



HVS Main Site

## 2016 Preliminary Program

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Preliminary Program

### THURSDAY, MARCH 17TH

Registration

8.30 - 10.00 **Opening Plenary Session: Next Decade in Valve Disease**

**Moderators:** Maurice E. Sarano, MD, President  
Gilles D. Dreyfus, MD, President-Elect  
Michael A. Borger, MD, Past President

Housing

8.30 - 8.35

**Welcome**

Maurice E. Sarano, MD

Exhibitors & Sponsors

8.35 - 8.49

**The Epidemics of Valve Disease Will Rise**

Bernard Prendergast, MD

Past & Future Meetings

8.49 - 9.03

**Genetics of Valve Disease Will Be Everything**

Robert A. Levine, MD

9.03 - 9.17

**Interventional Treatment Will Treat Every Valve Disease**

Alec Vahanian, MD

9.17 - 9.31

**Tissue Biomechanics Will Tell Us Everything**

Jane Grande-Allen, MD

9.31 - 9.45

**Robotic Valve Surgery Will Be The Standard Therapy for Degenerative Disease**

Rakesh Suri, MD

9.45 - 9.50

**Announcement of Borer Travel Awards**

Maurice E. Sarano, MD & Jeffery S. Borer, MD

9.45 - 10.00

**Presidential Address**

Maurice E. Sarano, MD

10.00 - 10.30

**Coffee Break & [Poster Viewing](#)**

10.30 - 12.00

**Concurrent Session I: Aortic Stenosis**

**Moderators:** Vinod Thourani, MD  
Susheel Kodali, MD

10.30 - 10.42

**New natural history and new classification in AS**

Luc Pierard, MD

10.42 - 10.54

**The new markers of severity of AS (BNP, calcifications)**

Philippe Pibarot, DVM, PhD

10.54 - 11.06

**Surgical approaches to AVR: is minimally invasive safer?**

Vinod Thourani, MD

11.06 - 11.18

**Sutureless prostheses: The way of the future...**

Michael Borger, MD

11.18 - 11.30

**TAVR 2016: How will we tackle periprosthetic AR**

Susheel Kodali, MD

11.30 - 12.00

**Discussion**

**Concurrent Session II: Aortic Valve Repair: Let's Do It!**

**Moderators:** Emmanuel Lansac, MD  
Hans-Joachim Schaeffers, MD

10.30 - 10.45

**Echocardiographic Predictors of Reparability**

Alain Berrebi, MD

10.42 -

**What do I need to know from echo to repair the aortic valve**

10:54

Gebrine El-Khoury, MD

10.54 - 11.06

**Valve-Sparing Root Replacement: Why and How to Do It?**

Laurent de Kerchove, MD, PhD

11.06 - 11.18

**Isolated Aortic Valve Repair: Why and How to Do It?**

Hans-Joachim Schaeffers, MD

11.18 - 11.30

**Rationales to Standardize Aortic Valve Repair**

Emmanuel Lansac, MD

11.30 - 12.00

**Discussion**

**Concurrent Session III: Biomarkers in Valve Disease**

**Moderators:** Marie-Annick Clavel, MD  
Mac Dweck, MD

10.30 - 10.45

**Natriuretic Peptide in Organic Mitral Regurgitation**

Rodolfo Pizarro, MD

- 10.45 - 11.00 **Natriuretic Peptide in Aortic Stenosis**  
Jutta Bergler-Klein, MD
- 11.00 - 11.15 **Novel Biomarkers for Aortic Stenosis**  
Brian Lindman, MD
- 11.15 - 11.30 **MicroRNA as Biomarkers in Aortic Stenosis**  
Magnus Back, MD
- 11.30 - 12.00 **Discussion**
- Concurrent Session IV: Experience and Innovation in Tissue Engineered Heart Valves Keynote & Abstracts**  
**Moderator:** John Mayer, MD
- 10:30 - 10:45 **Keynote**  
John Mayer, MD
- 10.45 - 10.55 **A1. [In-Situ Heart Valve Tissue Engineering - is On-the-fly Preseeding with Bone Marrow-derived Cells Required?](#)**  
**Anthal I.P.M. Smits**, Virginia Ballotta, Anita Driessen-Mol, Frank P.T. Baaijens, Carlijn V.C. Bouten.  
*Eindhoven University of Technology, Eindhoven, Netherlands.*
- 10.55 - 11.05 **A2. [Performance of Size-Reduced Bicuspidalized Decellularized Pulmonary Valve Conduits in Growing Sheep Model](#)**  
Karolina Theodoridis, Igor Tudorache, Andres Hilfiker, Tanja Mayer, Samir Sarikouch, Christoph Bara, Alexandru Calistru, Thomas Breyman, Alexander Horke, Axel Haverich, **Serghei Cebotari**.  
*Hannover Medical School, Hannover, Germany.*
- 11.05 - 11.15 **A3. [How Close Are We to Fully Engineering a Living Heart Valve? A Tale of Scaffolds, Stem Cells, Bioreactors and Sheep](#)**  
Marius M. Harpa<sup>1</sup>, Ionela Movileanu<sup>1</sup>, Allison Kenamer<sup>2</sup>, Nicholas Rierson<sup>2</sup>, Ovidiu Cotoi<sup>1</sup>, Horatiu Suciuc<sup>1</sup>, Victor Raicea<sup>1</sup>, Terezia Preda<sup>1</sup>, Dan Nistor<sup>1</sup>, Klara Branzaniuc<sup>1</sup>, Radu Deac<sup>1</sup>, Simona Gurzu<sup>1</sup>, Lucian Harceaga<sup>1</sup>, Peter Olah<sup>1</sup>, Carmen Sircuta<sup>1</sup>, Agneta Simionescu<sup>2</sup>, Michael Dandel<sup>1</sup>, **Dan Simionescu**<sup>2</sup>.  
<sup>1</sup>University of Medicine and Pharmacy, Targu Mures, Romania, <sup>2</sup>Clemson University, Clemson, SC, USA.
- 11.15 - 11.25 **A4. [Echocardiographic Leaflet Performance of Stentless Extracellular Matrix Tricuspid Tube graft in a Porcine Model](#)**  
**Diana M. Ropcke**, Christine Ilkjaer, Soren N. Skov, Marcell J. Tjornild, Anders V. Sorensen, Henrik Jensen, Sten L. Nielsen.  
*Aarhus University Hospital, Aarhus C, Denmark.*
- 11.25 - 11.35 **A5. [Bioresorbable Reinforcement of Neopulmonary Trunk Avoids Sovrapulmonary Stenosis in Arterial Switch Operation: Biomechanics, Growth and Remodelling](#)**  
**Mario Fittipaldi**<sup>1</sup>, Cristiano Spadaccio<sup>2</sup>, Antonio Nenna<sup>3</sup>, Massimiliano Fraldi<sup>4</sup>, Francesco Nappi<sup>5</sup>.  
<sup>1</sup>Great Ormond Street Hospital for Children NHS Foundation Trust, London, United Kingdom, <sup>2</sup>Golden Jubilee National Hospital, Glasgow, United Kingdom, <sup>3</sup>University Campus Bio-Medico, Rome, Italy, <sup>4</sup>University Federico II of Naples, Naples, Italy, <sup>5</sup>Centre Cardiologique du Nord, Paris, France.
- 11.35 - 11.45 **A6. [Bioabsorbable Vascular Graft - the First Step Towards Development of the Next Generation Heart Valves](#)**  
**Leo Bockeria**<sup>1</sup>, Alex Kim<sup>1</sup>, Konstantin Shatalov<sup>1</sup>, Vladimir Makarenko<sup>1</sup>, Oleg Svanidze<sup>2</sup>.  
<sup>1</sup>Bakoulev Center for Cardiovascular Surgery, Moscow, Russian Federation, <sup>2</sup>Xeltis AG, Zurich, Switzerland.
- 11.45 - 11.55 **A7. [A Nitinol Mesh Scaffold for Heart Valve Engineering](#)**  
Seyedhamed Alavi, Marc S. Ballarda, Lorenzo Valdevit, **Arash Kheradvar**.  
*University of California, Irvine, Irvine, CA, USA.*
- Concurrent Session V: Heart Valve Outcomes I Keynote & Abstracts**  
**Moderator(s):** Jeffery Borer, MD
- 10:30 - 10:45 **Keynote**  
Jeffery Borer, MD
- 10.45 - 10.55 **A8. [Fresh Decellularized Pulmonary Valve Allografts For Rvot Reconstruction During The Ross Operation - Clinical Outcomes At 10 Years](#)**  
**Francisco D. Costa**<sup>1</sup>, Eduardo Balbi, Filho<sup>2</sup>, Rafael Torres<sup>2</sup>, Daniele Colatusso<sup>1</sup>, Claudinei Colatusso<sup>1</sup>, Allysson Calixto<sup>2</sup>, Marise Costa<sup>1</sup>.  
<sup>1</sup>Santa Casa de Curitiba PUCPR, Curitiba, Brazil, <sup>2</sup>Instituto de Neurologia e Cardiologia de Curitiba, Curitiba, Brazil.
- 10.55 - 11.05 **A9. [Human Factors During Mitral Valve Replacement Surgery Are Associated With Adverse Events](#)**  
**Jock N. McCullough, MD**<sup>1</sup>, Alexander Iribarne, MD<sup>1</sup>, David C. Charlesworth, MD<sup>2</sup>, Robert A. Cough, MD<sup>3</sup>, Joseph P. DeSimone, MD<sup>1</sup>, Carmine Frumiento, MD<sup>4</sup>, Robert S. Kramer, MD<sup>5</sup>, Bruce J. Leavitt, MD<sup>6</sup>, Charles A. Marrin, MD<sup>1</sup>, Jeremy R. Morton, MD<sup>5</sup>, Joseph D. Schmoker, MD<sup>6</sup>, Benjamin M. Westbrook, MD<sup>2</sup>, Anthony W. DiScipio, MD<sup>1</sup>.  
<sup>1</sup>Dartmouth-Hitchcock Medical Center, Lebanon, NH, USA, <sup>2</sup>Catholic Medical Center, Manchester, NH, USA, <sup>3</sup>Eastern Maine Medical Center, Bangor, ME, USA, <sup>4</sup>Central Maine Medical Center, Lewiston, ME, USA, <sup>5</sup>Maine Medical Center, Portland, ME, USA, <sup>6</sup>University of Vermont Medical Center, Burlington, VT, USA.
- 11.05 - 11.15 **A10. [Familial Clustering of Mitral Regurgitation in the Community](#)**  
**Francesca N. Dellling**<sup>1</sup>, Shuo Li, MS<sup>2</sup>, Qiong Yang, PhD<sup>3</sup>, Vanessa Xanthakis, PhD<sup>2</sup>, Birgitta Lehman, RDCS<sup>4</sup>, Ewa Osypuk, MD<sup>4</sup>, Plamen Stantchev, MD<sup>4</sup>, Emelia J. Benjamin, MD<sup>2</sup>, Ramachandran S. Vasani, MD<sup>2</sup>.  
<sup>1</sup>Beth Israel Deaconess Medical Center, Boston, MA, USA, <sup>2</sup>Boston University School of Medicine, Boston, MA, USA, <sup>3</sup>Boston University School of Public Health, Boston, MA, USA, <sup>4</sup>Framingham Heart Study, Framingham, MA, USA.
- 11.15 - 11.25 **A11. [Outcome After Mechanical Aortic Valve Replacement In Adult Patients Under 55 Years: A Systematic Review, Meta-analysis And Microsimulation](#)**  
**Nelleke M. Kortelاند**, Jonathan R.G. Etnel, Bardia Arabkhani, Arezo Mohamad, M. Mostafa Mokhles, Ad J.J.C. Bogers, Johanna J.M. Takkenberg.  
*Erasmus MC, Rotterdam, Netherlands.*
- 11.25 - 11.35 **A12. [Computed tomography and Echo evaluation of Left Ventricular Remodeling in Patients with Severe Degenerative Mitral Regurgitation](#)**

**Zhenhua Li<sup>1</sup>**, Rakesh M. Suri<sup>2</sup>, Thomas A. Foley<sup>3</sup>, Eric E. Williamson<sup>3</sup>, Maurice Enriquez-Sarano<sup>1</sup>, Hector I. Michelena<sup>1</sup>.

