



International Society for Mechanical Circulatory Support

**BOLOGNA
ITALY**

Royal Carlton Hotel

**OCTOBER
21-23
2019**



27th ANNUAL MEETING
of International Society
for Mechanical Circulatory Support

Under the patronage of



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
SCUOLA DI MEDICINA E CHIRURGIA

www.ismcs.org

PROGRAM CHAIR

ANTONIO LOFORTE, MD, PhD

S. Orsola Hospital
Department of Cardiothoracic,
Transplantation
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University of Bologna
Italy

PROGRAM CO-CHAIR

FRANCESCO MOSCATO, ENG D, PhD

Center for Medical Physics
and Biomedical Engineering
Medical University of Vienna
Austria

ISMCS SCIENTIFIC COMMITTEE

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PRELIMINARY SCIENTIFIC PROGRAM

OCTOBER 20

09.00-12.00 Executive Board Meeting

13.00-18.00 General Board Meeting

OCTOBER 21

07.45-10.00 Young Investigators

pre-Symposium & Awards

CHAIRS: T. KAUFMANN, T. SCHLÖGLHOFER

10.00-10.30 Coffee & Poster Exhibition 1

10.30-11.00 Opening Ceremony

CHAIRS: A. LOFORTE, F. MOSCATO, C. SIVATHASAN,
D. PACINI

11.00-12.00 H. REUL Session

CHAIRS: U. STEINSEIFER, M. SLEPIAN, M. MACCHERINI

12.00-12.30 Keynote Lecture I

CHAIRS: A. LOEBE, A. LOFORTE

PIONEERING MECHANICAL CIRCULATORY SUPPORT (USA)

O.H. FRAZIER

PIONEERING MECHANICAL CIRCULATORY SUPPORT (EUROPE)

R. HETZER

12.30-13.00 Round Table I

**WHY AND HOW TO DEVELOP A VAD PROGRAM,
GET CONSCIENCE, AND IMPROVE THE RUNNING BY TIME**

CHAIR: J. LONG

M. ONO, C. HAYWARD, L. POTENA, P. MOHACSI,

G. WIESELTHALER, D. CHRISTENSEN

13.00-13.30 ISMCS Welcome by Authorities

CHAIRS: R. DI BARTOLOMEO, M. GARGIULO

13.30-14.30 Lunch MCS Symposium I

CHAIRS: U. JORDE, M. RINALDI, M. MASSETTI

- Pulsatility: 'Argument for' and 'Biologic Consequences Without'
M. SLEPIAN
- May pulsatility help myocardial function recovery?
D. BURKHOFF
- Haemodynamics of pulsatile and continuous flow pumps
H. SCHIMA
- The return to the pulse with current centrifugal pumps: clinical implications
W. DEMBITSKY
- How current technology may provide an adequate pulsatility?
T. MOTOMURA

14.30-15.00 Invited Lectures

DEVICE DEVELOPMENT

CHAIRS: A. MOLteni, M. SLAUGHTER, T. TSUKIYA

- MCS development: from design to commercial availability
U. STEINSEIFER
- Pushing towards a 'mechanical' rotary Total Artificial Heart concept
D. TIMMS
- Pushing towards a 'biological' Total Artificial Heart concept
G. GEROSA

15.00-16.00 Selected Abstracts 1

DEVICE DEVELOPMENT

CHAIRS: A. MOLteni, K. FUKAMACHI, V. TARZIA

16.00-16.30 Coffee & Poster Exhibition 2

16.30-17.00 Keynote Lecture II

CHAIRS: L. POTENA, M. LOEBE

**HEART REPLACEMENT THERAPY: MECHANICAL,
BIOLOGICAL OR REGENERATIVE?**

D. TAYLOR / COMMENT BY M. LOEBE

17.00-17.30 Invited Lectures

PARTIAL SUPPORT

CHAIRS: K. SUNAGAWA, R. WESTENFELD, C. RUSSO

- Surgical or percutaneous interventional treatment?
B. MEYNS
- Percutaneous VADs: options
G. LEBRETON
- Novel solutions and applications
A. FIANE

17.30-18.30 Selected Abstracts 2

PARTIAL SUPPORT

CHAIRS: T. SIESS, R. WESTENFELD, M. ATTISANI

18.30-19.30 Poster Exhibition 3

18.30-19.30 ISMCS General Assembly

OCTOBER 22

08.00-09.00 Invited Lectures

SHORT-TERM MCS AND ECLS

CHAIRS: F. MUSUMECI, A. EL BANAYOSY, A. OUATTARA

- ELISO registry report: perspectives
R. LORUSSO
- Cardiogenic shock: ECLS treatment strategies
F. PAPPALARDO
- Beyond ECLS - Transition to implantable long-term LVAD
D. SAEED
- Donor hearts preservation and assessment with Organ Care System
S. TSUI
- Extracorporeal Circulation Circuits in Surgery: look at History to get the Present
L. DI MARCO

