





# SCA Leadership

## Officers



**Scott T. Reeves, MD MBA**  
FACC FASE  
President



**Linda Shore-Lesserson, MD**  
FAHA FASE  
President-Elect



**Christopher A. Troianos, MD**  
Secretary-Treasurer



**Solomon Aronson, MD MBA**  
FACC FACCP FAHA FASE  
Past President

## Board of Directors

**George E. Burgess, III, MD**

**Davy Cheng, MD MSc FRCPC**  
FCAHS CCPE

**Amanda Fox, MD MPH**

**Glenn P. Gravlee, MD**

**Colleen Koch, MD MS MBA**  
FACC

**G. Burkhard Mackensen, MD**  
PhD FASE

**Feroze Mahmood, MD**

**Robert J. Marino, MD**

**Albert Perrino, Jr., MD**

**Andrew D. Shaw, MB FRCA**  
FCCM

**Douglas C. Shook, MD FASE**

**Mark Stafford-Smith, MD CM**  
FRCPC FASE

## Scientific Program Committee



**Andrew D. Shaw, MB**  
FRCA FCCM

Scientific Program  
Committee Chair  
@andyshaw007



**Amanda Fox, MD MPH**  
Scientific Program  
Committee Vice Chair



**Michael P. Eaton, MD**  
Coordinator, Workshops  
and PBLDs



**Davy Cheng, MD MSc**  
FRCPC FCAHS CCPE  
Scientific Program  
Committee ICCVA Chair



**William (Skip) C. Culp,  
Jr., MD FASE**  
Director, Fellow and  
Junior Faculty Program

**James H. Abernathy,  
III, MD MPH FASE**  
FAHA

**Tara Brakke, MD FASE**

**C. David Collard, MD**  
MS

**Mo Ghotbi, MD**

**Donna Greenhalgh,  
MBChB FRCA FFICM**

**Wendy L. Gross, MD**  
MHCM

**Gregg S. Hartman, MD**

**Paul M. Heerdt, MD**  
PhD FCCP

**Laureen L. Hill, MD**  
MBA

**Gregory M. Janelle,  
MD FASE**

**Priya A. Kumar, MD**

**G. Burkhard Mackensen,  
MD PhD FASE**

**Alina Nicoara, MD**  
FASE

**Daryl Oakes, MD**

**Wendy L. Pabich, MD**

**Wanda M. Popescu,  
MD**

**Sasha K. Shillcutt, MD**  
FASE

**Saket Singh, MD**

**Gautam Sreeram, MD**

**Chad E. Wagner, MD**

**Andrew Weisinger, MD**  
FASE

# General Information

## Target Audience

Cardiothoracic and vascular anesthesiologists, critical care physicians, general anesthesiologists, nurses, perfusionists, other allied health personnel, epidemiologists/researchers, and all those involved in the care of cardiovascular and thoracic surgery patients will benefit from attending this meeting.

## Statement of Need

### Why You Should Attend

The field of cardiothoracic and vascular anesthesiology is a dynamic specialty that changes as modern cardiovascular medicine changes. Changes in the field of perioperative cardiovascular medicine include percutaneous valve interventions, minimally invasive surgical techniques, heart failure devices, electrophysiology procedures, and an aging cardiac surgical patient population. The 37th SCA Annual Meeting and Workshops includes interactive workshops and discussion sessions with experts centered on patient-oriented educational programs to teach the requisite skills and concepts necessary for advanced care of these patients. The program provides attendees with a unique forum for learning about and sharing standards and advances in evidence-based practice and treatment from and with colleagues in cardiothoracic and vascular anesthesiology.

This meeting provides attendees the opportunity to

- discuss current practice and recent advances in cardiology and cardiac surgery
- interact with multidisciplinary experts in cardiovascular anesthesiology
- discuss how to translate scientific discoveries into clinical practice
- connect with colleagues in different practice settings at numerous networking events, including exhibitor and poster presentation sessions
- discuss quality of care issues, including database metrics, as mechanisms to assist you in working within your own institution to improve quality
- raise questions, debate controversies, plan follow-up studies, and discuss results
- discuss your own research and clinical observations
- meet with more than 200 poster presenters to learn about their work and future research directions
- visit exhibiting companies featuring products and services specifically designed for professionals who study cardiovascular medicine.

## What You Can Expect to Gain

The 37th SCA Annual Meeting and Workshops will offer information about current intraoperative management of patients undergoing various cardiac surgical procedures. In addition, this meeting will provide workshops in cardiac imaging, percutaneous valve surgery, transthoracic echocardiography, and extracorporeal support. Presentations are designed to enhance research and/or clinical knowledge and competence pertinent to cardiothoracic and vascular anesthesiology, and will feature content appropriate for professionals at several experience levels. By participating in this meeting, attendees can expect to be able to

- describe the latest advances in perioperative cardiovascular medicine
- critique current trends in clinical and bench research pertinent to cardiovascular medicine
- evaluate new techniques and diagnostic/interventional procedures in cardiothoracic and vascular anesthesiology
- assemble a network of professional colleagues with whom to exchange information about the practice of cardiovascular and thoracic anesthesiology.

## Wireless Connection

SSID (Network Name): Marquis\_CONF  
Password: SCA@2015

## Contents

|  |    |
|--|----|
| CME Accreditation . . . . .                          | 4  |
| Washington Marriott Marquis Floor Plans . . . . .    | 5  |
| Faculty . . . . .                                    | 8  |
| Schedule . . . . .                                   | 16 |
| Workshops . . . . .                                  | 25 |
| Fellow/Junior Faculty Program . . . . .              | 28 |
| PBLDs . . . . .                                      | 29 |
| Scientific Abstracts and Posters . . . . .           | 30 |
| Resident/Fellow Complex Case Presentations . . . . . | 43 |
| Sponsors . . . . .                                   | 56 |
| Exhibit Schedule . . . . .                           | 57 |
| Exhibitors . . . . .                                 | 57 |
| SCA Committee Meeting Schedule . . . . .             | 58 |
| Commercial Support . . . . .                         | 58 |

# General Information

## CME Accreditation

The Society of Cardiovascular Anesthesiologists (SCA) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education (CME) for physicians.

SCA designates this live activity for a maximum total of 38.5 AMA PRA Category 1 Credit(s)<sup>TM</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity. Successful completion requires that participants register for the meeting, attend, participate, and complete an online evaluation. Participants will receive their CME certificates immediately after they submit their evaluations online.

## 37th Annual Meeting

The registration fee includes continental breakfasts, coffee breaks, (2) lunches, (1) reception, and the electronic syllabus.

**Designation:** The Society of Cardiovascular Anesthesiologists designates this live activity for a maximum of 31 AMA PRA Category 1 Credit(s)<sup>TM</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

## Workshops

The registration fee includes workshop, continental breakfast (morning workshops), coffee breaks, and the electronic syllabus.