<sup>1</sup>*Division of Cardiovascular Diseases and Internal Medicine, Mayo Clinic, Rochester, MN, USA*, <sup>2</sup>*Department of Thoracic and Cardiovascular Surgery, Cleveland Clinic, Cleveland, OH, USA*, <sup>3</sup>*Department of Radiology, Mayo Clinic, Rochester, MN, USA*.

- 11.35 - 11.45 **A13. [Restrictive Indications for the Ross Procedure Improve Long Term Outcomes](#)**  
**Zohair Y. Alhalees**, Valeria Pergola, Giovanni Di Salvo, Maie Alshahid, Bahaa Fadel, Mohammed Alamri, Ziad Issa, Mamdouh Alahmadi, Saud Aloufi.  
*KFSHRC, Riyadh, Saudi Arabia.*
- 11.45 - 11.55 **A14. [Aortic Valve Replacement - Paradox in Patients With Paradoxical Low Flow](#)**  
**Anthony Poulin**, Maxime Berthelot-Richer, Lionel Tastet, Louis Simard, Dimitri Kalavrouziotis, Philippe Pibarot, Marie-Annick Clavel.  
*Quebec Heart and Lung Institute, Québec, QC, Canada.*
- 12:00 - 13.30 **Industry Lunch Symposium**
- 13.30 - 15.00 **Concurrent Session I: Great Debates**
- 13.30 - 14.15 **Debate I: Functional MR Is Best Treated Percutaneously**  
**Moderators:** Paul Sorajja, MD  
Michael Borger, MD
- 13.30 - 13.45 **PRO: My favorite is the Mitral Clip**  
Saibal Kar, MD
- 13.45 - 14.00 **CON: Surgical Repair Is The Standard Of Care**  
Steven Bolling, MD
- 14.00 - 14.15 **Reconciliation with moderators**
- 14.15 - 15.00 **Debate II: TAVR In Low Risk Patients**  
**Moderators:** Gregory Fontana, MD  
Nicolo Piazza, MD
- 14.15 - 14.30 **PRO** Nicolo Piazza, MD
- 14.30 - 14.45 **CON** Craig R. Smith, MD
- 14.45 - 15.00 **Reconciliation with moderators**
- Concurrent Session II: Bicuspid Aortic Valve: Clinical & Basic Science**  
**Moderators:** Hector Michelena, MD  
Alex Barker, MD  
Patrick Mathieu, MD  
Rakesh Suri, MD
- 13.30 - 13.42 **New genetic developments: Common and rare genetic variants in BAV**  
Siddharth Prakash, MD
- 13.42 - 13.54 **The wonders of 4D-flow MR: Ready for clinical use?**  
Alex Barker, PhD
- 13.54 - 14.06 **Do valvulo-aortic phenotypes predict dissection risk?**  
Evaldas Girdauskas, MD, PhD
- 14.06 - 14.18 **Embryology of BAV: is there a link with long-term morbidity?**  
Philippe Sucosky, PhD
- 14.18 - 14.30 **Is BAV repair a durable alternative? For who?**  
Laurent De Kerchove, MD
- 14.30 - 15.00 **Discussion**
- Concurrent Session III: Tissue Engineering**  
**Moderators:** Carlijn Bouten, MD  
Ulrich Stock, MD
- 13.30 - 13.42 **Tissue Engineering of Heart Valves - From In Vitro to In Vivo**  
Ulrich Stock, MD
- 13.42 - 13.54 **6-Month Aortic Valve Implantation of an Off-The-Shelf Tissue-Engineered Valve in Sheep**  
Zeeshan Syedain, MD
- 13.54 - 14.06 **Transcatheter off-the-shelf tissue engineered heart valves with self-repair capacity: long term results from a translational ovine model**  
Max Emmert, MD
- 14.06 - 14.18 **Long-Term In-Vivo Follow Up of Biomaterial-Based In-Situ Heart Valve Tissue Engineering**  
Carlijn Bouten, MD
- 14.18 - 14.30 **New Approaches in Heart Valve Pathobiology: Implications for Tissue Engineering**  
Elena Aikawa, MD
- 14.30 - 15.00 **Discussion**
- Concurrent Session IV: Experimental and Computational Analyses of Valve Disease and Treatment Keynote & Abstracts**  
**Moderator:** Ajit Yoganathan, Ph.D.
- 13.30 - 13.45 **Keynote**  
Ajit Yoganathan, Ph.D.
- 13.45 - 13.55 **A15. [A Study of Tunable Biaxial Strain Fields on Aortic Heart Valve Tissues](#)**  
**Ying Lei**, Zannatul Ferdous.  
*The University of Tennessee, Knoxville, TN, USA.*

- 13.55 - 14.05 **A16. [Infectious Agents related with Collagen Degradation and Inflammation in Myxomatous Mitral Valve Degeneration](#)**  
**Marcos G. Tiveron, Sr.**, Pablo M. A. Pomerantzeff, Sr., Maria L. Higuchi, Marcia Reis, Jaqueline Pereira, Joyce Kawakami, Renata Ikegami, Carlos M. Brandao, Sr., Fabio B. Jatene, Sr.  
*Heart Institute, Sao Paulo, Brazil.*
- 14.05 - 14.15 **A17. [Patient-Specific Computational Modeling of Mitral Valve Repair Techniques](#)**  
**Thuy Pham**<sup>1</sup>, Fanwei Kong<sup>1</sup>, Caitlin Martin<sup>1</sup>, Qian Wang<sup>1</sup>, Charles Primiano<sup>2</sup>, Raymond McKay<sup>2</sup>, John Elefteriades<sup>3</sup>, Wei Sun<sup>1</sup>.  
<sup>1</sup>Georgia Institute of Technology, Atlanta, GA, USA, <sup>2</sup>Hartford Hospital, Hartford, CT, USA, <sup>3</sup>Yale University, New Haven, CT, USA.
- 14.15 - 14.25 **A18. [Computational Simulation of In Vivo Pulmonary Autograft Early After the Ross Procedure: Wall Stress Analysis](#)**  
**Yue Xuan, PhD**<sup>1</sup>, Hesam S. Moghaddam, PhD<sup>1</sup>, Ismail El-Hamamsy, MD PhD<sup>2</sup>, Francois-Pierre Mongeon, MD<sup>2</sup>, Richard L. Leask, PhD<sup>3</sup>, Alexander Emmott<sup>3</sup>, Elaine E. Tseng, MD<sup>1</sup>, Liang Ge, PhD<sup>1</sup>.  
<sup>1</sup>UCSF Medical Center and San Francisco VA, San Francisco, CA, USA, <sup>2</sup>Montreal Heart Institute and Université de Montréal, Montreal, QC, Canada, <sup>3</sup>McGill University, Montreal, QC, Canada.
- 14.25 - 14.35 **A19. [Remodeling of Tissue Engineered Heart Valves During a One Year Follow-up Period in Sheep - A Computational Experimental Analysis](#)**  
**Sandra Loerakker**<sup>1</sup>, Bart Sanders<sup>1</sup>, Boris Schmitt<sup>2</sup>, Petra E. Dijkman<sup>3</sup>, Hendrik Spriestersbach<sup>2</sup>, Anita Driessen-Mol<sup>1</sup>, Emanuela S. Fioretti<sup>1</sup>, Marco Bartosch<sup>2</sup>, Laura Frese<sup>3</sup>, Simon P. Hoerstrup<sup>3</sup>, Felix Berger<sup>2</sup>, Frank P.T. Baaijens<sup>1</sup>.  
<sup>1</sup>Eindhoven University of Technology, Eindhoven, Netherlands, <sup>2</sup>Deutsches Herzzentrum Berlin, Berlin, Germany, <sup>3</sup>University and University Hospital Zurich, Zurich, Switzerland.
- 14.35 - 14.45 **A20. [A New Fluid-Structure Interaction Model for Bicuspid Aortic Valves](#)**  
Karin Lavon<sup>1</sup>, Rotem Halevi<sup>1</sup>, Gil Marom<sup>2</sup>, Sagit Ben Zekry<sup>3</sup>, Rami Haj-Ali<sup>1</sup>, Hans Joachim Schäfers<sup>4</sup>, **Ehud Raanani**<sup>5</sup>.  
<sup>1</sup>School of Mechanical Engineering, Faculty of Engineering, Tel Aviv University, Tel Aviv, Israel, <sup>2</sup>Biomedical Engineering Department, Stony Brook University, <sup>11794</sup>, NY, USA, <sup>3</sup>Echocardiography Laboratory, Chaim Sheba Medical Center, Tel Hashomer, Israel, <sup>4</sup>Department of Thoracic and Cardiovascular Surgery, University Hospitals of Saarland, Homburg, Germany, <sup>5</sup>Department of Cardio-thoracic Surgery, Chaim Sheba Medical Center, Tel Hashomer, Israel.
- 14.45 - 14.55 **A21. [Initial Impact of Bicuspid Aortic Valve Morphotype on Ascending Aorta Hemodynamics: an In Vitro Study](#)**  
**Andrew McNally**<sup>1</sup>, Philippe Sucosky<sup>2</sup>.  
<sup>1</sup>University of Notre Dame, South Bend, IN, USA, <sup>2</sup>Wright State University, Dayton, OH, USA.

