawa University, Japan



It has been almost a year since I started my position at Kanazawa University from Kyoto University. At Kanazawa University, I am trying to set up a rat liver transplantation model with **Dr. Gabata** (ISEM member) to promote research on liver regeneration and immunology after transplantation. We invited **Dr. Hirata**, a colleague of Kyoto University who is working on a rat liver transplantation to investigate the impact of mTORi on liver regeneration, to Kanazawa as a lecturer and asked him to pass on his techniques to PhD students.

The first step is to give a web-lecture (Figure 1) on the techniques, have the students watch a full video of the techniques, demonstrate the donor and recipient techniques in the laboratory using a microscope, and then have the students perform the actual transplant surgery the next day (Figure 2). I hope to establish a stable liver transplant model soon and start this experiment. Using the stepwise approach that we have advocated at Kyoto University, as reported by Dr. Hirata at this year's ISEM congress, we would like to foster young researchers at Kanazawa University and disseminate our research results to the world. I also "hope this technique could be applied to the clinical skills such as microsurgical hepatic artery reconstruction in living-donor liver transplantation. We are very looking forward to submitting papers regarding rat transplantation and seeing all of you on ISEM congress in Genova.

Fig 1. Web-lecture on the techniques



Hori T, World J Gastroenterol, 2010



Fig 2. Students perform the transplant surgery under supervision