**Designation:** The Society of Cardiovascular Anesthesiologists designates this live activity for a maximum of 3 AMA PRA Category 1 Credit(s)<sup>TM</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

## Problem-Based Learning Discussions (PBLDs)

The registration fee includes a continental breakfast and the electronic syllabus.

**Designation:** The Society of Cardiovascular Anesthesiologists designates this live activity for a maximum of 1.25 AMA PRA Category 1 Credit(s)<sup>TM</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

## Disclaimer

The material presented in this activity represents the opinion of the speakers and not necessarily the views of the Society of Cardiovascular Anesthesiologists.

## Claim Your CME

To claim CME credit, visit [www.scahq.org/Education/Evaluations](http://www.scahq.org/Education/Evaluations) to complete your 2015 SCA Annual Meeting & Workshops evaluations. **You must complete the evaluations to claim your CME credit.**

## Photography

Please be advised that throughout the SCA Annual Meeting & Workshops, photos may be taken for use in SCA marketing materials, including the e-newsletter and SCA Facebook page. If you do not consent to be photographed, please advise the SCA staff in writing.



Make sure to follow our Scientific Program Committee Chair on Twitter @andyslaw007. Use #SCA2015 when tweeting or posting on Facebook about the meeting.

Session syllabi and learning objectives are provided to attendees through electronic media only.



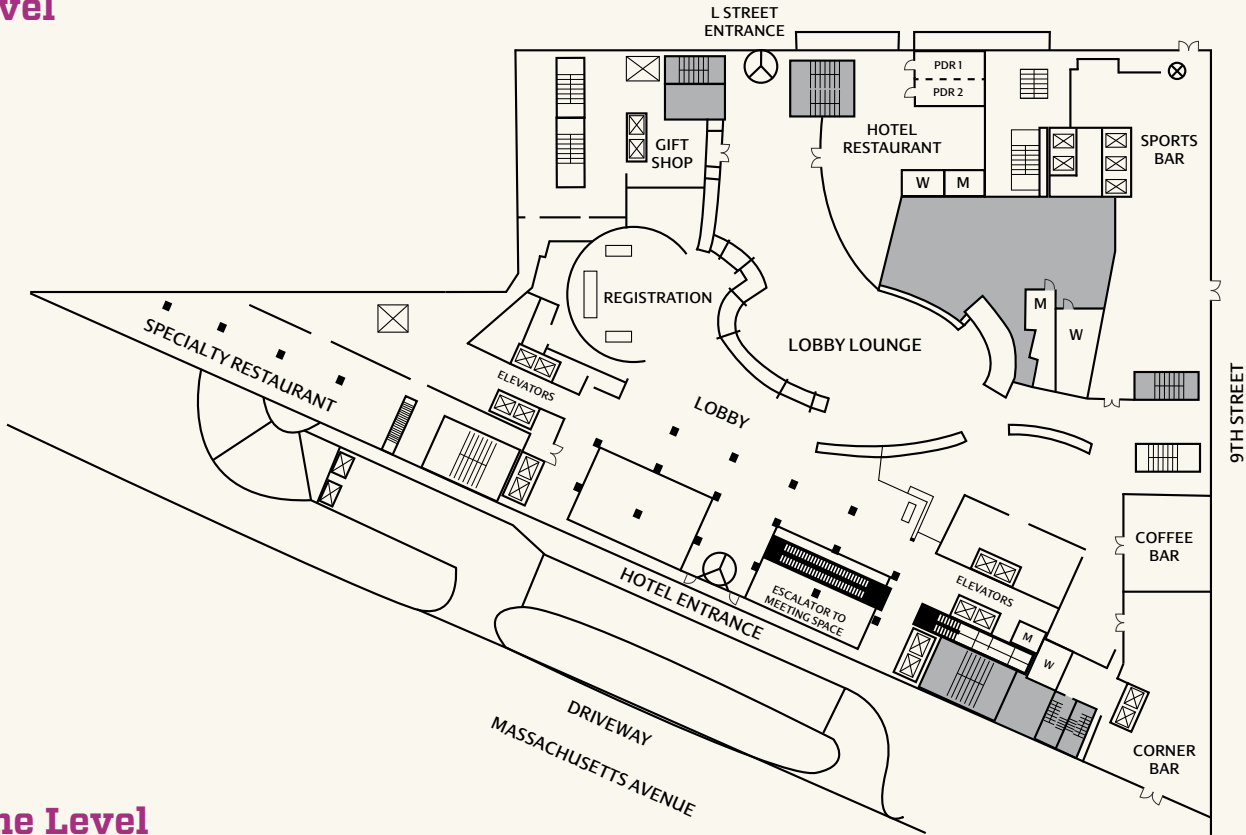
## Annual Meeting & Workshops Mobile App

Capture this QR code with your mobile device, or visit <http://eventmobi.com/SCA2015> to take advantage of our mobile app.