#### Concurrent Session V: Heart Valve Repair Keynote & Abstracts

**Moderator:** Ottavio Alfieri, MD

- 13:30 - 13:45 **Keynote**  
Ottavio Alfieri, MD
- 13.45 - 13.55 **A22. [Ten Year Single Center Experience with Robotic Assisted Mitral Valve Repair](#)**  
Alfredo Trento, MD, **Danny Ramzy**, MD, PhD, Michele De Robertis, RN, James Mirocha, MS, Wen Cheng, MD, Lawrence Czer, MD.  
*Cedars-Sinai Medical Center, Los Angeles, CA, USA.*
- 13.55 - 14.05 **A23. [Remodeling Associated With Aortic Ring Annuloplasty: Long Term Results of a Physiological Approach to Valve Sparing](#)**  
**Emmanuel LANSAC**<sup>1</sup>, Isabelle Di Centa<sup>2</sup>, Ghassan Sleilaty<sup>1</sup>, Stéphanie Lejeune<sup>1</sup>, Nizar Khelil<sup>1</sup>, Alain Berrebi<sup>1</sup>, Christelle Diakov<sup>1</sup>, Leila Mankoubi<sup>1</sup>, Marie Christine Malergue<sup>1</sup>, Milena Noghin<sup>1</sup>, Konstantinos Zannis<sup>1</sup>, Suzanna Salvi<sup>1</sup>, Patrice Dervanian<sup>1</sup>, Mathieu Debauchez<sup>1</sup>.  
<sup>1</sup>Institut Mutualiste Montsouris, PARIS, France, <sup>2</sup>Hopital Foch, Suresnes, France.
- 14.05 - 14.15 **A24. [Predictors of New-Onset Atrial Fibrillation in Preserved Ejection Fraction Patients Undergoing Isolated Mitral Valve Repairs](#)**  
**J. Trent Magruder**, Sarah Collica, Stephen Belmustakov, Todd C. Crawford, Joshua C. Grimm, Duke E. Cameron, William A. Baumgartner, Kaushik Mandal.  
*Johns Hopkins, Baltimore, MD, USA.*
- 14.15 - 14.25 **A25. [Combined Mitral and Aortic Valve Reconstruction](#)**  
**Alexander Wick**, Diana Aicher, Christian Giebels, Takahashi Kunihara, Hans-Joachim Schäfers.  
*Saarland University, Homburg, Germany.*
- 14.25 - 14.35 **A26. [Mitral Stenosis After Mitral Valve Repair For Degenerative Disease May Limit Exercise Capacity](#)**  
**Kiyoshi Doi**, Hitoshi Yaku, Satoshi Numata, Sachiko Yamazaki, Keiichi Itatani, Suguru Ohira, Kaichiro Manabe, Kiminori Ikemoto, Tetsuhiro Yamano.  
*Kyoto Prefectural University of Medicine, Kyoto, Japan.*
- 14.35 - 14.45 **A27. [Tricuspid Valve Repair: What to Do When a Ring Is Not Enough.](#)**  
**Matteo Pettinari**, Philip Bertrand, Herbert Gutermann, Christiaan Van Kerrebroeck, Robert Dion.  
*Ziekenhuis Oost Limburg, Genk, Belgium.*
- 14.45 - 14.55 **A28. [Early Echocardiographic Outcomes of Mitral Valve Annuloplasty versus Annuloplasty Combined with a Papillary Muscle Sling for Moderate to Severe Functional Mitral Regurgitation](#)**  
**Christos G. Mihos**<sup>1,2</sup>, Romain Capoulade<sup>1</sup>, Evin Yucel<sup>1</sup>, Serguei Melnitchouk<sup>1</sup>, Judy Hung<sup>1</sup>.  
<sup>1</sup>Massachusetts General Hospital, Boston, MA, USA, <sup>2</sup>Columbia University, Division of Cardiology, Mount Sinai Heart Institute, Miami Beach, FL, USA.
- 15:00 - 15:30 **Coffee Break & [Poster Viewing](#)**
- 15.30 - 17.00 **Concurrent Session I: Rapid Fire: Mitral and Tricuspid Innovation**  
**Moderator:** David Meerkin, MD  
Vinod Thourani, MD

Gilles Dreyfus, MD  
Alec Vahanian, MD

**In-Audience Moderators:** Maurice E. Sarano, MD  
Hector Michelena, MD

- 15.30 - 15.35 **Percutaneous annuloplasty of TR**  
Gino Nicenig, MD
- 15.35 - 15.40 **The 4Tech approach to TR**  
Paolo Denti, MD
- 15.40 - 15.45 **Off-pump chordal implant**  
Gino Gerosa, MD
- 15.45 - 15.50 **Epicardial devices approach for functional MR**  
Jai Ramen, MD
- 15.50 - 15.55 **The Valtech Cardioband implantation**  
Francesco Maisano, MD
- 15.55 - 16:00 **Mitral Bridge**  
Valavanur Subramanian, MD
- 16:00 - 16:05 **Adjustable mitral annuloplasty**  
Carlos Ruiz, MD
- 16:05 - 16:10 **Docking the TMVR**  
Rebecca Halm
- 16:10 - 16:20 **Edwards CardiaQ transcatheter mitral valve replacement**  
Issac George, MD
- 16.20 - 16.25 **The Tendyne TMVR**  
Paul Sorajja, MD
- 16.30 - 16.35 **The Twelve Mitral Prosthesis**  
Bernard Prendergast, MD
- 16.30 - 17.00 **Discussion**
- Concurrent Session II: Rheumatic Disease & Global Epidemiology**  
**Moderators:** Vuyisile Nkomo, MD  
Liesl Zuhlke, MD  
Bernard Prendergast, MD
- 15.30 - 15.42 **Epidemiology of Rheumatic Heart Disease - Lessons from the Global Burden of Disease**  
David Watkins, MD
- 15.42 - 15.54 **The Clinical Burden of Rheumatic Heart Disease - Insights from the REMEDY Study**  
Liesl Zuhlke, MD
- 15.54 - 16.06 **Genetic Determinants of Rheumatic Fever and Rheumatic Heart Disease**  
Andrea Beaton, MD
- 16.06 - 16.18 **Rheumatic Heart Disease in Samoa**  
Marvin Allen, MD
- 16.18 - 16.30 **Rheumatic Heart Disease Collaboration in Mozambique**  
Daniel Sidi, MD
- 16.30 - 17.00 **Discussion**
- Concurrent Session III: Mechanisms & Prevention of Bioprosthetic Degeneration**  
**Moderator:** Robert Levy, MD  
Jean-Christian Roussel, MD
- 15.30 - 15.42 **The Pathophysiologic Determinants of How and Why Valve Bioprostheses Fail**  
Gaetano Thiene, MD
- 15.42 - 15.54 **Bioprosthetic Heart Valve Structural Degradation: Biomechanical Mechanisms, Modeling, Performance**  
Michael Sacks, Ph.D.
- 15.54 - 16.06 **The Impact of Oxidative Modifications on Non-Calcific Bioprosthetic Heart Valve Failure**  
Giovanni Ferrari, Ph.D.
- 16.06 - 16.18 **Immunogenic non-human carbohydrate antigen expression in bioprostheses. Potential link to structural deterioration**  
Vered Padler-Karavani, Ph.D.
- 16.18 - 16.30 **Pathogenesis and Mitigation of Bioprosthetic Structural Degeneration Due to Mineralization**  
Robert Levy, MD
- 16.30 - 17.00 **Discussion**
- Concurrent Session IV: 3-D Echo Imaging**  
**Moderators:** Joseph Maalouf, MD  
Francesco Faletra, MD  
Alain Berrebi, MD
- 15.30 - 15.42 **The Incremental Value of 3D Echocardiography for Valve Analysis of Mitral and Aortic Regurgitation**  
Alain Berrebi, MD
- 15.42 - 15.54 **Benefits of Imaging the Tricuspid Valve Using 3D Echocardiography**  
Rebecca Hahn, MD
- 15.54 - 16.06 **The Evolving Role of 3D TEE in Transcatheter Edge-to-Edge Mitral Valve Repair**  
Joseph Maalouf, MD
- 16.06 - 16.18 **The Role of 3D TEE in Guiding Transcatheter Closure of Mitral Periprosthetic Leaks and Valve-in-valve**

**Implantation**

Sunil Mankad, MD

- 16.18 - 16.30 **New Trends in Echo-Guiding Percutaneous Procedures: The X-Ray-3D Echo Fusion Imaging**  
Francesco Faletta, MD
- 16.30 - 17.00 **Discussion**
- Concurrent Session V: Endocarditis**  
**Moderators:** Mariana Mirabel, MD  
Milind Desai, MD
- 15.30 - 15.42 **Prophylaxis of Infective Endocarditis**  
Ann Bolger, MD
- 15.42 - 15.54 **Incremental Value of Multimodality Imaging in IE**  
Milind Desai, MD
- 15.54 - 16.06 **Endocarditis Team**  
Milind Desai, MD
- 16.06 - 16.18 **CDRIE**  
Charles Love, MD
- 16.18 - 16.30 **Timing of Valve Surgery in Adults**  
Jean-Francois Obadia, MD
- 16.30 - 16.35 **Worldwide Challenges in IE**  
Mariana Mirabel, MD
- 16.35 - 17.00 **Discussion**
- 17:00 - 17.30 **Annual Business Meeting**
- 17.30 - 19:00 **Welcome Reception & [Moderated Poster Competition](#)**

**FRIDAY, MARCH 18**

- 8.30 - 10.00 **Concurrent Session I: Degenerative MR**  
**Moderators:** Francesco Grigioni, MD  
David Adams, MD
- 8.30 - 8.42 **Anatomy and Physiopathology Through Different Imaging Modalities**  
Vuyisile Nkomo, MD
- 8.42 - 8.54 **Natural History Studies and Indications for Surgery**  
Francesco Grigioni, MD
- 8.54 - 9.06 **Mitral Repair is Always the Preferred Surgical Technique to Treat Degenerative Mitral Regurgitation (or Maybe Not)**  
David Adams, MD
- 9.06 - 9.18 **Percutaneous Treatment of Degenerative Mitral Regurgitation: Where Do We Stand and Where Should We Go?**  
Francesco Maisano, MD
- 9.18 - 9.30 **Rational and Potential Benefits of Minimally Invasive Surgery**  
Didier Loulmet, MD
- 9.30 - 10.00 **Discussion**
- Concurrent Session II: Managing Complications of Transcatheter Valve Therapies**  
**Moderators:** Jeorg Kempfert, MD  
Matthew Verghese, MD
- 8.30 - 8.40 **Valve Embolization**  
Gurpreet Sandhu, MD
- 8.40 - 8.50 **TAVR Related Mitral Regurgitation**  
Verghese Matthew, MD
- 8.50 - 9.00 **Aortic Annular Rupture/TAVR Catastrophe**  
Kevin Greason, MD
- 9.00 - 9.10 **Aortic Dissection**  
Norman Mangner, MD
- 9.10 - 9.20 **Annular Rupture: How to avoid and how to manage**  
Axel Unbehaun, MD
- 9.20 - 9.30 **Stroke during TAVR**  
Jorg Kempfert, MD
- 9.30 - 10.00 **Discussion**
- Concurrent Session III: Valve Calcification: Clinical & Basic Science**  
**Moderators:** Jordan Miller, MD  
David Messika-Zeitoun, MD
- 8.30 - 8.45 **Animal Models of Valve Disease: Great Utility or Ultimate Futility?**  
Jordan Miller, MD
- 8.45 - 9.00 **Leveraging the Genetics of Valve Calcification at the Dawn of Precision Medicine**  
Yohan Bosse, MD
- 9.00 - 9.15 **Deriving Prognostic Information from Valve Calcification: "The Doctor Will CT You Now...."**  
David Messika-Zeitoun, MD
- 9.15 - 9.30 **New Imaging Modalities in Valve Disease: The Next Wave of Actionable Intelligence**



Marc Dweck, MD

9.30 - 10.00 **Discussion****Concurrent Session IV: Heart Valve Imaging Keynote & Abstracts****Moderator:** Jim Thomas, MD8.30 - 8.45 **Keynote**