09.00-10.00 Selected Abstracts 3

SHORT-TERM MCS AND ECLS

CHAIRS: S. SONNTAG, A. MONTALTO, S. MARTIN-SUAREZ

10.00-10.30 Rapid fire / Poster

SHORT-TERM MCS AND ECLS

CHAIRS: T. TSUKIYA, S. SCIACCA, E. PILATO

10.30-11.00 Coffee & Poster exhibition 4

11.00-12.00 Invited lectures

LONG-TERM VAD

CHAIRS: A. LOFORTE, S. SCHUELER, C. AMARELLI

- Concomitant Cardiac Surgery procedures in need during LVAD implantation
W. DEMBITSKY
- Minimally-invasive LVAD implantation: should we adopt it as standard?
J. SCHMITTO
- How to deal with preoperative and postoperative RV function
D. ZIMPFER
- Continuous-flow BVAD: feasible and reliable?
E. POTAPOV
- LVAD hemodynamic optimization
N. URIEL

12.00-12.30 Keynote lecture III

CHAIRS: C. SIVATHASAN, G. FAGGIAN

HEART TRANSPLANTATION VS. MECHANICAL

CIRCULATORY SUPPORT: CURRENT PERSPECTIVES

M. SLAUGHTER / COMMENT BY M. FRIGERIO

12.30-13.00 Round table II

MCS REGISTRIES IN THE WORLD

CHAIR: B. MEYNS

INTERMACS/STS, EUROMACS, MCS Asia/Pacific, MCS in Japan

R. KORMOS, T. DE BY, C. SIVATHASAN, J. LONG,
M. ONO, F. GRIGIONI

13.00-13.30 Poster exhibition 5

13.30-14.30 Lunch MCS Symposium II

CHAIRS: C. MAHR, L. KLEIN, M. PILATO

- LVAD therapy: long-term outcomes and challenges
R. KORMOS
- LVAD versatility for implant
S. MALTAIS
- Adult LVAD systems reliability for pediatric population
A. LORTS
- LVAD concept as monitoring system
F. MOSCATO
- Telemonitoring and smart systems I
L. KLEIN

14.30-15.30 Invited lectures

HEMOCOMPATIBILITY

CHAIRS: G. WIESELTHALER, M. SLEPIAN, U. LIVI

- "It's Hemocompatibility",
"Not Thrombosis and/or Bleeding"
M. SLEPIAN
- AVWS and beyond
C. BARTOLI
- Biocompatibility of current continuous and pulsatile pumps
I. NETUKA
- Human Interface and Usability associated with MCS
H. SCHIMA

15.30-16.30 Selected abstracts 4

HEMOCOMPATIBILITY

CHAIRS: I.L. PIPER, U. KERTSCHER, A. IACOVONI

16.30-17.00 Coffee & Poster exhibition 6

17.00-17.30 Keynote lecture IV

CHAIRS: P. LEPRINCE, M. MORSHUIS, G. GEROSA

BIOENGINEERING CONCEPTS

FOR TOTAL ARTIFICIAL HEART SUPPORT

R. WAMPLER

17.30-18.00 Invited lectures

TOTAL ARTIFICIAL HEART

CHAIRS: P. LEPRINCE, M. MORSHUIS, G. GEROSA

- Total Artificial Heart: temporary bridge or definitive solution?
J. COPELAND
- New Total Artificial Heart Systems
P. LEPRINCE
- The 'Cleveland' TAH concept
K. FUKAMACHI

18.00-19.00 Selected abstracts 5

LONG-TERM VAD & TAH

CHAIRS: D. TIMMS, M. MASETTI, G. DI GIAMMARCO

20.30 Conference Dinner (Awards)

OCTOBER 23

08.00-09.00 Invited lectures

PEDIATRICS

CHAIRS: G. GARGIULO, C. PACE NAPOLEONE,

A. LORTS

- PEDIMACS Registry: outcomes
C. VANDERPLUYM
- Total Artificial Heart therapy in pediatrics
D. MORALES
- An open window towards permanent support with infant pumps
A. AMODEO
- Pediatric VAD outpatients management
J. CONWAY
- Heart Transplantation or MCS in congenital heart disease?
A. HASAN