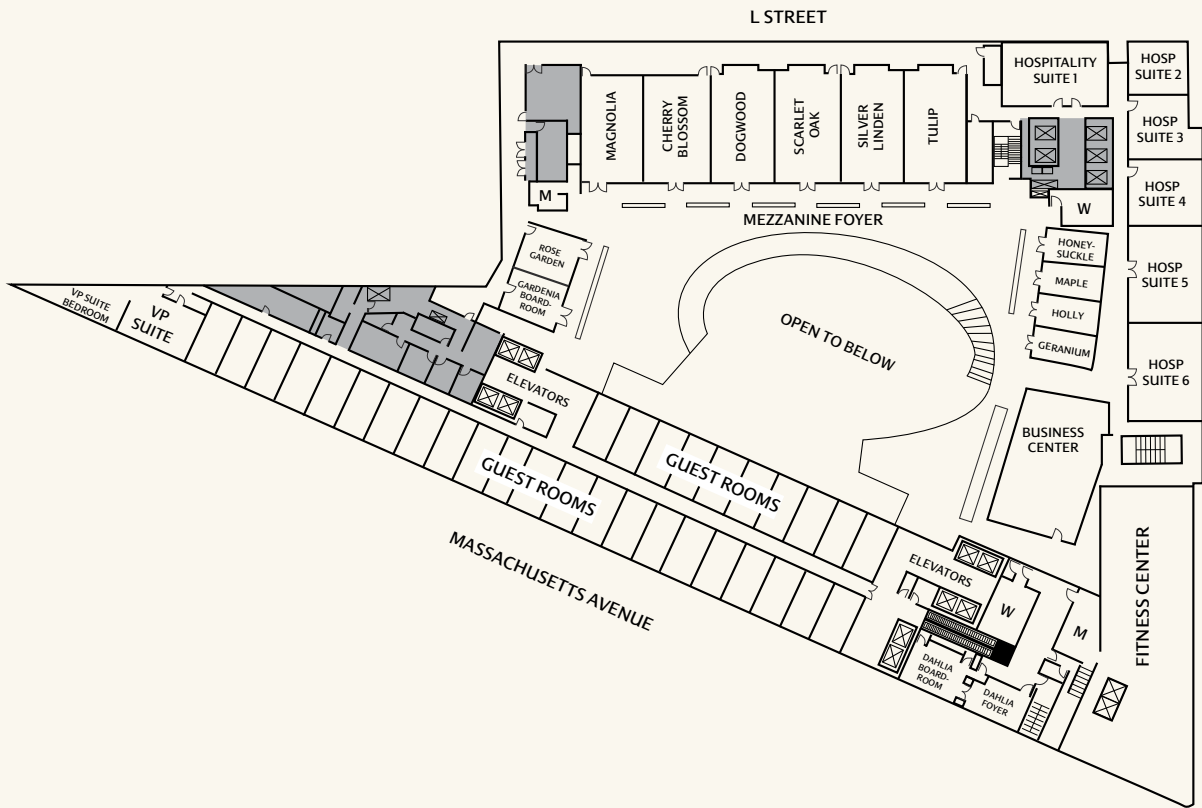


# Washington Marriott Marquis Floor Plans

## Lobby Level



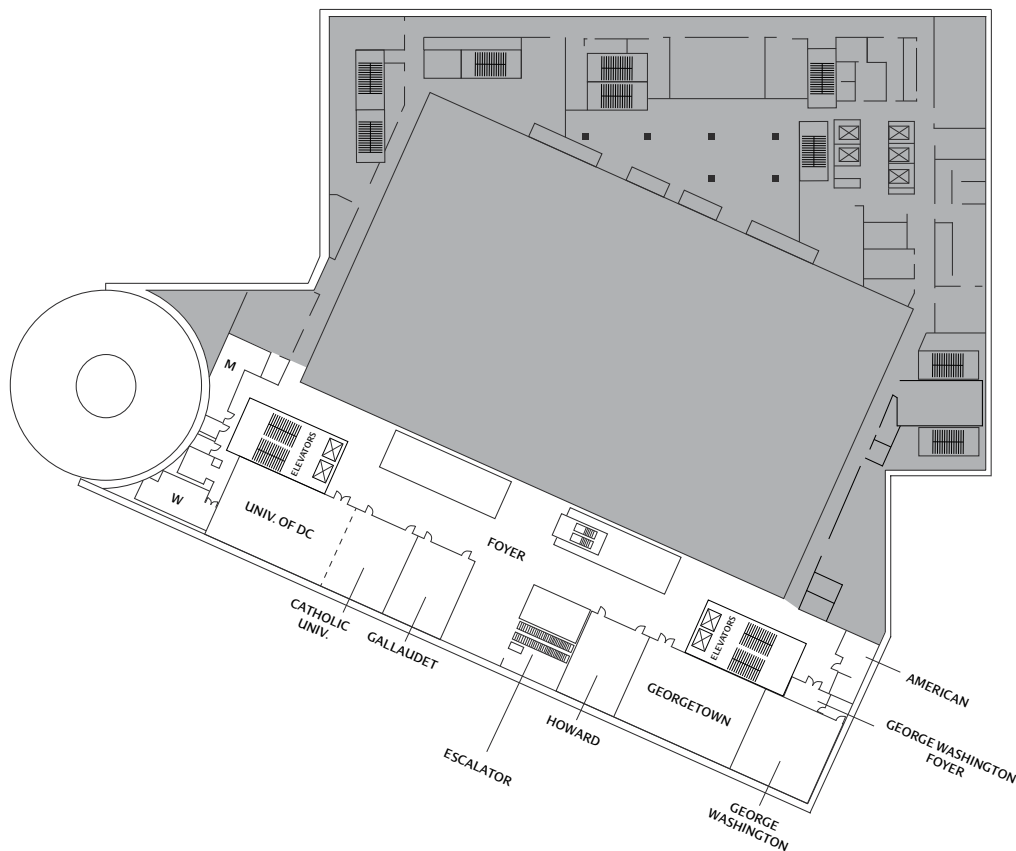
## Mezzanine Level





# Washington Marriott Marquis Floor Plans

## Meeting Level 1



## Meeting Level 2



# Washington Marriott Marquis Floor Plans

## Meeting Level 3



## Meeting Level 4



# Faculty

## Disclosures

### Nature of Relationship Key

- |   |   |                           |
|---|---|---------------------------|
| 1. No relationship with commercial supporters | 6. Other  | 10. Royalties             |
| 2. Research support                           | 7. Faculty member will discuss and disclose unlabeled drug uses during presentation | 11. Advisory Board member |
| 3. Speakers' bureau                           | 8. Client   | 12. Board of Directors    |
| 4. Consultant                                 | 9. Principal Investigator   | 13. Founder               |
| 5. Stockholder                                |   | 14. Education             |

## Disclosure Policy

It is the policy of the Society of Cardiovascular Anesthesiology (SCA) that the planners, faculty, and this provider disclose the existence of any significant financial interest or other relationships that they or their spouse or partner may have with the manufacturer(s) of any commercial product(s) or services relating to the topics presented in the educational activity. SCA also requires disclosure of the intent to discuss unlabeled uses of a commercial product or investigational use of a product not yet approved for this purpose. It is the responsibility of the Scientific Program Committee to review potential conflicts of interest as submitted in the disclosure form and resolve such conflicts. Resolving the conflict ensures that the content of the activity is aligned with the interests of the public. Detailed disclosure information will be made available to attendees, who will also be informed when no relevant financial relationships exist.

### James H. Abernathy, III, MD MPH FASE FAHA

Associate Professor  
Chief, Division of Cardiothoracic Anesthesiology  
Department of Anesthesia and Perioperative Medicine  
Medical University of South Carolina  
Charleston, SC  
Disclosures: Pharmedium, 9

### Abbas Al-Qamari, MD

Assistant Professor  
Department of Anesthesiology  
Feinberg School of Medicine  
Northwestern University  
Chicago, IL  
Disclosures: 1

### Erik P. Anderson, MD

Staff Anesthesiologist  
University of Vermont  
Fletcher Allen Healthcare  
South Burlington, VT  
Disclosures: 1

### Ron Angona, MS CCP

Chief Perfusionist  
ECMO Coordinator  
University of Rochester Medical Center  
Rochester, NY  
Disclosures: 1

### Ioanna Apostolidou, MD

Associate Professor  
Director, Cardiothoracic Anesthesiology Fellowship  
Division Chief, Cardiothoracic Anesthesiology  
University of Minnesota  
Minneapolis, MN  
Disclosures: 1

### Solomon Aronson, MD MBA FACC FACP FAHA FASE

Professor  
Duke University School of Medicine  
Director Business Development  
Duke Private Diagnostic Clinic  
Executive Vice Chairman,  
Department of Anesthesiology  
Duke University  
Durham, NC  
Disclosures: the medicine company, 4

### John G. Augoustides, MD FASE FAHA

Associate Professor  
Director, Transcatheter Aortic Valve Replacement  
Anesthesiology and Critical Care  
Perelman School of Medicine  
University of Pennsylvania  
Philadelphia, PA  
Disclosures: 1