Jim Thomas, MD

8.45 - 8.55 **A29. Assessment of Myocardial Fibrosis in Aortic Stenosis using Cardiac Magnetic Resonance Imaging**Calvin Chin<sup>1</sup>, **Russell J. Everett**<sup>2</sup>, Jacek Kwiecinski<sup>3</sup>, Alex Vesey<sup>2</sup>, Emily Yeung<sup>2</sup>, Gavin Esson<sup>2</sup>, William Jenkins<sup>2</sup>, Maria Koo<sup>2</sup>, Saeed Mirsadraee<sup>2</sup>, Audrey White<sup>2</sup>, Alan Japp<sup>2</sup>, Sanjay Prasad<sup>4</sup>, Scott Semple<sup>5</sup>, David Newby<sup>2</sup>, Marc Dweck<sup>2</sup>.<sup>1</sup>Department of Cardiovascular Science, National Heart Center, Singapore, Singapore, <sup>2</sup>University of Edinburgh, Edinburgh, United Kingdom, <sup>3</sup>First Department of Cardiology, Poznan University of Medical Sciences, Poland, <sup>4</sup>Royal Brompton Hospital, London, United Kingdom, <sup>5</sup>Clinical Research Imaging Centre, Edinburgh, United Kingdom.8.55 - 9.05 **A30. Causes and Mechanisms of Isolated Mitral Regurgitation in the Community: Impact and Outcome****Volha Dziadzko**, Marie-Annick Clavel, Maurice Enriquez-Sarano.  
Mayo Clinic, Rochester, MN, USA.9.05 - 9.15 **A31. Aortic Valve Stenosis Complicates the Hemodynamic Hypothesis for Regional Bicuspid Aortic Valve Aortopathy Development****Alex J. Barker**<sup>1</sup>, Pim van Ooij<sup>2</sup>, Emilie Bollache<sup>1</sup>, S Chris Malaisrie<sup>1</sup>, Patrick M. McCarthy<sup>1</sup>, Jeremy Collins<sup>1</sup>, James Carr<sup>1</sup>, Paul W. M. Fedak<sup>3</sup>, Michael Markl<sup>1</sup>.<sup>1</sup>Northwestern University, Chicago, IL, USA, <sup>2</sup>Amsterdam Medical Center, Amsterdam, Netherlands, <sup>3</sup>University of Calgary, Calgary, AB, Canada.9.15 - 9.25 **A32. Low Ejection Fraction, Low-Flow, Low-Gradient Aortic Stenosis: Dobutamine Stress Echocardiographic Criteria to Assess Stenosis Severity**Eden Touboul<sup>1</sup>, Abdellaziz Dahou<sup>1</sup>, Ian Burwash<sup>2</sup>, Maurice Enriquez-Sarano<sup>3</sup>, Jutta Bergler-Klein<sup>4</sup>, Stefan Orwat<sup>5</sup>, Helmut Baumgartner<sup>5</sup>, Gerald Mundigler<sup>4</sup>, Eric Larose<sup>1</sup>, Philippe Pibarot<sup>1</sup>, **Marie-Annick Clavel**<sup>1</sup>.<sup>1</sup>IUCPQ, Quebec, QC, Canada, <sup>2</sup>Ottawa Heart Institute, Ottawa, ON, Canada, <sup>3</sup>Mayo Clinic, Rochester, MN, USA, <sup>4</sup>Vienna General Hospital, Vienna, Austria, <sup>5</sup>Muenster general hospital, Muenster, Germany.9.25 - 9.35 **A33. The En-Face Quantitative Analysis of Valvular Calcification; Novel Physiological Insights into Aortic Stenosis using 4-dimensional Computed Tomography.****William S. Jenkins**<sup>1</sup>, Louis Simard<sup>2</sup>, Jérôme Hourdain<sup>2</sup>, Marie-Annick Clavel<sup>2</sup>, Maurice Enriquez-Sarano<sup>1</sup>.<sup>1</sup>Mayo Clinic, Rochester, MN, USA, <sup>2</sup>Laval University, Quebec, QC, Canada.9.35 - 9.45 **A34. Prognostic Value of Longitudinal Strain in Asymptomatic Aortic Stenosis and Preserved Left ventricular Ejection Fraction - The COFRASA/GENERAC Study****Maria Melissopoulou**, Virginia Nguyen, Tiffany Mathieu, David Attias, Julien Dreyfus, Isabelle Codogno, Alec Vahanian, David Messika-Zeitoun.

Bichat Claude Bernard Hospital, Paris, France.

9.45 - 9.55 **A35. Non-Invasive Assessment of Paravalvular Aortic Regurgitation Following Transcatheter Aortic Valve Replacement Based on Energy Loss****Ali N. Azadani**<sup>1</sup>, Peyman N. Azadani<sup>2</sup>.<sup>1</sup>University of Denver, Denver, CO, USA, <sup>2</sup>University of Utah School of Medicine, Salt Lake City, UT, USA.**Concurrent Session V: Heart Valve Outcomes II Keynote & Abstracts****Moderator:** Jose Pomar, MD8.30 - 8.45 **Keynote**

Jose Pomar, MD

8.45 - 8.55 **A36. Early Versus Delayed Surgery for Patients with Valvular Infective Endocarditis Complicated by Embolic Ischemic Cerebrovascular Events: A Meta-Analysis of 14 Studies****Christos G. Mihos**<sup>1</sup>, Andres M. Pineda<sup>2</sup>, Orlando Santana<sup>2</sup>.<sup>1</sup>Massachusetts General Hospital, Boston, MA, USA, <sup>2</sup>Columbia University, Division of Cardiology, Mount Sinai Heart Institute, Miami Beach, FL, USA.8.55 - 9.05 **A37. Matched Comparison of Self Expanding Transcatheter Heart Valves for the Treatment of Failed Surgical Aortic Bioprosthesis: Insights from the Valve in Valve International Data (VIVID) Registry.****Sami M. Alnasser**<sup>1</sup>, Asim Cheema<sup>1</sup>, Ran Kornowski<sup>2</sup>, Matheus Simonato<sup>3</sup>, Thomas Walther<sup>4</sup>, Azeem Latib<sup>5</sup>, Luca Testa<sup>6</sup>, JeanClaude Laborde<sup>7</sup>, David Hildick Smith<sup>8</sup>, Marco Barbanti<sup>9</sup>, WonKeun Kim<sup>10</sup>, Francesco Bedogni<sup>11</sup>, Hafid Amrane<sup>12</sup>, A. J. van Boven<sup>13</sup>, Marc Pelletier<sup>14</sup>, Josep RodesCabau<sup>15</sup>, Joelle Kefer<sup>16</sup>, Christian Frerker<sup>17</sup>, Nicolas M Van Mieghem<sup>18</sup>, Ganesh Manoharan<sup>19</sup>, Stephen G Worthley<sup>20</sup>, Anita W Asgar<sup>21</sup>, carmelo sgro<sup>22</sup>, John Webb<sup>23</sup>, Danny Dvir<sup>24</sup>.<sup>1</sup>University of Toronto, Toronto, ON, Canada, <sup>2</sup>Rabin Medical Center, Tel Aviv, Israel, <sup>3</sup>Escola Paulista de Medicina, Sao Paulo, Brazil, <sup>4</sup>Kerckhoff Heart Center, Bad Nauheim, Germany, <sup>5</sup>Ospedale San Raffaele, Milan, Italy,<sup>6</sup>Istituto Clinico S. Ambrogio, Milan, Italy, <sup>7</sup>St. George hospital, London, Plumtree Nottingham, United Kingdom,<sup>8</sup>Royal Sussex County Hospital, Brighton, United Kingdom, <sup>9</sup>Ferrarotto Hospital, University of Catania, Catania, Italy, <sup>10</sup>Kerckhoff Heart Center, Bad Nauheim, Germany, <sup>11</sup>Istituto Clinico S Ambrogio, Milan, Italy, <sup>12</sup>MedischCentrum, Leeuwarden, Netherlands, <sup>13</sup>Medisch Centrum Leeuwarden, Leeuwarden, Netherlands, <sup>14</sup>NewBrunswick Heart Center, Saint John, NB, Canada, <sup>15</sup>Quebec Heart and Lung Institute, Laval, QC, Canada,<sup>16</sup>Cliniques SaintLuc, Université Catholique de Louvain, Brussels,, Belgium, <sup>17</sup>Asclepios Clinic St. Georg, Hamburg,Germany, <sup>18</sup>Erasmus MC, Rotterdam, Rotterdam, Netherlands, <sup>19</sup>Royal Victoria Hospital, Belfast, United Kingdom,<sup>20</sup>The University of Adelaide,, Adelaide, Australia, <sup>21</sup>Montreal Heart Institute, Montreal, QC, Canada,<sup>22</sup>FERRAROTTO'S HOSPITAL,, CATANIA, Italy, <sup>23</sup>St Pauls Hospital, Vancouver, BC, Canada, <sup>24</sup>St Paul's Hospital,

Vancouver, BC, Canada.

9.05 - 9.15 **A38. Transcatheter Mitral Valve Implantation: One Year Outcomes of the First-In-Man Experience**