09.00-10.00 Selected abstracts 6

PEDIATRICS

CHAIRS: M. SCHWEIGER, L. GALLETTI, E. ANGELI

10.00-10.30 Rapid fire / Poster

PEDIATRICS

CHAIRS: M. SCHWEIGER, L. CAREDDU, E. PILATO

10.30-11.00 Coffee & Poster exhibition 7

11.00-11.30 Keynote lecture V

CHAIRS: A. LORTS, M. PADALINO, J. KARIMOV

HISTORY AND INNOVATIONS IN PUMP DEVELOPMENT FOR CONGENITAL HEART DISEASE

K. DASSE

11.30-12.00 Invited lectures

SIMULATION

CHAIRS: M. SLEPIAN, K. FRASER, G. TANSLEY

- CFD blood flow simulation: strengths and limitations
A. REDAELLI
- Impact of LVAD cannulation on blood flow and stagnation
A. ALISEDA
- Challenging solutions in congenital heart disease
M. GRANEGGER

12.00-13.00 Selected abstracts 7

SIMULATION

CHAIRS: K. FRASER, M. GRANEGGER, G. TANSLEY

13.00-13.30 Poster exhibition 8

13.30-14.30 Lunch MCS symposium III

CHAIRS: N. URIEL, I. NETUKA, M. FRIGERIO

- Tips and tricks for VAD placement and removal
E. POTAPOV
- Technical solutions in congenital heart disease
A. HASAN
- LVAD therapy for all?
W. DEMBITSKY
- Myocardial Recovery: still Alive or Dead-End Target?
S. DRAKOS
- Telemonitoring and smart systems II
K. BOURQUE

14.30-15.00 Keynote lecture VI

CHAIRS: F. MOSCATO, T. MASUZAWA

BIOMEDICAL ROBOTICS, FROM FICTION TO SCIENCE

P. DARIO

15.00-15.40 Invited lectures

SMART PUMPING, MONITORING, CONTROL

CHAIRS: H. SCHIMA, F. CONSOLO, A. DI MOLFETTA

- Exercise limits in LVAD patients: insight from haemodynamic simulations
L. FRESIELLO
- In-vitro modelling for pump control evaluation: strengths and limitations
S. GREGORY
- Elimination of driveline: percutaneous energy transmission projects
G. WIESELTHALER
- New Technologies and wearables for MCS
M. SLEPIAN

15.40-16.40 Selected abstracts 8

SMART PUMPING, MONITORING, CONTROL

CHAIRS: J. KARIMOV, F. CONSOLO, A. DI MOLFETTA

16.40-17.00 Coffee & Poster exhibition 9

17.00-18.15 Invited lectures

DEVICES UPDATE

CHAIRS: J. LONG, M. ONO, M. BAIOCCHI

18.15-18.30 Closing ceremony

A. LOFORTE, A. EL BANAYOSY

ISMCS program outline

ISMCS/ICCAC MCS Proficiency Verification Course 2019

October 23, 08.00-12.00

Chairs: T. Schlöglhofer, D. Christensen
VAD Coordinator Faculty
R. Bach, J. Beckman, T. Berg,
F. Kaufmann, D. Robson, S. Schroeder

INTERNATIONAL FACULTY

(preliminarily)