### Jae-Hyon Bahk, MD PhD

Professor  
Department of Anesthesiology  
Seoul National University Hospital  
Seoul, Korea  
Disclosures: Edwards Lifesciences Korea, 4

### Daniel Bainbridge, MD FRCPC

Associate Professor  
Department of Anesthesiology and Perioperative Medicine  
Western University Canada  
London, ON, Canada  
Disclosures: 1

### Dalia Banks, MD FASE

Associate Clinical Professor  
University of California San Diego  
Director, Cardiothoracic Anesthesiology Fellowship  
Division Chief, Cardiothoracic Anesthesiology  
Clinical Director, Sulpizio CVC and PTU  
San Diego, CA  
Disclosures: 1

### Julian Barker, MD MBChB MRCP FRCA FFICM

Director of ECMO & Lead Clinician for Cardiothoracic Critical Care and Cardiothoracic Anesthesia  
University Hospital of South Manchester  
Wythensawe, United Kingdom  
Disclosures: 1

### Karsten Bartels, MD

Assistant Professor, Anesthesiology and Surgery  
Department of Anesthesiology  
University of Colorado Denver  
Denver, CO  
Disclosures: 1

### Wendy K. Bernstein, MD MBA

Associate Professor  
Department of Anesthesiology  
Director, Simulation Program  
Director, Cardiothoracic Anesthesia Fellowship Program  
University of Maryland School of Medicine  
Baltimore, MD  
Disclosures: Astra Zeneca, 6

### Julian Stephens Bick, MD

Assistant Professor, Clinical Anesthesiology  
Division of Adult Cardiothoracic Anesthesiology  
Department of Anesthesiology  
Vanderbilt University Medical Center  
Nashville, TN  
Disclosures: 1

### Mary Beth Brady, MD FASE

Director, Intraoperative TEE Program  
Johns Hopkins University School of Medicine  
Baltimore, MD  
Disclosures: 1

### Tara Brakke, MD FASE

Chief, Division of Cardiovascular Anesthesiology  
Director, Cardiothoracic Anesthesiology Fellowship  
University of Nebraska Medical Center  
Omaha, NE  
Disclosures: 1

### Jeffrey A. Brinker, MD FACC FSCAI

Johns Hopkins University  
Baltimore, MD  
Disclosures: 1

### Marek Brzezinski, MD PhD

Associate Professor  
Department of Anesthesia and Perioperative Care  
University of California, San Francisco  
San Francisco, CA  
Disclosures: Grifols, 3



# Faculty

## Mark A. Chaney, MD

Professor  
Director, Cardiac Anesthesia  
Program Director, Adult  
Cardiothoracic Fellowship  
Department of Anesthesia and  
Critical Care  
University of Chicago  
Chicago, IL  
Disclosures: 1

## Lakhmir Chawla, MD

Chief, Division of Intensive Care  
Medicine  
U.S. Department of Veterans Affairs  
Washington, DC  
Disclosures: Abbvie, 4; Astute  
Medical, 4; Alere Medical, 4;  
La Jolla Pharmaceutical, 4;  
Pfizer, 4; Bard Medical, 4;  
Nxstage Medical, 4; Baxter  
Medical, 4

## Yee Eot Chee, MBBS MHA MA FANZCA FHKAM PGDipECHO PTEeXAM ASCeXAM

Honorary Clinical Associate Professor  
Consultant  
Queen Mary Hospital  
Hong Kong University  
Pok Fu Lam, Hong Kong  
Disclosures: 1

## Davy Cheng, MD MSc FRCP FCAHS CCPE

Distinguished University Professor  
and Chair/Chief, Department of  
Anesthesia and Perioperative  
Medicine  
Professor, Critical Care Division  
Department of Medicine  
Western University  
London, ON, Canada  
Disclosures: 1

## Albert T. Cheung, MD

Professor  
Department of Anesthesiology  
Division Chief, Cardiothoracic  
Anesthesiology  
Program Director, Adult  
Cardiothoracic Anesthesiology  
Stanford University School of  
Medicine  
Stanford, CA  
Disclosures: Covidien, 4; Uptodate, 6

## Sophia Chew, MMED (Anaes) MBBS FANZCA

Senior Consultant  
Department of Anesthesiology  
Singapore General Hospital  
Singapore  
Disclosures: 1

## Y-F Chow, MD MBBS FANZCA FHKCA FHKAM PG Dip Echo MSc

Doctor  
Queen Elizabeth Hospital  
Kowloon Central Cluster, Hospital  
Authority  
Kowloon, Hong Kong  
Disclosures: 1

## C. David Collard, MD MS

Professor and Chief, Anesthesia  
Baylor St. Luke's Medical Center  
Texas Heart Institute  
Houston, TX  
Disclosures: 1

## R. Lebron Cooper, MD

Professor, Anesthesiology  
Wayne State University School of  
Medicine  
Director, Clinical Operations,  
Structural Heart Disease  
Catheterization Labs  
Interim Chief, Cardiovascular  
Anesthesiology  
Chief, Research and Quality  
Assurance  
Department of Anesthesiology  
Henry Ford Hospital  
Detroit, MI  
Disclosures: 1

## William (Skip) C. Culp, Jr., MD FASE

Professor  
Department of Anesthesiology  
Scott & White Hospital  
The Texas A&M University System  
Health Science Center College  
of Medicine  
Temple, TX  
Disclosures: Self, 6

## Ellen M. Dailor, MD

Director, Cardiac Anesthesiology  
Division  
Director, Cardiothoracic  
Anesthesiology Fellowship  
Department of Anesthesiology  
University of Rochester School of  
Medicine and Dentistry  
Rochester, NY  
Disclosures: 1

## David J. Daly, MBBS FANZCA MCLinEpi

Staff Anaesthetist  
Alfred Hospital  
Senior Lecturer  
Monash University  
Melbourne, Victoria, Australia  
Disclosures: Neurosave Inc., 2;  
Slater and Gordon Lawyers, 6;  
Stringer Clark Lawyers, 6;  
Maurice Blackburn Lawyers, 6;  
Holding Redlich Lawyers, 6

## Subid Ranjan Das, MBBS FRCA FFARCSI FHKCA FHKAM (Anaes)

Doctor/Consultant  
Chief of Service, Department of  
Cardiothoracic Anaesthesia  
Queen Mary Hospital  
Hong Kong, SAR China  
Disclosures: 1

## Laurie Davies, MD

Associate Professor  
Anesthesiology and Surgery  
University of Florida  
Gainesville, FL  
Disclosures: 1

## Robert J. Deegan, MB BCH PhD

Associate Professor, Clinical  
Anesthesiology  
Vanderbilt University Medical  
Center  
Nashville, TN  
Disclosures: 1

## J. Mauricio Del Rio, MD

Assistant Professor, Anesthesiology  
Division of Cardiothoracic  
Anesthesiology and Critical  
Care Medicine  
Department of Anesthesiology  
Duke University School of Medicine  
Duke University Medical Center  
Durham, NC  
Disclosures: 1