- [with an Apically Tethered Device](#)  
**Alison Duncan**, Cesare Quarto, Simon Davies, Anselm Uebing, Neil Moat.  
*The Royal Brompton Hospital, London, United Kingdom.*
- 9.15 - 9.25 **A39. Conventional Mitral Valve Surgery in MitraClip Candidates**  
**Thilo Noack**, Yamen Al Ghanam, Philipp Kiefer, Fabian Emrich, Philipp Lurz, David M. Holzhey, Farhad Bakhtiary, Martin Misfeld, Gerhard Schuler, Friedrich-Wilhelm Mohr, Joerg Seeburger.  
*Heart Center Leipzig University, Leipzig, Germany.*
- 9.25 - 9.35 **A40. Epidemiology of Valvular Heart Diseases: A 30-year Retrospective of Hospitalizations and In-Hospital Mortality in New York State**  
**Phyllis G. Supino, EdD**, Ofek Y. Hai, DO, Jeffrey S. Borer, MD.  
*SUNY Downstate Medical Center, Beverly, MA, USA.*
- 9.35 - 9.45 **A41. Right Ventricular Function by Speckle Tracking and Outcomes In Low-flow, Low Gradient Aortic Stenosis with Low LVEF**  
**Abdellaziz Dahou<sup>1</sup>**, Marie-Annick Clavel<sup>1</sup>, Romain Capoulade<sup>2</sup>, Philipp E. Bartko<sup>2</sup>, Julien Magne<sup>3</sup>, Gerald Mundigler<sup>4</sup>, Jutta Bergler-Klein<sup>4</sup>, Ian Burwash<sup>5</sup>, Julia Mascherbauer<sup>4</sup>, Henrique B. Ribeiro<sup>1</sup>, Kim O'Connor<sup>1</sup>, Helmut Baumgartner<sup>6</sup>, Mario Senechal<sup>1</sup>, Jean G. Dumesnil<sup>7</sup>, Raphael Rosenhek<sup>4</sup>, Josep Rodés-Cabau<sup>1</sup>, Philippe Pibarot<sup>1</sup>.  
<sup>1</sup>QUÉBEC HEART-LUNG INSTITUTE, QUÉBEC, QC, Canada, <sup>2</sup>Massachusetts General Hospital, Boston, MA, USA, <sup>3</sup>Centre Hospitalier Universitaire Limoges, Limoges, France, <sup>4</sup>Division of Cardiology, Medical University of Vienna, Vienna, Austria, <sup>5</sup>University of Ottawa Heart Institute, Ottawa, ON, Canada, <sup>6</sup>Department of Cardiovascular Medicine, University Hospital Muenster, Muenster, Germany, <sup>7</sup>Laval University, QUÉBEC, QC, Canada.
- 9.45 - 9.55 **A42. Does The Use Of A Decision Aid Improve Decision Making In Prosthetic Heart Valve Selection? A Multicenter Randomized Clinical Trial**  
**Nelleke M. Korteland<sup>1</sup>**, Yunus Ahmed<sup>2</sup>, David R. Koolbergen<sup>2</sup>, Marjan Brouwer<sup>3</sup>, Frederiek de Heer<sup>3</sup>, Jolanda Kluin<sup>3</sup>, Eline F. Bruggemans<sup>4</sup>, Robert J.M. Klautz<sup>4</sup>, Anne M. Stiggelbout<sup>4</sup>, Jeroen J.J. Bux<sup>5</sup>, Ad J.J.C. Bogers<sup>1</sup>, Johanna J.M. Takkenberg<sup>1</sup>.  
<sup>1</sup>Erasmus MC, Rotterdam, Netherlands, <sup>2</sup>AMC, Amsterdam, Netherlands, <sup>3</sup>UMC Utrecht, Utrecht, Netherlands, <sup>4</sup>LUMC, Leiden, Netherlands, <sup>5</sup>Diakonessenhuis, Utrecht, Netherlands.
- 10:00 - 10:30 **Coffee Break & Poster Viewing**
- 10.30 - 12.00 **Concurrent Session I: Dystrophic Aortic Insufficiency: Limits of Current Guidelines**  
**Moderators:** Emmanuel Lansac, MD  
Jean Louis Vanoverschelde, MD
- 10.30 - 10.40 **The LV dysfunction in AR: New ways to assess and decide when to operate?**  
Linda Giliam, MD
- 10.40 - 10.50 **Quantification of AR: the heart of the matter**  
Marta Sitges, MD
- 10.50 - 11.00 **Aortic root aneurysm: How to measure, when and how to operate**  
Thoralf M Suundt, MD
- 11.00 - 11.10 **MRI Aortic Compliance and Risk of Dissection**  
Emilie Bollache, MD
- 11.10 - 11.20 **Tricuspid aortic valve repair: Is It Worthwhile?**  
Jan Vojacek, MD
- 11.20 - 11.30 **Bicuspid aortic valve repair: Is It Worthwhile?**  
Ismail El-Hamamsy, MD
- Concurrent Session II: Mitral Valve Prolapse: Clinical & Basic Science**  
**Moderators:** Susan Slaughaupt, MD  
Russell Norris, MD  
Robert Levine, MD
- 10.30 - 10.42 **Serotonergic Regulation of Mitral Valve Prolapse**  
Robert Levy, MD
- 10.42 - 10.54 **Identification of the Cilia Gene, DZIP1, in a large family with Non-syndromic MVP**  
David Milan, MD
- 10.54 - 11.06 **Genetic Landscape and Sporadic Mitral Valve Prolapse: Unifying Concepts for Disease Etiology?**  
Nabila Bouatia-Naji, MD
- 11.06 - 11.18 **Familial MVP Studies Lead to New Candidate Disease Genes**  
Jean-Jacques Schott, MD
- 11.18 - 11.30 **Translating Genetic and Biological Discoveries into Remedial Therapies for MVP**  
Roger Markwald, MD
- 11.30 - 12.00 **Discussion**
- Concurrent Session III: Achieving Regulatory Approval**  
**Moderators:** Jeffrey S. Borer, MD  
Wei Sun, Ph.D
- 10.30 - 10.40 **Medical Device Regulatory Essentials: Approval pathways for indication expansions and sub-populations?**  
Nicole Ibrahim, MD
- 10.40 - 10.50 **Preclinical and Bench Testing - What Can be Inferred?: New Technical Developments**  
Changfu Wu, PhD
- 10.50 - 11.00 **What can we expect from VARC-3?**
- 11.00 - 11.10 **ISO Guidances for Industry and Regulatory Approval Standards: How do They Intersect? Role of modeling**  
Francis Duray, PhD



- 11.10 - 11.20 **The CE Mark Process - Feasibility Demonstration or Proof of Performance/Safety? How to Select Minimal Sample Sizes?**  
Bassil Akra, MD
- 11.20 - 11.30 **How Does Industry Respond to Development Issues Involving Two Disparate Approval Systems**
- 11.30 - 12.00 **Discussion**
- Concurrent Session IV: Mechanical Valve & Anticoagulation**
- Moderators:** Hector Michelena, MD  
Sabrina Phillips MD  
Bernard Lung, MD
- 10.30 - 10.45 **Mechanical Valve and Pregnant: What to do?**  
Sabrina Phillips, MD
- 10.45 - 11.00 **New Anticoagulants and Mechanical Valves: Compatible?**  
Waldemar Wysokinski, MD
- 11.00 - 11.15 **Do Mechanical Valves Thrombose More Than Bioprostheses?**  
Sorin Pislari, MD
- 11.15 - 11.30 **Can I recommend a lower INR target or aspirin and clopidogrel?**  
John Puskas, MD
- 11.30 - 12.00 **Discussion**
- Concurrent Session V: Minimally Invasive Valve Surgery Keynote & Abstracts**
- Moderator:** W. Randolph Chitwood, MD
- 10:30 - 10:45 **Keynote**  
W. Randolph Chitwood, MD
- 10.45 - 10.55 **A43. [Minimal Invasive and Sutureless Technology: Are These Advantages for Patients Undergoing Aortic Valve Replacement?](#)**  
**Steffen Pfeiffer**, Joachim Sirch, Jurij M. Kalisnik, Ferdinand Vogt, Theodor Fischlein, Giuseppe Santarpino.  
*Klinikum Nürnberg, Paracelsus Medical University, Nuremberg, Germany.*
- 10.55 - 11.05 **A44. [Minimally Invasive Versus Conventional Extracorporeal Circulation In Minimally Invasive Mitral Valve Surgery](#)**  
**Christian J. Rustenbach**, Ulrich F.W. Franke, Ragi Nagib, Samir Ahad, Adrian Ursulescu, Hardy Baumbach.  
*Robert-Bosch-Hospital, Stuttgart, Germany.*
- 11.05 - 11.15 **A45. [Minimally Invasive Mitral Valve Surgery: Technique of Choice for Cardiac Reoperations](#)**  
**Daide Ricci**, Cristina Barbero, Giovanni Marchetto, Suad ElQarra, Massimo Boffini, Mauro Rinaldi.  
*AOU Città della Salute e della Scienza di Torino - University of Turin, Turin, Italy.*
- 11.15 - 11.25 **A46. [Transcatheter Aortic Valve Replacement in Patients with Pulmonary Hypertension](#)**  
**Mohammad Rajaei**<sup>1</sup>, Jose Condado<sup>2</sup>, Hanna Jensen<sup>1</sup>, Jose Binongo<sup>3</sup>, Chandan Devireddy<sup>2</sup>, Bradley Leshnowe<sup>1</sup>, Jessica Forcillo<sup>1</sup>, Stamatios Lerakis<sup>2</sup>, Eric Sarin<sup>1</sup>, Kreton Mavromati<sup>2</sup>, Robert Guyton<sup>1</sup>, James Stewart<sup>2</sup>, Peter Block<sup>2</sup>, Lillian Tsai<sup>1</sup>, Amy Simone<sup>1</sup>, Patricia Keegan<sup>1</sup>, Vasilis Babaliaros<sup>2</sup>, Vinod Thourani<sup>1</sup>.  
<sup>1</sup>Emory Structural Heart and Valve Center, Joseph B. Whitehead Department of Surgery, Division of Cardiothoracic Surgery, Atlanta, GA, USA, <sup>2</sup>Emory Structural Heart and Valve Center, Department of Medicine, Division of Cardiology, Atlanta, GA, USA, <sup>3</sup>Emory University Rollins School of Public Health, Atlanta, GA, USA.
- 11.25 - 11.35 **A47. [Is there an Impact on Postoperative Morbidity and Long Term Survival after Minimal Access Aortic Valve Replacement](#)**  
**Sven Lehmann**, Denis R. Merk, Sergey Leontyev, Christian Etz, Martin Misfeld, Martin Haensig, Anna K. Funkat, Jens Garbade, Friedrich W. Mohr.  
*Heartcenter Leipzig, Leipzig, Germany.*
- 11.35 - 11.45 **A48. [New Transcervical Approach to Transcatheter Mitral Valve Replacement \(TMVR\) using CoreVista System](#)**  
Cristiano Spadaccio, **Fraser W. Sutherland**.  
*Golden Jubilee National Hospital, Glasgow, United Kingdom.*
- 11.45 - 11.55 **A49. [Aortic Valve Replacement via Right Mini-Thoracotomy: Is it Really Minimally Invasive?](#)**  
**Mauro Del Giglio**, Simone Calvi, Simone Turci, Marco Pagliaro, Marco Panzavolta, Elisa Mikus.  
*Maria Cecilia Hospital, GVM for Care & Research, Cotignola (Ra), Italy.*
- 12:00 - 13:30 **Industry Lunch Symposium**
- 13.30 - 15.00 **Concurrent Session I: Great Debates**
- 13.30 - 14.15 **Debate I: Robotic**  
**Moderators:** Husam Balkhy, MD  
Rakesh Suri, MD
- 13.30 - 13.45 **I Do Not Need Robotic Approach**  
David Adams, MD
- 13.45 - 14.00 **Patients Adore Robotic Repair**  
Doug Murphy, MD
- 14.00 - 14.15 **Reconciliation with moderators**
- 14.15 - 15.00 **Debate II: Low Gradient Normal EF Severe Aortic Stenosis**  
**Moderator:** David Messika-Zeitoun, MD  
Maurice Enriquez-Sarano, MD
- 14.15 - 14.30 **Severe AS Low-Gradient Does Not Exist**  
Jene Louis Vanoverschelde, MD
- 14.30 - 14.45 **Severe AS Low-Gradient Is Genuine and Requires Treatment**  
Phillippe Pibarot, DVM, PhD

14.45 - 15.00 **Reconciliation with moderators**

**Concurrent Session II: Ischemic Functional MR: New Paradigms From Mechanism to Treatment**

**Moderators:** Nozomi Watanabe, MD  
Judy Hung, MD

13.30 - 13.42 **How Big is the Problem? Demographics and Prognosis of Ischemic Functional MR?**  
Judy Hung, MD

13.42 - 14.00 **Secondary/Ischemic/Functional/Type 3b? How Do We Define and Recognize It? Imaging Features**  
Nozomi Watanabe, MD

**Who Should We Fix? How Should We Fix It? Lessons Learned from the CTSN Trials:**

14.00 - 14.15 **Severe MR**  
Michael Acker, MD

14.15 - 14.30 **Moderate MR**  
Robert Michler, MD

14.30 - 14.45 **Subvalvular Approaches to MV Repair for Ischemic MR**  
Gorav Ailawadi, MD

14.45 - 15.00 **Discussion**

**Concurrent Session III: Transcatheter Valve Implantation in Failed Bioprostheses/Rings: The Valve-in-Valve Approach**

**Moderators:** Danny Dvir, MD  
Elaine Tseng, MD

13.30 - 13.40 **Failure of Surgical Valves: The Scope of the Problem**  
Marie Annick Clavel, MD

13.40 - 13.50 **In Vitro Assessment of Edwards Sapien XT vs. Medtronic Corevalve in Surgical Bioprostheses**  
Ulrich Steinseifer, MD

13.50 - 14.00 **Introduction to Valve-In-Valve Therapies: What Does Clinical Data Show?**  
Danny Dvir, MD

14.00 - 14.10 **Elevated Gradients: The "Achilles' Heel" of Valve in Valve Procedures**  
Sabine Bleiziffer, MD

14.10 - 14.20 **Mitral Valve in Valve/Valve in Ring**  
Ehud Rannani, MD

14.20 - 14.30 **Tricuspid Valve in Valve/Valve in Ring**  
TBD

14.30 - 15.00 **Discussion**

**Concurrent Session IV: Basic Science to Elucidate Mechanisms of Valve Disease Keynote & Abstracts**

**Moderators:** Elena Aikawa, MD

13:30 - 13:45 **Keynote Speaker**  
Elena Aikawa, MD

13.45 - 13.55 **A50. [Cadherin-11 Coordinates Cellular Migration and Extracellular Matrix Remodeling During Aortic Valve Development and Promotes Calcification in Mature Aortic Valves](#)**

**Derek C. Sung**, Caitlin J. Bowen, Kiran A. Vaidya, Jonathan T. Butcher.  
*Cornell University, Meinig School of Biomedical Engineering, Ithaca, NY, USA.*

13.55 - 14.05 **A51. [Overexpression Of Long Non-coding Rna During Calcific Aortic Valve Stenosis Promotes An Osteogenic Program By Modifying The Epigenetic Signature Of Notch1](#)**

**Fayez Hadji**<sup>1</sup>, Marie-Chloé Boulanger<sup>1</sup>, Émilie Lavoie-Charland<sup>1</sup>, Nathalie Gaudreault<sup>1</sup>, Sandra Guauque-Olarte<sup>1</sup>, Rihab Bouchareb<sup>1</sup>, Mohamed Nsaibia<sup>1</sup>, Luigi Bouchard<sup>2</sup>, Yohan Bossé<sup>1</sup>, Patrick Mathieu<sup>1</sup>.

