

30th Congress of the International Society for Mechanical Circulatory Support



Reunion for clinicians
and engineers



Joint International Congress 2024 in Utsunomiya

13th November – 15th November, 2024

LIGHT CUBE UTSUNOMIYA in Utsunomiya, Tochigi, Japan.



 ISMCS 2024

On behalf of the local organizing committee, I am delighted to invite you to the 30th Annual Meeting and Scientific Sessions of the International Society for Mechanical Circulatory Support (ISMCS). The conference will take place from November 13th to November 15th at LIGHT CUBE UTSUNOMIYA in Utsunomiya, Tochigi, Japan. The *ISMCS2024* will be held in person, and we are trying three new things in the program. The first is that we have two sessions for cardiologists including session with the Japanese Heart Failure Society (Topics 5) and session for AMI SHOCK (ECLS trial/ DanGer trial) (Topics 8). The second is a joint session with the VAD coordinators (Topics 4). We will discuss self-management of VADs that will reduce the burden on caregivers. The third is regarding the rapid spread of VAD treatment in Asian countries. In particular, in China, four VADs made in China are used. We will also organize an exhibition and a wet lab for devices where you can meet the distinguished experts and new devices. Moreover, we will discuss intra-atrial VAD for HFpEF (Topics 2) and First-in-Human experience of BiVACOR TAH (Topics 3).

Utsunomiya is located at north of Tokyo and it takes 50 min by bullet train (Shinkansen) from Tokyo and famous for its beautiful scenery in autumn especially in Nikko area such as Toshogu shrine (magnificent memorial for Tokugawa-shogunate, UNESCO World Heritage) (please see the beautiful Nikko: [Movies | Visit Tochigi \(visit-tochigi.com\)](https://visit-tochigi.com)). The venue will also offer local foods such as gyoza (pan fried dumplings), ramen, and strawberry. Please visit our website for registration and submission of your abstract (<https://kinki-convention.jp/ismcs30/index.html>).

I look forward to meeting you in Utsunomiya, Japan.

Sincerely,

Koichi Toda
Conference President

PRELIMINARY PROGRAM GRID

| 11/12 (Tuesday) | | 11/13 (Wednesday) | |
|-----------------|---|-------------------|---|
| 7:00 | | 7:00 | |
| 8:00 | | 8:00 | Young Investigators Pre-symposium |
| 9:00 | | 9:00 | Opening Ceremony |
| 10:00 | Executive Board meeting | 10:00 | Helmut Reul Young Investigator Award |
| 11:00 | | 11:00 | Topics 1: Impella for high risk surgery |
| 12:00 | | 12:00 | |
| 13:00 | The 2 nd International Heart Hackathon Competition | 13:00 | Lunch Symposium 1 sponsored by ABIOMED |
| 14:00 | ICCAC-MCS Bootcamp | 14:00 | Topics 2: What is new? From laboratory and company |
| 15:00 | General Board meeting | 15:00 | |
| 16:00 | | 16:00 | Topics 3: Right ventricular failure (two implantable VAD, TAH, or Fontan?) |
| 17:00 | | 17:00 | |
| 18:00 | | 18:00 | Topics 4: Self-Care in Patients with MCS : ISMCS-ICCAC joint symposium (VAD coordinator session) |
| 19:00 | | 19:00 | |
| 20:00 | | 20:00 | Welcome reception Table tennis tournament / Karaoke tournament |
| 21:00 | | 21:00 | |

11/14 (Thursday)

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|-------|--|
| 7:00 | |
| 8:00 | General session (Mini Orals) |
| 9:00 | Topics 5: ISMCS - Japanese Heart Failure Society (JHFS) joint symposium |
| 10:00 | Topics 6: Towards forgettable device: Battery/Driveline/Remote monitoring/Artificial Intelligence |
| 11:00 | Lunch Symposium 2 sponsored by CH-Biomedical (CH-VAD/BRIOVAD) |
| 12:00 | |
| 13:00 | Topics 7: Booming VAD therapy in Asian countries |
| 14:00 | General session (Mini Orals) |
| 15:00 | Topics 8: Management of AMI shock in 2024: Role of temporary MCS (ECLS shock trial and DanGer shock trial) |
| 16:00 | General Assembly |
| 17:00 | Gala dinner (at Utsunomiya Tobu-Hotel) |
| 18:00 | |
| 19:00 | |
| 20:00 | |
| 21:00 | |

11/15 (Friday)

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| 7:00 | |
| 8:00 | Topics 9: ISMCS-JSAO joint symposium : How to design new pumps (digital twins, virtual fitting, In silico testing…) |
| 9:00 | |
| 10:00 | Topics 10: Cardiac recovery after MCS (medication, biological therapies, etc) |
| 11:00 | Topics 11: Simulation and Modelling |
| 12:00 | Lunch Symposium 3 sponsored by Abbott and NIPRO |
| 13:00 | |
| 14:00 | Topics 12: Complicated VAD surgery (pump exchange, valve surgery/TAVI, etc) |
| 15:00 | General session (Mini Orals) |
| 16:00 | Topics 13: VAD for small patients/small heart/ congenital disease |
| 17:00 | Closing Ceremony |
| 18:00 | Buffet party with JSAO |
| 19:00 | |
| 20:00 | |
| 21:00 | |