## Georges Desjardins, MD FRCP FASE

Associate Professor  
University of Montreal  
Department of Anesthesiology  
Montreal Heart Institute  
Montreal, QC, Canada  
Disclosures: 1

## Frank C. Detterbeck, MD

Professor and Chief, Thoracic  
Surgery  
Yale University School of Medicine  
New Haven, CT  
Disclosures: Lily Oncology, 3;  
Medela, 4

## Stefan J. M. Dieleman, MD

Cardiac Anesthesiologist  
Department of Anesthesiology,  
Intensive Care, and Emergency  
Medicine  
University Medical Center Utrecht  
Utrecht, Netherlands  
Disclosures: 1

## James A. DiNardo, MD

Professor, Anesthesia  
Harvard Medical School  
Chief, Division of Cardiac  
Anesthesia  
Francis X. McGowan, Jr., MD, Chair  
in Cardiac Anesthesia  
Boston Children's Hospital  
Boston, MA  
Disclosures: 1

## George Djaiani, MD FRCA FRCP

Associate Professor, Anesthesia  
University of Toronto  
Toronto General Hospital  
Toronto, ON, Canada  
Disclosures: Hospira, 9

## Uriah Dudgeon, MHS CCP

Cardiovascular Perfusionist  
Massachusetts General Hospital  
Boston, MA  
Disclosures: 1

## Andra E. Duncan, MD MS

Assistant Professor  
Department of Anesthesiology  
Cleveland Clinic Lerner College of  
Medicine  
Cleveland Clinic  
Cleveland, OH  
Disclosures: Fresenius Kabi, 9

## Michael P. Eaton, MD

Denham S. Ward Professor and  
Chair of Anesthesiology  
University of Rochester School of  
Medicine and Dentistry  
Rochester, NY  
Disclosures: 1

## Balthasar Eberle, MD

Associate Professor  
Director, Cardiovascular Anesthesia  
Department of Anesthesiology and  
Pain Medicine  
Inselspital, Bern University Hospital  
Bern, Switzerland  
Disclosures: 1

## Joerg Ender, MD

Director  
Department of Anesthesiology and  
Intensive Care Medicine  
Heart Center, Leipzig University  
Leipzig, Germany  
Disclosures: 1

## Stephen A. Esper, MD MBA

Assistant Professor, Anesthesiology  
University of Pittsburgh  
Pittsburgh, PA  
Disclosures: 1

## Adam S. Evans, MD MBA

Assistant Professor  
Icahn School of Medicine at Mount  
Sinai  
New York, NY  
Disclosures: 1

## Stephanie Fischer, MB BCH FCA(SA)

Dunkeld Anesthetic Practice  
Johannesburg, South Africa  
Disclosures: 1

# Faculty

## David C. Fitzgerald, BS CCP

Cardiac, Vascular & Thoracic  
Surgical Associates, PC  
Bristow, VA  
Disclosures: 1

## Amanda A. Fox, MD MPH

Associate Professor  
University of Texas Southwestern  
Medical Center  
Dallas, TX  
Disclosures: 1

## John A. Fox, MD

Assistant Professor, Anesthesiology  
Harvard Medical School  
Director, Intraoperative Ultrasound  
Assistant Director, Cardiac  
Anesthesiology  
Department of Anesthesiology,  
Perioperative and Pain  
Medicine  
Brigham and Women's Hospital  
Boston, MA  
Disclosures: 1

## Carlos Galhardo, Jr., MD

Chief, Anesthesiology Department  
Unimed Rio Hospital  
Consultant Anesthesiologist  
National Institute of Cardiology  
Rio de Janeiro, Brazil  
Disclosures: 1

## Brian J. Gelfand, MD FACS

Chief Intensivist  
Cardiovascular Intensive Care Unit  
University of Florida  
Gainesville, FL  
Disclosures: 1

## Kam Ghadimi, MD

Assistant Professor  
CT Anesthesia and Critical Care  
Duke University School of Medicine  
Durham, NC  
Disclosures: 1

## Mo Ghotbi, MD

Chief, Cardiovascular  
Anesthesiology  
Kaiser Foundation Hospital  
San Francisco, CA  
Disclosures: 1

## Tony Gin, MD

Chair, Department of Anesthesia &  
Intensive Care  
Chinese University of Hong Kong  
Hong Kong  
Disclosures: 1

## Kathryn Glas, MD MBA FASE

Professor, Anesthesiology  
Director, Cardiothoracic  
Anesthesiology  
Emory University School of  
Medicine  
Atlanta, GA  
Disclosures: LWW, 10

## Donna Greenhalgh, MBChB

### FRCA FFICM

Consultant, Cardiothoracic  
Anaesthesia and Intensive Care  
University Hospital of South  
Manchester  
Manchester, UK  
Disclosures: 1

## David Grenda, MD PhD

Department of Anesthesiology  
Emory University  
Disclosures: 1

## Hilary P. Grocott, MD FRCP

### FASE

Professor  
Departments of Anesthesiology,  
Perioperative Medicine, and  
Surgery  
University of Manitoba  
Winnipeg, MB, Canada  
Disclosures: 1

## Michael P. W. Grocott, MBBS MD BSc FRCA FRCP FFICM

Professor, Anaesthesia and Critical  
Care Medicine  
University of Southampton  
Southampton, UK  
Disclosures: 1

## Robert C. Groom, CCP MS

Director, Cardiovascular Perfusion  
Maine Medical Center  
Portland, ME  
Disclosures: 1

## Wendy L. Gross, MD MHCM

Assistant Professor, Anesthesiology  
Brigham and Women's Hospital  
Boston, MA  
Disclosures: 1

## Fabio Guarracino, MD

Head, Department of Anaesthesia  
and Critical Care Medicine  
Director, Cardiothoracic  
Anaesthesia and Intensive Care  
Azienda Ospedaliero Universitaria  
Pisana  
Pisa, Italy  
Disclosures: 1

## Jacob T. Gutsche, MD

Assistant Professor  
Perelman School of Medicine  
University of Pennsylvania  
Philadelphia, PA  
Disclosures: 1

## Kevin W. Hatton, MD FCCM

Chief, Division of Anesthesiology  
Critical Care Medicine  
Associate Professor,  
Anesthesiology and Surgery  
University of Kentucky College of  
Medicine  
Lexington, KY  
Disclosures: 1

## Nina C. Hauck-Weber, PhD

Department of Anesthesiology  
Laboratory of Experimental  
Intensive Care and  
Anesthesiology L.E.I.C.A.  
University of Amsterdam (AMC)  
Amsterdam, Netherlands  
Disclosures: 1

## Paul M. Heerdt, MD PhD FCCP

Professor, Anesthesiology and  
Pharmacology  
Weill Cornell Medical College  
New York, NY  
Disclosures: Cheetah Medical, 9;  
Dolphys/Ventinova, 9