<sup>1</sup>Quebec Heart and Lung Institute, Quebec, QC, Canada, <sup>2</sup>Department of biochemistry, Faculty of Medicine and Health Sciences, Université de Sherbrooke, Sherbrooke, QC, Canada.

14.05 - 14.15 **A52. [Implication of Leptin in The Development of Calcific Aortic Valve Disease: Induction of Osteoblast Differentiation of Human Valvular Interstitial Cells Via the Akt And Erk Pathways](#)**

**Mickael Rosa**<sup>1</sup>, Rodrigo Lorenzi<sup>1</sup>, Ahmed Elkalioubie<sup>2</sup>, Madjid Tagzirt<sup>1</sup>, Ramadan Jashari<sup>3</sup>, Francis Juthier<sup>2</sup>, Antoine Rauch<sup>2</sup>, Anaïs Arbesu y Miar<sup>1</sup>, Delphine Corseaux<sup>1</sup>, André Vincentelli<sup>2</sup>, Bart Staels<sup>1</sup>, Eric Van Belle<sup>2</sup>, Sophie Susen<sup>2</sup>, Annabelle Dupont<sup>2</sup>.

<sup>1</sup>European Genomic Institute for Diabetes (E.G.I.D.), FR 3508, UNIV LILLE, Inserm UMR 1011; Institut Pasteur de Lille, F-59000, Lille, France, <sup>2</sup>European Genomic Institute for Diabetes (E.G.I.D.), FR 3508, UNIV LILLE, Inserm UMR 1011; Institut Pasteur de Lille, F-59000, Cardiovascular and Pulmonary, and Haematology Department, CHRU de Lille, Lille, France, <sup>3</sup>European Homograft Bank, c/o Military Hospital Queen Astrid, Brussels, Belgium.

14.15 - 14.25 **A53. [Shear-Sensitive miRNA-181b Impairs Anti-Inflammatory Signaling in the Aortic Valve Endothelium](#)**

**Jack Heath**, Joan Fernandez Esmerats, Rachel Simmons, Sandeep Kumar, Hanjoong Jo.  
*Emory University, Atlanta, GA, USA.*

14.25 - 14.35 **A54. [A Role for the Retinoblastoma Pathway in Aortic Valve Disease](#)**

**Marina Freytsis**<sup>1</sup>, Lauren Baugh<sup>2</sup>, Phil Hinds<sup>1</sup>, Lauren Black<sup>2</sup>, Gordon Huggins<sup>3</sup>.

<sup>1</sup>Tufts University, Boston, MA, USA, <sup>2</sup>Tufts University, Medford, MA, USA, <sup>3</sup>Tufts Medical Center, Boston, MA, USA.

14.35 - 14.45 **A55. [GWAS of Aortic Stenosis \(AS\) in patients with Bicuspid Aortic Valve \(BAV\) Disease](#)**

Mahyar Heydarpour, PhD<sup>1</sup>, Vanessa Monteiro-Vieira, BSc<sup>1</sup>, Karam Habchi, BSc<sup>1</sup>, Jan Sliwa, MD<sup>2</sup>, Martin Sigurdsson, MD, PhD<sup>1</sup>, Jochen Muehlschlegel, MD, MMSc<sup>1</sup>, Prem Shekar, MD<sup>3</sup>, Eric Isselbacher, MD<sup>4</sup>, Thoralf Sundt, MD<sup>4</sup>,

**Simon Body, MBChB, MPH**<sup>1</sup>.

<sup>1</sup>Brigham & Women's Hospital, Perioperative Genomics Center, Boston, MA, USA, <sup>2</sup>Brigham & Women's Hospital,

Cardiothoracic Anaesthesia, Boston, MA, USA, <sup>3</sup>Brigham & Women's Hospital, Heart & Vascular Center, Boston, MA, USA, <sup>4</sup>Massachusetts General Hospital, Corrigan Minehan Heart Center, Boston, MA, USA.

- 14.45 - 14.55 **A56. Genetic Association and Functional Studies Identifies GLIS1 as A Risk Locus for Mitral Valve Prolapse**  
 Christian Dina<sup>1</sup>, Nathan Tucker<sup>2</sup>, Francescaca Dellings<sup>3</sup>, Susan Slaugenhaupt<sup>4</sup>, Robert A. Levine<sup>5</sup>, Albert A. Hagège<sup>6</sup>, Jean-Jacques Schott<sup>7</sup>, Xavier Jeunemaitre<sup>8</sup>, David Milan<sup>2</sup>, Russell Norris<sup>9</sup>, **Nabila Bouatia-Naji<sup>10</sup>**.  
<sup>1</sup>Inserm UMR1087, CNRS UMR 6291, Institut du Thorax, Centre Hospitalier Universitaire (CHU), Nantes, France, <sup>2</sup>Cardiovascular Research Center, Massachusetts General Hospital, Charlestown, MA, USA, <sup>3</sup>Framingham Heart Study, Framingham, MA, USA, <sup>4</sup>Center for Human Genetic Research, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA, <sup>5</sup>Cardiac Ultrasound Laboratory, Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA, <sup>6</sup>AP-HP, Department of Cardiology, Hôpital Européen Georges Pompidou, INSERM UMR 970 | Européen Georges Pompidou, INSERM UMR970, Paris, France, <sup>7</sup>Inserm UMR1087, CNRS UMR 6291, Institut du Thorax, Centre Hospitalier Universitaire (CHU) Nantes, Nantes, France, <sup>8</sup>AP-HP, Département de Génétique, Hôpital Européen Georges Pompidou, INSERM U970 Paris Cardiovascular Research Center, Paris, France, <sup>9</sup>Cardiovascular Developmental Biology Center, Children's Research Institute, Medical University of South Carolina, Charleston, SC, USA, <sup>10</sup>INSERM UMR970 Paris Cardiovascular Research Center, Paris, France.

#### Concurrent Session V: Percutaneous Heart Valve Therapy Keynote & Abstracts

**Moderator:** Michael Mack, MD

- 13.30 - 13.45 **Keynote**  
 Michael Mack, MD
- 13.45 - 13.55 **A57. Transcatheter Tricuspid Valve Repair: Initial Results from the Multicentre First-in-Man Feasibility Trial**  
**Alec Vahanian<sup>1</sup>**, Francesco Maisano<sup>2</sup>, Jean-Michel Juiard<sup>1</sup>, Ottavio Alfieri<sup>3</sup>, Antonio Colombo<sup>3</sup>, Antonio L. Bartorelli<sup>4</sup>, Francesco Alamanni<sup>4</sup>, Azeem Latib<sup>3</sup>.  
<sup>1</sup>Hôpital Bichat, Université Paris-Diderot, Paris, France, <sup>2</sup>University Hospital Zurich, Zurich, Switzerland, <sup>3</sup>San Raffaele University Hospital, Milan, Italy, <sup>4</sup>Centro Cardiologico Monzino, I.R.C.C.S., University of Milan, Milan, Italy.
- 13.55 - 14.05 **A58. Crimp Induced Leaflet Damage and Calcification of Transcatheter Heart Valves**  
 Aditi Sinha<sup>1</sup>, Oleksandr Barannyk<sup>2</sup>, **Arash Kheradvar<sup>1</sup>**.  
<sup>1</sup>University of California, Irvine, Irvine, CA, USA, <sup>2</sup>Vivitro Labs Inc, Victoria, BC, Canada.
- 14.05 - 14.15 **A59. Transcatheter Replacement of Failed Bioprosthetic Valves: Comprehensive In-Vitro Bench Testing and Large In-Vivo Clinical Assessment of the Effect of Implantation Depth on Hemodynamics after Valve-in-Valve**  
**Matheus Simonato<sup>1</sup>**, John Webb<sup>1</sup>, Ran Kornowski<sup>2</sup>, Alec Vahanian<sup>3</sup>, Christian Frerker<sup>4</sup>, Henrik Nissen<sup>5</sup>, Sabine Bleiziffer<sup>6</sup>, Alison Duncan<sup>7</sup>, Guilherme F. Attizzani<sup>8</sup>, Eric Horlick<sup>9</sup>, Azeem Latib<sup>10</sup>, Raffi Bekeredjian<sup>11</sup>, Marco Barbanti<sup>12</sup>, Thierry Lefevre<sup>13</sup>, Alfredo Cerillo<sup>14</sup>, Jose Maria-Hernandez<sup>15</sup>, Giuseppe Bruschi<sup>16</sup>, Kostantinos Spargias<sup>17</sup>, Alessandro Iadanza<sup>18</sup>, Stephen Brecker<sup>19</sup>, Jose Honorio Palma<sup>20</sup>, Ariel Finkelstein<sup>21</sup>, Mohamed Abdel-Wahab<sup>22</sup>, Pedro Lemos<sup>23</sup>, Anna Sonia Petronio<sup>24</sup>, Didier Champagnac<sup>25</sup>, Jan-Malte Sinning<sup>26</sup>, Stefano Salizzoni<sup>27</sup>, Massimo Napodano<sup>28</sup>, Claudia Fiorina<sup>29</sup>, Antonio Marzocchi<sup>30</sup>, Martin Leon<sup>31</sup>, Danny Dvir<sup>1</sup>.  
<sup>1</sup>St. Paul's Hospital, Vancouver, Canada; <sup>2</sup>Rabin Medical Center, Petah Tikva, Israel; <sup>3</sup>Hôpital Bichat-Claude Bernard, Paris, France; <sup>4</sup>Asklepios Klinik, Hamburg, Germany; <sup>5</sup>Odense University Hospital, Odense, Denmark; <sup>6</sup>Deutsches Herzzentrum München, Munich, Germany; <sup>7</sup>Royal Brompton and Harefield, London, United Kingdom; <sup>8</sup>Case Western Research University, Cleveland, United States; <sup>9</sup>Peter Munk Cardiac Centre, Toronto, Canada; <sup>10</sup>Ospedale San Raffaele, Milan, Italy; <sup>11</sup>Universitätsklinikum Heidelberg, Heidelberg, Germany; <sup>12</sup>Ospedale Ferrarotto, Catania, Italy; <sup>13</sup>Hôpital Jacques Cartier, Massy, France; <sup>14</sup>L'Ospedale del Cuore G. Pasquinucci, Massa, Italy; <sup>15</sup>Hospital Universitario Virgen de la Victoria, Malaga, Spain; <sup>16</sup>Ospedale Niguarda Ca' Granda, Milan, Italy; <sup>17</sup>Hygeia Hospital, Athens, Greece; <sup>18</sup>Azienda Ospedaliera Universitaria Senese, Siena, Italy; <sup>19</sup>St. George's Hospital, London, United Kingdom; <sup>20</sup>Escola Paulista de Medicina - UNIFESP, Sao Paulo, Brazil; <sup>21</sup>Tel Aviv Sourasky Medical Center, Tel Aviv, Israel; <sup>22</sup>Segeberger Kliniken, Bad Segeberg, Germany; <sup>23</sup>Faculdade de Medicina da Universidade de Sao Paulo, Sao Paulo, Brazil; <sup>24</sup>Università di Pisa, Pisa, Italy; <sup>25</sup>Clinique du Tonkin, Villeurbanne, France; <sup>26</sup>Universitätsklinikum Bonn, Bonn, Germany; <sup>27</sup>Città della Salute e della Scienza - Molinette Hospital, Torino, Italy; <sup>28</sup>Università degli Studi di Padova, Padova, Italy; <sup>29</sup>Spedali Civili di Brescia, Brescia, Italy; <sup>30</sup>Policlinico Sant'Orsola Malpighi, Bologna, Italy; <sup>31</sup>Columbia University Medical Center, New York, United States.
- 14.15 - 14.25 **A60. Mitral Valve Reconstruction with the Cardioband System: Results of the Multicentre Feasibility Trial**  
**Francesco Maisano<sup>1</sup>**, Karl-Heinz Kuck<sup>2</sup>, Ottavio Alfieri<sup>3</sup>, Antonio Colombo<sup>3</sup>, Stephan Baldus<sup>4</sup>, Alec Vahanian<sup>5</sup>, Georg Nickenig<sup>6</sup>.  
<sup>1</sup>University Hospital Zurich, Zurich, Switzerland, <sup>2</sup>Asklepios Klinik St. Georg Hospital, Hamburg, Germany, <sup>3</sup>San Raffaele University Hospital, Milan, Italy, <sup>4</sup>University Hospital Köln, Cologne, Germany, <sup>5</sup>Assistance Publique-Hôpitaux de Paris, Bichat Hospital, Paris, France, <sup>6</sup>University Hospital Bonn, Bonn, Germany.
- 14.25 - 14.35 **A61. Frame Flexibility Effects on Leaflet Stress Distribution: Comparison of Transcatheter versus Surgical Aortic Valve Bioprostheses**  
 Mostafa Abbasi, Mohammed Barakat, Koohyar Vahidkhal, **Ali Azadani**.  
 University of Denver, Denver, CO, USA.
- 14.35 - 14.45 **A62. Sinus Flow Stasis Occurs in Valve in Valve Transcatheter Aortic Valve Implantation**  
**Lakshmi P. Dasi<sup>1</sup>**, Hoda Hatoum<sup>1</sup>, Brandon Moore<sup>1</sup>, Pablo Maureira<sup>2</sup>, Juan Crestanello<sup>1</sup>.  
<sup>1</sup>The Ohio State University, Columbus, OH, USA, <sup>2</sup>Lorraine University Hospital of Nancy, Nancy, France.
- 14.45 - 14.55 **A63. Systematic Transoesophageal Echocardiography after Mitral Valve Replacement - Prevalence and Determinants of Periprosthetic Leakage**  
**Verdonk Constance**.  
 Hopital Bichat, Paris, France.
- 15.00 - 15.30 **Coffee Break & Poster Viewing**