ISMCS 2024

**International Society for Mechanical Circulatory Support
Scientific Congress**

Utsunomiya, Japan

November 13 – 15, 2024

Reunion for clinicians and engineers



Tuesday November 12, 2024 (Day 0)

10:00 – 17:00 (Room 103)

The 2nd International Heart Hackathon Competition

Heart Hackathon is the world's first total artificial heart design competition by students, aiming to nurture and inspire the next generation in cardiovascular innovation. (Please visit: [HeartHackathon](#))

13:00 – 17:00 (Room 104)

ICCAC-MCS Bootcamp

ICCAC (International Consortium of Circulatory Assist Clinicians) includes networking events, MCS (VAD) Coordinator-Specific sessions and MCS Bootcamp. This ICCAC-MCS Bootcamp will be the first ICCAC-MCS Bootcamp in Asia. (Please visit: [Home | ICCAC](#))

9:00 – 12:00 (Room 101)

Executive Board meeting

13:00 – 17:00 (Room 101)

General Board meeting



Wednesday November 13, 2024 (Day 1)

7:30 – 8:45 (Room 201-202)

Young Investigators Pre-symposium

9:00 – 9:15 (Room 201-202)

Opening Ceremony

Koichi Toda (Japan), Antonio Loforte (Italy)

9:30 – 10:30 (Room 201-202)

Helmut Reul Young Investigator Award

Moderators: Ulrich Steinseifer (Germany), TBD

10:45 – 12:00 (Room 201-202)

Topics 1: Impella for high risk surgery

Moderators: Alexander Bernhardt (Germany), TBD

Speakers: Alexander Bernhardt (Germany), Kenji Minakata (USA), Hiroshi Niinami (Japan), TBD

We will discuss preoperative, intraoperative (Impella supported CABG), and postoperative use of Impella for high risk patients.

12:30 – 13:30 (Room 201-202)

Lunch Symposium 1 sponsored by ABIOMED

Evgenij Potapov (Germany), Masahiro Ono (USA)

13:45 – 15:15 (Room 201-202)

Topics 2: What is new? From laboratory and company

Moderators: Vakhtang V. Tchantchaleishvili (Chief editor of Artificial Organs, USA), TBD

Speakers: Vakhtang V. Tchantchaleishvili (USA), Eduardo Rame (Berlin Heals, USA), Andrew

Malone (Pumpinheart, Ireland), Ina Laura Perkins (Realheart TAH, Sweden), Po-Lin Hsu

(magAssist, China), Kevin Bourque (Abbott, USA), TBD



We will discuss microcurrent devices that propagate cardiac reverse remodeling and new pumps including intra-atrial VAD for HFpEF, Chinese percutaneous VAD, and more.

15:30 – 17:00 (Room 201-202)

Topics 3: Right ventricular failure (two implantable VAD, TAH, or Fontan?)

Moderators: Evgenij Potapov (Germany), Tomonori Tukiya (Japan), TBD

Speakers: Pascal Leprince (France), Daniel Zimpfer (Austria), David McGiffin (Australia), Akira Shiose (Japan), Daniel Timms (Australia)

We will discuss clinical outcomes of Carmat TAH, HeartMate 3 x 2 as TAH, implantable Bi-VAD, Fontan type operation, and First-in-Human experience of BiVACOR TAH for right ventricular failure.

17:15 – 18:45 (Room 201-202)

Topics 4: Self-Care in Patients with MCS : ISMCS-ICCAC joint symposium (VAD coordinator session)

Moderators: Thomas Schläglhofer (Austria), Shunsuke Saito (Japan), Christopher Hayward (Australia)

Speakers: Janelle McLean (Australia), Janet Wu (USA), Desiree Robson (Australia) , TBD

We will talk about “Empowering the patient to be self-sufficient: is the caregiver necessary?” and “Combining patient-self-care with remote monitoring : easing clinicians fear for patients without caregivers” and so on.

19:00 – (Room 201-202)

Welcome reception

Table tennis tournament / Karaoke tournament



Thursday November 14, 2024 (Day 2)

7:30 – 8:45 (Room 201-202)

General session (Mini Orals)

9:00 – 10:30 (Room 201-202)

Topics 5: ISMCS - Japanese Heart Failure Society (JHFS) joint symposium

Moderators: Koichiro Kinugawa (Japan), Ina Laura Perkins (Sweden), Antonio Loforte (Italy)

Speakers: Mandeep Mehra (USA), Manreet Kanwar (USA), Masaru Hatano (Japan), Makiko Nakamura (Japan)

We will discuss how we can break the stagnation in the MCS area. What can we as the ISMCS do to ensure that more patients can be saved with the help of MCS?