## Hugh Hemmings, MD PhD FRCA

Joseph F. Artusio Professor and  
Chair, Anesthesiology  
Professor, Pharmacology  
Weill Cornell Medical College  
Anesthesiologist-in-Chief  
NewYork-Presbyterian Hospital/  
Weill Cornell  
New York, NY  
Disclosures: Elsevier, 4; Becton  
Dickinson, 4; Cadence, 9

## Nadia Hensley, MD

Johns Hopkins University  
Baltimore, MD  
Disclosures: 1

## Antonio Hernandez, MD

Associate Professor, Clinical  
Anesthesiology  
Division of Critical Care  
Medicine & Cardiothoracic  
Anesthesiology  
VUMC Department of  
Anesthesiology  
Nashville, TN  
Disclosures: 1

## Eugene A. Hessel, II, MD FACS

Professor, Anesthesia, Surgery  
(Cardiothoracic), Neurosurgery,  
and Pediatrics  
University of Kentucky College of  
Medicine  
Lexington, KY  
Disclosures: 1

## Lauren L. Hill, MD MBA

Professor and Chair, Department of  
Anesthesiology  
Emory University School of  
Medicine  
Atlanta, GA  
Disclosures: 1

## Steven E. Hill, MD

Professor, Anesthesiology  
Division Chief, Cardiothoracic  
Anesthesiology and Critical Care  
Medical Codirector, Clements  
University Hospital  
Cardiovascular ICU  
University of Texas Southwestern  
Medical Center  
Dallas, TX  
Disclosures: 1

## Jonathan Ho, MD

Associate Professor,  
Anesthesiology  
Cochief, Cardiac Anesthesiology  
Director of Perioperative  
Echocardiography  
University of California, Los Angeles  
Los Angeles, CA  
Disclosures: 1

## Charles W. Hogue, MD

Professor, Anesthesia and Critical  
Care  
Johns Hopkins University School of  
Medicine  
Baltimore, MD  
Disclosures: Covidien, 9; CSL  
Behring, 4; Grifols, 11; Ornim, 11

## Kimberly Howard-Quijano, MD MS

Assistant Clinical Professor,  
Anesthesiology  
Cochief, Cardiothoracic  
Anesthesiology  
Associate Director, Cardiovascular  
Research  
David Geffen School of Medicine  
at UCLA  
Los Angeles, CA  
Disclosures: 1

## Nian Chih Hwang, MBBS

FFARCSI FAMS GDAcu  
Head, Department of  
Cardiothoracic Anaesthesia  
National Heart Centre, Singapore  
Senior Consultant and  
Director, Cardiothoracic  
Anesthesia Service  
Department of Anaesthesiology  
Singapore General Hospital  
Professor  
Office of Education  
Duke-NUS Graduate Medical  
School  
Singapore  
Disclosures: 1

# Faculty

## **Eric Jacobsohn, MBChB MHPE FRCPC**

Professor and Head, University of Manitoba Department of Anesthesia  
Medical Director, WRHA Anesthesia Program  
University of Manitoba  
Winnipeg, MB, Canada  
Disclosures: 1

## **Gregory M. Janelle, MD FASE**

Associate Professor,  
Anesthesiology and Surgery  
Chief, Division of Cardiothoracic Anesthesia  
University of Florida College of Medicine  
Gainesville, FL  
Disclosures: 1

## **Srdjan Jelacic, MD**

University of Washington  
Seattle, WA  
Disclosures: 1

## **Yunseok Jeon, MD**

Associate Professor,  
Anesthesiology  
Seoul National University Hospital  
Seoul, Korea  
Disclosures: 1

## **Philip Jones, MD MSc (Clin Trials) FRCPC**

Associate Professor  
University of Western Ontario  
London, ON, Canada  
Disclosures: 1

## **Ravi Vivekanand Joshi, MD**

Associate Professor,  
Anesthesiology  
University of Texas Southwestern Medical Center  
Dallas, TX  
Disclosures: 1

## **Suhaini Kadiman, MD**

Deputy Head of Department  
Director, Clinical Research  
Adjunct Professor, Cardiovascular Engineering  
National Heart Institute  
Kuala Lumpur, Malaysia  
Disclosures: 1

## **Keyvan Karkouti, MD FRCPC MSc**

Associate Professor  
Department of Anesthesia  
University Health Network  
Toronto General Hospital  
University of Toronto  
Toronto, ON, Canada  
Disclosures: Octapharma, 9; Baxter, 9; TEM, 9; Helena, 9; CSL Behring, 6; Octapharma, 11

## **Jason D. Kennedy, MD**

Assistant Professor, Anesthesiology and Critical Care Medicine  
Department of Anesthesiology  
Vanderbilt  
Nashville, TN  
Disclosures: 1

## **Andrew Klein, MD FRCA**

Consultant, Anaesthesia and Intensive Care  
Papworth Hospital  
Cambridge, UK  
Disclosures: Brightwake UK Ltd, 9; CSL Behring, 9; Covidien, 3

## **Matthew A. Klopman, MD FASE**

Emory University School of Medicine  
Disclosures: 1

## **Colleen Koch, MD MS MBA FACC**

Mark C. Rogers Professor,  
Anesthesiology  
Chair, Department of Anesthesiology and Critical Care Medicine  
Johns Hopkins Medicine  
Baltimore, MD  
Disclosures: 1

## **Logan Kosarek, MD**

Staff Anesthesiologist  
Ochsner Medical Center  
New Orleans, LA  
Disclosures: 1

## **Priya A. Kumar, MD**

Professor, Anesthesiology  
University of North Carolina at Chapel Hill  
Chapel Hill, NC  
Disclosures: 1

## **Jonathan D. Leff, MD**

Chief, Cardiothoracic Anesthesiology  
Director, Cardiothoracic Anesthesia Fellowship  
Associate Professor, Clinical Anesthesiology  
Montefiore Medical Center  
Bronx, NY  
Disclosures: Casmed Systems, 4

## **Sophia ANG Bee Leng, MD**

Senior Consultant  
Anaesthesia Department  
National University Hospital  
Singapore  
Singapore  
Disclosures: 1

## **Jerrold H. Levy, MD FAHA FCCM**

Professor, Anesthesiology  
Associate Professor, Surgery  
Codirector, Cardiothoracic ICU  
Duke University School of Medicine  
Durham, NC  
Disclosures: Boehringer-Ingelheim, 6; CSL Behring, 6; Grifols, 6; Janssen, 11; Portola, 11

## **Marc Licker, MD**

Professor, Faculty of Medicine  
University of Geneva  
Director of Cardiovascular, Thoracic, and Emergency Anesthesia  
University Hospital Geneva  
Geneva, Switzerland  
Disclosures: 1

## **Martin J. London, MD**

Professor, Clinical Anesthesia  
University of California, San Francisco  
San Francisco, CA  
Disclosures: 1

## **James J. Lynch, MD**

Assistant Professor, Anesthesiology  
Mayo Clinic  
Rochester, MN  
Disclosures: 1