**15.30 - 17.00 Concurrent Session I: Rapid Fire: Aortic Valve & Other Innovations**

**Moderator:** Carlos Ruiz, MD  
Eric Sarin, MD  
Michael Borger, MD  
Jeorg Seeburger, MD

**In-Audience Moderators:** Maurice Sarano, MD  
Rakesh Suri, MD

5 min presentation.

15.30 – 15.35 **Dangerous Calcium patterns high risk for root rupture**  
Jonathan Leipsic, MD

15.35 – 15.40 **Valve in valve of a severely regurgitant bioprosthesis**  
Amit Segev, MD

15.40 – 15.45 **DirectFlow TAVR**  
Charles Davidson, MD

15.45 – 15.50 **Portico TAVR**  
Gregory Fontana, MD

15.50 – 15.55 **Jenavalve for aortic insufficiency**  
Sabine Bleiziffer, MD

15.55 – 16.00 **I prefer the transapical approach for TAVR**  
Kevin Greason, MD

16.00 – 16.05 **I can do trans-caval TAVR**  
Vasilis Babaliaros

16.05 – 16.10 **I can do valve in valve in small prostheses**  
Norman Mangner, MD

16.10 – 16.15 **The Claret device To avoid Stroke**  
Tamim Nazif, MD

16.15 – 16.20 **Periprosthetic AR**  
Paul Sorajja, MD

16.20 – 16.25 **Repositioning the TAVR**

16.25 – 16.30 **4Tech tricuspid technology**  
Denti Paolo, MD

16.30 – 17.00 **Discussion**

**Concurrent Session II: Valve Disease Registries**

**Moderators:** Hanneke Takkenberg, MD  
Jolanda Kluin, MD

15.30 - 15.45 **The MIDA Registry**  
Francesco Grigioni, MD

15.45 - 16.00 **An Update on the Valve-In-Valve Registry**  
Danny Dvir, MD

16.00 - 16.15 **AVIATOR: Lessons Learned and Challenges Ahead**  
Jolanda Kluin, MD

16.15 - 16.30 **BAVCON**  
Simon Body, MD

16.30 - 17.00 **Discussion**

**Concurrent Session III: Valve Cell Biology & Pathology**

**Moderators:** Jane Grande-Allen, Ph.D.  
Jonathan Butcher, MD

15.30 – 15.42 **Microenvironmental Cues in the Regulation of Valvular Angiogenesis**  
Kristyn Masters, Ph.D.

15.42 – 15.54 **The role of cell shape on valve interstitial cell biology and function**  
Kartik Balachandran, Ph.D.

15.54 – 16.06 **Cellular heterogeneity in aortic valves: relevance for heart valve tissue engineering**  
Najma Latif, MD

16.06 – 16.18 **Endothelial mesenchymal transformation in fetal valve maturation and postnatal valve remodeling**  
Jonathan Butcher, MD

16.18 – 16.30 **The basic science behind the phase II clinical trial of Ataciguat to treat moderate CAVD**  
Jordan Miller, MD

16.30 – 17.00 **Discussion**

**Concurrent Session IV: Tricuspid Valve Disease**

**Moderator:** Jerry Braun, MD  
David Messika-Zeitoun, MD

15.30 - 15.45 **Etiology and natural history of Tricuspid regurgitation**  
Hector Michelena, MD

15.45 - 16.00 **Assessment and Quantification of Tricuspid Annulus and Regurgitation**  
David Messika-Zeitoun, MD

16.00 - 16.15 **Organic and functional Tricuspid regurgitation, When and how to Operate**  
Jerry Braun, MD

16.15 - 16.30 **Per-cutaneous Treatment of Tricuspid regurgitation - Where do we stand?**

Amit Segev, MD

16.30 - 17.00 **Discussion****Concurrent Session V: Atrial Fibrillation****Moderator:** Peter Brady, MD  
Hersh Maniar, MD15.30 - 15.42 **Hybrid Approaches to Stand-Alone AF, Ideal Patients and Real World Outcomes**

Bart Maesen, MD, PhD

15.42 - 15.54 **Concomitant Surgical Ablation in Patients Undergoing Valve Surgery: Risks, Benefits and Outcomes**

Hersh Maniar, MD

15.54 - 16.06 **Surgical MAZE: What Lesion Sets? What Outcomes?**

Ralph Damiano Jr., MD

16.06 - 16.18 **AF and Mitral Valve Surgery: When Not To Do A MAZE**

Thierry Mesan, MD

16.18 - 16.30 **Minimizing Stroke Risk in Patients with "Valvular" AF**

Peter Brady, MD

16.30 - 17.00 **Discussion**17.00 - 18.00 **Hand-on Session**18:00 - 19:00 **Faculty Reception****SATURDAY, MARCH 19**8:20 - 8:30 **Award Presentations for Best Abstracts****Maurice E. Sarano, MD**

President

**Gilles D. Dreyfus, MD**

President-Elect

**Michael A. Borger, MD**

Past President

8.30 - 10.00 **Concurrent Session I: Case Studies I****Moderator:** Maurice E. Sarano, MD8.30 - 8.40 **C1. [Redo Transapical Procedure in a Calcified Transapical Edwards Sapien XT Prosthesis](#)****Doreen Richardt**, Thorsten Hanke, Holger Thiele, Hans H. Sievers, Thomas Kurz.  
*University Hospital of Schleswig-Holstein, Lübeck, Germany.*8.40 - 8.50 **C2. [Three-Dimensional Transoesophageal-Guided Transmitral Valve Implantation with a TENDYNE Device](#)****Alison Duncan**, Cesare Quarto, Simon Davies, Neil Moat.  
*The Royal Brompton Hospital, London, United Kingdom*8.50 - 9.00 **C3. [Reversible Thrombotic Aortic Restenosis After Valve-In-Valve Transcatheter Aortic Valve Replacement](#)****Patrick J. Goleski**, Creighton W. Don, MD.  
*University of Washington, Seattle, WA, USA.*9.00 - 9.10 **C4. [Hyper-acute Early Transcatheter Prosthesis Thrombosis In A Patient With Polycythemia Vera.](#)****Laura Besola**, Augusto D'Onofrio, Eleonora Bizzotto, Erica Manzan, Chiara Tessari, Gianbattista Isabella, Gaetano Thiene, Gino Gerosa.  
*University of Padua, Padua, Italy.*9.10 - 9.20 **C5. [Transcatheter Aortic Valve Replacement in Type B Aortic Dissection](#)****Iosif Gulkarov**<sup>1</sup>, Akanibo Da-Wariboko, MD<sup>1</sup>, Ashwad Afzal, MD<sup>1</sup>, Arash Salemi, MD<sup>2</sup>, Berhane Worku<sup>1</sup>.  
<sup>1</sup>*New York Methodist Hospital, Brooklyn, NY, USA,* <sup>2</sup>*Weill Cornell Medical Center, New York, NY, USA.*9.20 - 9.30 **C6. [Multiple Valve Surgery For Advanced Rheumatic Heart Disease: Results And Risk Factors In 150 Patients](#)****Zahira Zouizra**, Yassin Boukaidi, Rachid El Houati, Drissi Boumzebra.  
*Ibn Tofail Hospital, MARRAKECH, Morocco.*9.30 - 9.40 **C7. [Progressive Aortic Valve Stenosis: is it all about the Calcium Deposition?](#)****Geoffrey D. Huntley**, B.A., Jeremy J. Thaden, M.D., Marie-Annick Clavel, D.V.M., Ph.D., Maurice E. Sarano, M.D., Vuyisile T. Nkomo, M.D., M.P.H..  
*Mayo Clinic, Rochester, MN, USA.*9.40 - 9.50 **C8. [Apical Left Ventricular Mycotic Aneurysm with Prosthetic Aortic Valve Endocarditis.](#)****Kazuyoshi Takagi**, Hiroyuki Otsuka, Koichi Arinaga, Koji Akasu, Tohru Takaseya, Takahiro Shojima, Yuichiro Hirata, Kumiko Wada, Satoshi Kikusaki, Keishi Hashimoto, Hiroyuki Tanaka.  
*Kurume University, Kurume, Japan.*9.50 - 10.00 **C9. [Concomitant Tricuspid Valve Replacement using an Extracellular Matrix Cylinder and Pulmonary Thromboembolectomy](#)****Sreekumar Subramanian, MD**, Joshua S. Hall, MSM, Bryan T. Fisher, Sr, MD.  
*TriStar Centennial Medical Center, Nashville, TN, USA.***Concurrent Session II: TAVR Imaging & Implementation****Moderators:** Nicolo Piazza, Ph.D., MD  
Mirkos Doss, MD8.30 - 8.42 **Pre-Procedure Screening**