- A. Aliseda (Washington DC, USA)
C. Amarelli (Naples, Italy)
A. Amodeo (Rome, Italy)
E. Angeli (Bologna, Italy)
M. Attisani (Turin, Italy)
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C. Bartoli (Pittsburgh, PA, USA)
K. Bourque (Charleston, SC, USA)
D. Burkhoff (New York City, USA)
L. Careddu (Bologna, Italy)
D. Christensen (Philadelphia, PA, USA)
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J. Copeland (San Diego, CA, USA)
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G. Di Giammarco (Chieti, Italy)
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A. Di Molfetta (Rome, Italy)
S. Drakos (Salt Lake City, UT, USA)
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O.H. Frazier (Houston, TX, USA)
L. Fresiello (Leuven, Belgium)
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L. Galletti (Bergamo, Italy)
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M. Gargiulo (Bologna, Italy)
G. Gerosa (Padua, Italy)
M. Granegger (Zurich, Switzerland)
S. Gregory (Melbourne, Australia)
F. Grigioni (Rome, Italy)
A. Hasan (Newcastle, UK)
C. Hayward (Sidney, Australia)
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A. Iacovoni (Bergamo, Italy)
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U. Kertscher (Berlin, Germany)
L. Klein (San Francisco, CA, USA)
R. Kormos (Pittsburgh, PA, USA)
G. Lebreton (Paris, France)
P. Leprince (Paris, France)
U. Livi (Udine, Italy)
M. Loebe (Miami, FL, USA)
A. Loforte (Bologna, Italy)
J. Long (Oklahoma City, OK, USA)
A. Lorts (Cincinnati, OH, USA)
R. Lorusso (Maastricht, Netherlands)
M. Maccherini (Siena, Italy)
C. Mahr (Seattle, WA, USA)
S. Maltais (Rochester, MN, USA)
S. Martin-Suarez (Bologna, Italy)
M. Masetti (Bologna, Italy)
M. Masetti (Rome, Italy)
T. Masuzawa (Ibaraki, Japan)
B. Meyns (Leuven, Belgium)
P. Mohacsi (Bern, Switzerland)
A. Molteni (London, UK)
A. Montalto (Rome, Italy)
D. Morales (Cincinnati, OH, USA)
M. Morshuis (Bad Oeynhausen, Germany)
F. Moscato (Vienna, Austria)
T. Motomura (Houston, TX, USA)
F. Musumeci (Rome, Italy)
I. Netuka (Prague, Czech Republic)
M. Ono (Tokyo, Japan)
A. Ouattara (Bordeaux, France)
C. Pace Napoleone (Turin, Italy)
D. Pacini (Bologna, Italy)
M. Padalino (Padua, Italy)
F. Pappalardo (Milan, Italy)
E. Pilato (Naples, Italy)
M. Pilato (Palermo, Italy)
I.L. Piper (Swansea, UK)
E. Potapov (Berlin, Germany)
L. Potena (Bologna, Italy)
A. Redaelli (Milan, Italy)
M. Rinaldi (Turin, Italy)
C. Russo (Milan, Italy)
D. Saeed (Dusseldorf, Germany)
H. Schima (Wien, Austria)
J. Schmitto (Hannover, Germany)
S. Schueler (Newcastle, UK)
M. Schweiger (Zurich, Switzerland)
S. Sciacca (Palermo, Italy)
T. Siess (Danvers, MA, USA)
C. Sivathasan (Singapore)
M. Slaughter (Louisville, KY, USA)
M. Slepian (Tucson, AZ, USA)
S. Sonntag (Aachen, Germany)
U. Steinseifer (Aachen, Germany)
K. Sunagawa (Kyushu, Japan)
G. Tansley (Griffith, Australia)
V. Tarzia (Padua, Italy)
D. Taylor (Houston, TX, USA)
D. Timms (Houston, TX, USA)
S. Tsui (Cambridge, UK)
T. Tsukiya (Osaka, Japan)
N. Uriel (Chicago, IL, USA)
C. VanderPluym (Boston, MA, USA)
R. Wampler (Sacramento, CA, USA)
R. Westefeld (Dusseldorf, Germany)
G. Wieselthaler (San Francisco, CA, USA)
D. Zimpfer (Vienna, Austria)
- VAD Coordinator Faculty**
R. Bach (Bad Rothenfelde, Germany)
J. Beckman (Seattle, WA, USA)
T. Berg (Aachen, Germany)
F. Kaufmann (Berlin, Germany)
D. Robson (Sidney, Australia)
S. Schroeder (Lincoln, NE, USA)

GENERAL INFORMATION

CONGRESS VENUE

Royal Carlton Hotel

Via Montebello, 8 - 40121 Bologna (Italy)

The Hotel is in the centre of Bologna, just a short walk from Bologna Centrale railway station and Piazza Maggiore, outside the restricted traffic zone. It's just 5 km from Guglielmo Marconi international airport.

REGISTRATION

Online registration at www.noemacongressi.it

Registration fees

ISMCS MEMBER

EARLY REGISTRATION

€ 350,00 + VAT (€ 427,00 VAT included)

LATE REGISTRATION

€ 450,00 + VAT (€ 549,00 VAT included)

ISMCS NON MEMBER

EARLY REGISTRATION

€ 400,00 + VAT (€ 488,00 VAT included)

LATE REGISTRATION

€ 500,00 + VAT (€ 610,00 VAT included)

NURSE/PERFUSIONIST/RESIDENT

€ 190,00 + VAT (€ 231,80 VAT included)

STUDENT

€ 105,00 + VAT (€ 128,10 VAT included)

1 DAY REGISTRATION

€ 200,00 + VAT (€ 244,00 VAT included)

ISMCS/ICCAC

MCS Proficiency Course (MPV)

PHYSICIANS

€ 120,00 + VAT (€ 146,40 VAT included)

NURSE/ENGINEER

€ 80,00 + VAT (€ 97,60 VAT included)

HOTEL RESERVATION

The Organizing Secretariat is available for hotel reservation and information.

Suggested hotels

ROYAL HOTEL CARLTON 4*

Via Montebello, 8 - 40121 Bologna

STARHOTEL EXCELSIOR 4*

Viale P. Pietramellara, 51 - 40121 Bologna

HOTEL INTERNAZIONALE 4*

Via dell'Indipendenza, 60 - 40121 Bologna

HOTEL TRE VECCHI 4*

Via dell'Indipendenza, 47 - 40121 Bologna

HOTEL MERCURE BOLOGNA CENTRO 4*

Viale P. Pietramellara, 59 - 40121 Bologna

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Artificial
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ORGANIZING SECRETARIAT

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