## **Michael J. Mack, MD**

Baylor Scott & White Health  
Plano, TX  
Disclosures: 1

## **G. Burkhard Mackensen, MD PhD FASE**

Chief, Division of Cardiothoracic Anesthesiology  
UW Medicine Research and Education Endowed Professor, Anesthesiology  
Adjunct Professor, Medicine  
Department of Anesthesiology and Pain Medicine  
University of Washington Medicine  
Regional Heart Center (RHC)  
University of Washington  
Seattle, WA  
Disclosures: 1

## **Aman Mahajan, MD PhD**

Professor and Chair, Anesthesiology  
David Geffen School of Medicine at UCLA  
Los Angeles, CA  
Disclosures: 1

## **Feroze Mahmood, MD**

Associate Professor,  
Anesthesiology  
Beth Israel Deaconess Medical Center  
Boston, MA  
Disclosures: 1

## **Yasdet Maldonado, MD**

Assistant Professor, Anesthesiology  
Temple University School of Medicine  
Allegheny Health Network  
Pittsburgh, PA  
Disclosures: 1

## **Jonathan B. Mark, MD**

Professor, Anesthesiology  
Duke University Medical Center  
Chief, Anesthesiology Service  
Veterans Affairs Medical Center  
Durham, NC  
Disclosures: 1

## **Nicholas W. Markin, MD**

Assistant Professor  
Department of Anesthesia  
University of Nebraska Medical Center  
Omaha, NE  
Disclosures: 1

## **Janet Martin, PharmD PhD**

Director, Centre for Medical Evidence, Decision Integrity and Clinical Impact (MEDICI)  
Assistant Professor  
Department of Anesthesia and Perioperative Medicine  
Department of Epidemiology and Biostatistics  
Schulich School of Medicine and Dentistry  
Western University  
London, ON, Canada  
Disclosures: 1

## **C. David Mazer, MD**

Professor, Anesthesia  
St. Michael's Hospital  
University of Toronto  
Toronto, ON, Canada  
Disclosures: Thrasos Innovations, 6; Allocure Inc, 6; Fresenius Kabi, 9; CSL Behring, 6

## **Shay McGuinness, MBChB FRCA FANZCA FFICM**

Specialist, Cardiothoracic and Vascular ICU  
Auckland City Hospital  
Auckland, New Zealand  
Disclosures: Baxter Healthcare, 3; Edwards Lifescience, X; Fisher & Paykel Healthcare, 2

## **Yatin Mehta, MD MNAMS FRCA FAMS**

Chairman  
Medanta Institute of Critical Care & Anesthesiology  
Medanta The Medicity  
Haryana, India  
Disclosures: 1

# Faculty

## Alexander Mittnacht, MD FASE

Professor, Anesthesiology  
Director, Pediatric Cardiac  
Anesthesia  
Icahn School of Medicine at Mount  
Sinai  
New York, NY  
Disclosures: Abiomed, 3; Casmel, 3;  
Manual Surgical, 4

## K. Annette Mizuguchi, MD PhD MMSc

Assistant Professor  
Brigham and Women's Hospital  
Boston, MA  
Disclosures: ptemasters.com, 5

## Candice R. Montzingo, MD FASE

Associate Professor  
Director of Education, Division of  
Cardiothoracic Anesthesia  
Department of Anesthesiology  
University of Utah  
Salt Lake City, UT  
Disclosures: 1

## Jose Mariano Soares de Moraes, MD PhD

Physician and Medical Director  
Hospital Monte Sinai  
Suprema Medical School  
Juiz De Fora-MG  
Brazil  
Disclosures: 1

## J. Daniel Muehlschlegel, MD MMSc FAHA

Director, Cardiovascular Anesthesia  
Research  
Associate Professor, Anesthesia  
Harvard Medical School  
Department of Anesthesiology,  
Perioperative and Pain Medicine  
Brigham and Women's Hospital  
Boston, MA  
Disclosures: 1

## Chirojit Mukherjee, MD

Director, Fellowship Program and  
Senior Consultant  
Anesthesia and Intensive Care  
Heart Center  
Leipzig, Germany  
Disclosures: 1

## Viviane G. Nasr, MD

Assistant Professor, Anesthesia  
Harvard Medical School  
Boston Children's Hospital  
Boston, MA  
Disclosures: 1

## J. Prince Neelankavil, MD

Program Director, Cardiothoracic  
Fellowship  
University of California, Los  
Angeles  
Los Angeles, CA  
Disclosures: 1

## Mark T. Nelson, MD MED

Assistant Professor, Anesthesiology  
Virginia Commonwealth University  
Richmond, VA  
Disclosures: 1

## Arne Neyrinck, MD PhD

Associate Professor  
Department of Anesthesiology  
University Hospital Leuven  
Leuven, Belgium  
Disclosures: Air Liquide France, 6

## Alina Nicoara, MD FASE

Assistant Professor, Anesthesiology  
Director, Perioperative  
Echocardiography  
Duke University Medical Center  
Durham, NC  
Disclosures: 1

## Georgios (George) Nicolaou, MB BCH FRCP

Associate Professor and Chief,  
Anesthesia  
Director and Fellowship  
Coordinator, Thoracic and  
Vascular Anesthesia  
Department of Anesthesia and  
Perioperative Medicine  
Western University  
London Health Sciences Centre  
Victoria Hospital  
London, ON, Canada  
Disclosures: 1

## Laura Niklason, MD

Yale University  
New Haven, CT  
Disclosures: Humacyte, Inc, 12

## Minoru Nomura, MD PhD

Professor and Director,  
Cardiovascular Anesthesia  
Tokyo Women's Medical College  
Shinju-Ku, Tokyo, Japan  
Disclosures: 1

## Florian Nuevo, MD

Disclosures: 1

## Nancy A. Nussmeier, MD

Massachusetts General Hospital  
Boston, MA  
Disclosures: UpToDate (Wolters  
Kluwer Health), 6

## Gregory A. Nuttall, MD

Professor, Anesthesiology  
Mayo Clinic College of Medicine  
Rochester, MN  
Disclosures: 1

## Daryl Oakes, MD

Clinical Associate Professor  
Department of Anesthesiology,  
Perioperative and Pain  
Medicine  
Stanford University Medical Center  
Stanford, CA  
Disclosures: 1

## E. Andrew Ochroch, MD MSCE

Associate Professor, Anesthesia,  
Critical Care, and Surgery  
University of Pennsylvania  
Philadelphia, PA  
Disclosures: 1

## Makoto Ozaki, MD

Professor and Chair, Department of  
Anesthesiology  
Tokyo Women's Medical University  
Shinju-Ku, Tokyo, Japan  
Disclosures: Johnson & Johnson,  
Japan, 11; Masimo Japan, 11

## Wendy L. Pabich, MD

Cardiac Anesthesiologist  
Physicians Anesthesia Service  
Swedish Medical Center  
Seattle, WA  
Disclosures: Pensar Development,  
13

## Sarah Henrickson Parker, PhD

Director, Education and Academic  
Affairs  
Human Factors Research Scientist  
National Center for Human Factors  
in Healthcare  
MedStar Health  
Washington, DC  
Disclosures: 1