Jean Buithieu, MD

8.42 - 8.54 **Intraprocedure Guidance**

Nicolo Piazza, MD

8.54 - 9.06 **Modeling of TAVR Implantation and Function**

Wei Sun, PhD

- 9.06 - 9.18 **Post Procedure Valve Assessment (e.g. Valve Thrombosis, Prosthetic Valve Function Evaluation)**  
Gregory Fontana, MD
- 9.18 - 9.30 **Which Valve for Which Patient - A Tailored Imaging Approach**  
Mirkos Doss, MD
- 9.30 - 10.00 **Discussion**
- Concurrent Session III: Biomechanics & Mechanobiology**  
**Moderators:** Michael Sacks, MD  
Ajit Yoganathan, MD
- 8.30 - 8.42 **Heart Valve Struction and Function: Implications for Valve Disease**  
Muralidhar Padala, MD
- 8.42 - 8.54 **Multi-Scale Approaches to Heart Valve Function**  
Michael Sacks, MD
- 8.54 - 9.06 **Heart Valve Biomechanics**  
Ajit P. Yoganathan, MD
- 9.06 - 9.18 **Heart Valve Extracellular Matrix Function and Performance**  
Jane Grande-Allen, MD
- 9.18 - 9.30 **Heart Valve Cellular Function**  
Craig Simmons, MD
- 9.30 - 10.00 **Discussion**
- Concurrent Session IV: Valve Repair Network**  
**Moderators:** Michael Borger, MD  
Rakesh Suri, MD
- 8.30 - 8.42 **Mitral Valve Repair: A Success Story**  
Gilles D. Dreyfus, MD
- 8.42 - 8.54 **Aortic Valve Repair: Have We Reached the Limit?**  
Jean Louis Vanoverschelde, MD
- 8.54 - 9.06 **Mitral Repair Network: Critical hemodynamic and LV measures to include**
- 9.06 - 9.18 **Anatomic and functional mitral characteristics indispensable to consider in a valve research network**  
Ottavio Alfieri, MD
- 9.18 - 9.30 **Starting a Valve Repair Network: Lessons Learned**  
Emmanuel Lansac, MD
- 9.30 - 10.00 **Discussion**
- Concurrent Session V: Ross/Homograft**  
**Moderators:** Hanneke Takkenberg, MD  
Ismail El-Hamamsy, MD
- 8.30 - 8.45 **Surgical Techniques for Pulmonary Autograft Implantation in Adult Patients**  
Peter Skillington, MD
- 8.45 - 9.00 **Pediatric Ross Operation: Late Outcomes and Determinants of Homograft Durability**  
Hanneke Takkenberg, MD
- 9.00 - 9.15 **Reoperations After the Ross Procedure: Challenges and Opportunities**  
Giovanni Battista Luciani, MD
- 9.15 - 9.30 **Toward a Successful Ross Program: Sharing Experiences**  
Ismail El-Hamamsy, MD
- 9.30 - 10.00 **Discussion**
- 10.30 - 12.00 **Concurrent Session I: Case Studies II**  
**Moderator:** Maurice E. Sarano, MD
- 10.30 - 10.40 **C10. [The Challenge of Sizing Valsalva Prostheses for Autograft Reinforcement in the Ross Procedure](#)**  
Alfred Kocher, **Claudia Oeser**, Martin Andreas, Guenther Laufer.  
*Medical University of Vienna, Vienna, Austria.*
- 10.40 - 10.50 **C11. [Right Atrial Myxoma Clinically Mimicking Recurrence Of Mitral Valve Stenosis After Open Mitral Valve Repair For Rheumatic Severe Mitral Stenosis.](#)**  
**Gauranga Majumdar**, Surendra Agarwal, Shantanu Pande, Bipin Chandra.  
*Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, India.*
- 10.50 - 11.00 **C12. [Successful Bailout Transcatheter Valve Implantation for Prosthetic Aortic Valve Endocarditis During Open Re-do Surgery](#)**  
**Lorenz Hansen, MD**, Klaudija Bijuklic, MD, Jan-Hendrik Stripling, MD, Joachim Schofer, MD, PHD, Friedrich-Christian RieB, MD, PHD.  
*Albertinen-Krankenhaus, Hamburg, Germany.*
- 11.00 - 11.10 **C13. [Importance of the Prosthesis Choice in the Valve-in-Valve Era: Role of the Sutureless Perceval Valve](#)**  
**Stefano Moriggia**, Igor Belluschi, Andrea Blasio, Nicola Buzzatti, Fabrizio Monaco, Ottavio Alfieri.  
*San Raffaele University Hospital, Milan, Italy.*
- 11.10 - 11.20 **C14. [3d TOE-guided Mitral Valve-in-Valve Procedure](#)**  
**Alison Duncan**, Cesare Quarto, Simon Davies, Neil Moat.  
*The Royal Brompton Hospital, London, United Kingdom.*
- 11.20 - 11.30 **C15. [Transcatheter Mitral Valve-in-Ring Replacement: A Novel Therapy in a Challenging Case of Symptomatic Mitral Regurgitation](#)**  
**Risheen S. Reejsinghani**, Lucas S. Zier, Mark L. Villalon, Scot H. Merrick, Georg M. Wieselthaler, Atif N. Qasim, Vaikom S. Mahadevan.



University of California, San Francisco, San Francisco, CA, USA.

- 11.30 - 11.40 **C16. Double-Sided Mitral Valve Repair: Transventricular Approach Augmented By Undersized Annuloplasty Via Conventional Left Atriotomy**  
 Kerim Cagli, MD<sup>1</sup>, Ali Baran Budak, MD<sup>2</sup>, Kemal Korkmaz, MD<sup>2</sup>, Hikmet Selcuk Gedik, MD<sup>2</sup>, Eren Gunertem, MD<sup>1</sup>, Omer Cicek, MD<sup>1</sup>, Gokhan Lafci, MD<sup>1</sup>, **Serdar Gunaydin, MD, PhD<sup>2</sup>**.  
<sup>1</sup>Yuksekk Ihtisas Training and Research Hospital, Ankara, Turkey, <sup>2</sup>Numune Training and Research Hospital, Ankara, Turkey.
- 11.40 - 11.50 **C17. Transapical Mitral Valve In Ring Procedure: Intraoperative Challenge And Late Complication**  
**Laura Besola**, Augusto D'Onofrio, Erica Manzan, Eleonora Bizzotto, Chiara Tessari, Tomaso Bottio, Giuseppe Tarantini, Gino Gerosa.  
 University of Padua, Padua, Italy.
- 11.50 - 12.00 **C18. Late presentation of Annular Rupture Initially Mimicking Prosthesis Dysfunction after Transcatheter Aortic Valve Implantation.**  
**Sami M. Alnasser**, Christopher Fiendle, Jennifer Day, Mark Osten, Robert J Cusimano, Ashish Shah, Eric Horlick.  
 Peter Munk Cardiac Center, Toronto General Hospital, University of Toronto, Toronto, ON, Canada.

#### Concurrent Session II: Mitraclip Imaging & Implementation

**Moderators:** Paul Sorajja, MD  
 Madalina Garbi, MD

#### 10.30 - 10.38 **How do I know it's on label DMR?** Muhamed Saric, MD

10.38 - 10.46 **Differences in Mitraclip technique for DMR vs. FMR**  
 Magnus Settergren, MD

10.46 - 10.54 **Unconventional imaging for MitraClip therapy**  
 Rebecca Hahn, MD

11.02 - 11.10 **The benefit of implanting multiple clips**  
 Francisco Maisano, MD

11.10 - 11.18 **I only need transthoracic echo to guide the procedure**  
 Mani Vannan, MD

11.18 - 11.26 **My hardest case as a Mitraclip expert**  
 Saibal Kar, MD

11.26 - 11.32 **A surgeon's perspective on performing Mitraclip**  
 Joerg Seeburger, MD

11.32 - 12.00 **Discussion**

#### Concurrent Session III: Ventricular Hemodynamics: Imaging & Modeling

**Moderators:** Arash Kheradvar, MD  
 Sorin Pislaru, MD  
 Jim Thomas, MD  
 Blasé Carabello, MD

10.30 - 10.45 **The role of invasive hemodynamics in the world of advanced imaging**  
 Blasé Carabello, MD

10.45 - 11.00 **Deformation imaging in valvular heart disease: ready for prime time**  
 Sorin Pislaru, MD

11.00 - 11.15 **The most common imaging pitfalls in VHD: How can we be more quantitative?**  
 Jim Thomas, MD

11.15 - 11.30 **Image-based modeling of hemodynamic in heart valve disease**  
 Arash Kheradvar, MD

11.30 - 12.00 **Discussion**

#### Concurrent Session IV: InterAmerican Cardiac Society Collaborative Session

**Moderators:** Jose Pomar, MD  
 Gustavo Restrepo, MD

10.30 - 10.42 **Echo Screening for Rheumatic Valve Heart Disease: Where Are We?**  
 Andrea Beaton, MD

10.42 - 10.54 **Time to Intervention in Rheumatic Mitral Valve Disease**  
 Flavio Tarasoutchi, MD

10.54 - 11.06 **Balloon Mitral Valvuloplasty: Going Beyond Valve Morphology**  
 Marcia Barbosa, MD

11.06 - 11.18 **Rheumatic Mitral Valve Regurgitation: Can It Be Repaired?**  
 Taweesak Chotivatanapong, MD

11.18 - 11.30 **Are We Always Offering the Best to Our Patients? Same in Every Country?**  
 Jose Pomar, MD

11.30 - 12.00 **Discussion**

#### Concurrent Session V: Minimally Invasive & Robotic Surgery

**Moderators:** Rakesh Suri, MD  
 Doug Murphy, MD

10.30 - 10.42 **Mitral valve repair: the science behind early repair**  
 Thierry Le Tourneau, MD

10.42 - 10.54 **Who are the candidates for robotic mitral repair and how do I set up the operation?**  
 Tomislav Mihaljevic, MD

10.54 - 11.06 **Robotic repair for all categories of leaflet prolapse complexity?**  
 Robinson Poffo, MD

- 11.06 - 11.18 **What are the short and mid-term outcomes?**  
Michael Halkos, MD
- 11.18 - 11.30 **Who Should Undertake the Establishment of a Robotic Program?**  
Vinay Bhadwar, MD
- 11.30 - 11.42 **My Toughest Robotic Mitral Valve Repair**  
Emiliano Navarra, MD
- 11.42 - 12.00 **Discussion**