10:30 – 12:00 (Room 201-202)

Topics 6: Towards forgettable device: Battery/Driveline/Remote monitoring/Artificial Intelligence

TBD

TBD

TBD

9:00 – 12:00 (Room 105-106)

Meet the experts and new pumps in Wet Lab (parallel session)

Alexander Bernhardt (Germany), Antonio Loforte (Italy), Kenji Minakata (USA), Evgenij Potapov (Germany), Masahiro Ono (USA), Pascal Leprince (France), Daniel Zimpfer (Austria), David McGiffin (Australia), Akira Shiose (Japan), Xianqiang Wang (China), Cumaraswamy Sivathasan (Singapore), Minoru Ono (Japan), KR Balakrishnan (India), Nai Hsin Chi (Taiwan), Yang Hyun Cho (Korea), Christopher Salerno (USA), Akinobu Itoh (USA), Iki Adachi (USA), Vakhtang V. Tchantchaleishvili (USA), Tadashi Motomura (USA), Tomaso Bottio (Italy)



12:30 – 13:30 (Room 201-202)

Lunch Symposium 2 sponsored by CH-Biomedical (CH-VAD/ BRIOVAD)

Xianqiang Wang (China)

13:45 – 15:00 (Room 201-202)

Topics 7: Booming VAD therapy in Asian countries

Moderators: Yoshiki Sawa (Japan), Cumaraswamy Sivathasan (Singapore)

Speakers: Minoru Ono (Japan), Xianqiang Wang (China), KR Balakrishnan (India), Nai Hsin Chi (Taiwan), Yang Hyun Cho (Korea)

15:00 – 16:15 (Room 201-202)

General session (Mini Orals)

16:15 – 17:30 (Room 201-202)

Topics 8: Management of AMI shock in 2024: Role of temporary MCS (ECLS shock trial and DanGer shock trial)

Speakers: Manreet Kanwar (USA), Jacob Eifer Møller (Denmark), Junya Ako (Japan), TBD

We will discuss the role of MCS including ECLS (ECLS shock trial) and percutaneous left ventricular unloading (Impella: DanGer shock trial) in the management of AMI-Cardiogenic Shock.

17:45 – 18:30 (Room 201-202)

General Assembly

19:00 –

Gala dinner (at Utsunomiya Tobu-Hotel)



Friday November 15, 2024 (Day 3)

7:30 – 9:00 (Room 201-202)

Topics 9: ISMCS-JSAO joint symposium

: How to design new pumps (digital twins, virtual fitting, In silico testing…)

Moderators: Christoph Nix (Germany), Toru Masuzawa (Japan), Iki Adachi (USA)

Speakers: Shaun Gregory (Australia), Tomonori Tukiya (Japan), Kiyotaka Fukamachi (USA), TBD

We will discuss how engineers can design the better pump based on clinical needs.

9:15 – 10:45 (Room 201-202)

Topics 10: Cardiac recovery after MCS (medication, biological therapies, etc)

Moderators: Stravros Drakos (USA), Yasushi Sakata (Japan), TBD

Speakers: Stravros Drakos (USA), Eduardo Rame (USA), Shigeru Miyagawa (Japan), TBD

We will discuss how we can facilitate cardiac recovery during MCS. By medication, cardiac rehabilitation, biological therapies including iPS cell technology, or microcurrent device?

10:45 – 12:00 (Room 201-202)

Topics 11: Simulation and Modelling

Speakers: Zhongjun Jon Wu (USA)

TBD

TBD

12:30 – 13:30 (Room 201-202)

Lunch Symposium 3 sponsored by Abbott and NIPRO

Ivan Netuka (Czech)



13:45 – 15:00 (Room 201-202)

Topics 12: Complicated VAD surgery (pump exchange, valve surgery/TAVI, etc)

Moderators: Ivan Netuka (Czech), TBD

Speakers: Christopher Salerno (USA), Evgenij Potapov (Germany), Akinobu Itoh (USA) , TBD

Experts will tell you how you can change the pump, fix the leaky valve, and save nightmare cases.

15:00 – 16:15 (Room 201-202)

General session (Mini Orals)

16:15 – 17:30 (Room 201-202)

Topics 13: VAD for small patients/small heart/congenital disease

Moderators: Yoshikatsu Saiki (Japan), Iki Adachi (USA), TBD

Speakers: Iki Adachi (USA), Daniel Zimpfer (Austria), Akinobu Itoh (USA), TBD

We will discuss how we can implant pumps in congenital cases and pts with small hearts.

17:30 – (Room 201-202)

Closing Ceremony

Koichi Toda (Japan), Daniel Zimpfer (ISMCS 2025 in Austria)