## Ronald Pauldine, MD

Clinical Professor  
Department of Anesthesiology and  
Pain Medicine  
University of Washington  
Seattle, WA  
Disclosures: 1

## Yong G. Peng, MD PhD FASE

Associate Professor,  
Anesthesiology  
Director, Cardiothoracic Fellowship  
Program  
Director, Perioperative Transesoph-  
ageal Echocardiography  
University of Florida College of  
Medicine  
Gainesville, FL  
Disclosures: 1

## Albert Perrino, Jr., MD

Professor, Anesthesiology  
Yale School of Medicine  
Chief, Anesthesiology  
VA Connecticut Healthcare System  
New Haven, CT  
Disclosures: 1

## Paul Pisklak, MD

Staff Intensivist  
Cardiac Anesthesiologist  
Texas Heart Institute  
CHI Baylor St. Luke's Medical  
Center  
Houston, TX  
Disclosures: 1

## Andrew Pitkin, MRCP FRCA

Assistant Professor  
University of Florida  
Gainesville, FL  
Disclosures: 1

## Mihai V. Podgoreanu, MD FASE

Associate Professor with Tenure  
Chief, Division of Cardiothoracic  
Anesthesia and Critical Care  
Director, Perioperative Genomics  
Program  
Department of Anesthesiology  
Duke University  
Durham, NC  
Disclosures: 1

## Wanda M. Popescu, MD

Associate Professor  
Anesthesiology  
Yale University School of Medicine  
New Haven, CT  
Disclosures: 1

## Mias Pretorius, MBChB MSCI

Associate Professor  
Anesthesiology and Clinical  
Pharmacology  
Director, Adult Cardiothoracic  
Anesthesia Fellowship  
Division of Cardiothoracic  
Anesthesia  
Vanderbilt University School of  
Medicine  
Nashville, TN  
Disclosures: 1

## Marco Ranucci, MD FESC

Head, Cardiothoracic and  
Vascular Anesthesia and ICU  
Department  
IRCCS Policlinico San Donato  
Milan, Italy  
Disclosures: CSL Behring, 3; Sorin  
Group, 4; Medtronic Inc, 3;  
Roche Diagnostics, 3; Grifols  
SA, 3

## Srikantha Rao, MBBS MD MS

Associate Professor  
Anesthesiology  
Division Director, Cardiac and  
Vascular Anesthesia  
Program Director, Adult  
Cardiothoracic Anesthesia  
Fellowship  
PennState College of Medicine  
Milton S. Hershey Medical Center  
Hershey, PA  
Disclosures: 1



# Faculty

## Scott T. Reeves, MD MBA FACC FASE

President, Society of Cardiovascular Anesthesiologists  
The John E. Mahaffey, MD,  
Professor and Chairman  
Anesthesia and Perioperative  
Medicine  
Medical University of South Carolina  
Charleston, SC  
Disclosures: 1

## Matthias L. Riess, MD PhD

Professor  
Department of Anesthesiology  
Vanderbilt University  
Staff Anesthesiologist  
TVHS VA Medical Center  
Nashville, TN  
Disclosures: 1

## J. Devin Roberts, MD

Assistant Professor, Anesthesiology  
Department of Anesthesiology and  
Critical Care Medicine  
University of Chicago Medical Center  
Chicago, IL  
Disclosures: 1

## Michael F. Roizen, MD

Chief Wellness Officer  
Cleveland Clinic  
Cleveland, OH  
Disclosures: Other, 11

## Peter M. J. Rosseel, MD

Anesthesiologist  
Amphia Hospital  
Breda, Netherlands  
President, European Association  
of Cardiothoracic  
Anaesthesiologists  
Department of Anaesthesia and  
Intensive Care  
Disclosures: 1

## Kathryn Rouine-Rapp, MD

Professor, Anesthesia  
University of California, San  
Francisco  
San Francisco, CA  
Disclosures: 1

## Colin Royse, MD MBBS FANZCA

Professor, Anaesthesia  
University of Melbourne  
Melbourne, Victoria, Australia  
Disclosures: Heartweb Pty Ltd, 5;  
iTEACHU PTY LTD, 5

## Michael Sander, MD

Vice Chair, Department of  
Anesthesiology and Intensive  
Care Medicine  
Charité-Universitätsmedizin Berlin  
Berlin, Germany  
Disclosures: Pulsion Medical  
Systems, 3; Edwards Life  
Sciences, 3; Pulsion Medical  
Systems, 9; Edwards Life  
Sciences, 9

## Robert M. Savage, MD FACC

Vice Chair, Department of  
Cardiothoracic Anesthesia  
Head, Sections of Perioperative  
Echocardiography  
Chair, Critical Response and  
Resuscitation  
Anesthesiology Institute, Heart &  
Vascular Institute  
Cleveland Clinic  
Cleveland, OH  
Disclosures: 1

## Peter Schulman, MD

Associate Professor  
Department of Anesthesiology and  
Preoperative Medicine  
Oregon Health & Science  
University  
Portland, OR  
Disclosures: Boston Scientific, 9

## Manfred D. Seeberger, MD

Professor  
Anesthesia and Intensive Care  
University of Basel  
Head of Anesthesia, Klinik  
Hirslanden Zurich  
Zurich, Switzerland  
Disclosures: 1

## Patricia C. Seifert, MSN RN FAAN

Educator, Cardiovascular  
Operating Room  
Inova Heart and Vascular Institute  
Falls Church, VA  
Disclosures: 1

## Jack Shanewise, MD FASE

Professor  
Anesthesiology  
Columbia University Medical  
Center  
New York, NY  
Disclosures: 1

## Kenneth G. Shann, CCP

Director, Perfusion Services  
Massachusetts General Hospital  
Boston, MA  
Disclosures: 1

## Andrew D. Shaw, MB FRCA FCCM

Professor and Chief  
Division of Cardiothoracic  
Anesthesiology  
Vanderbilt University Medical  
Center Department of  
Anesthesiology  
Nashville, TN  
Disclosures: Baxter, 4; Thrasos, 11;  
Covidien, 11; Astute, 11

## Stanton K. Shernan, MD FAHA FASE

Professor, Anesthesia  
President, National Board of  
Echocardiography  
Director, Cardiac Anesthesia  
Brigham and Women's Hospital  
Harvard Medical School  
Boston, MA  
Disclosures: e-echocardiography.com,  
6; Philips Healthcare, Inc., 6

## Sasha K. Shillcutt, MD FASE

Associate Professor  
Director, Perioperative  
Echocardiography  
Director, Clinical Research  
Department of Anesthesiology  
University of Nebraska Medical  
Center  
Omaha, NE  
Disclosures: E-Echocardiography, 4

## Douglas C. Shook, MD FASE

Assistant Professor, Anesthesia  
Harvard Medical School  
Director, Cardiothoracic  
Anesthesiology Fellowship  
Director, Interventional Cardiac  
Anesthesia  
Department of Anesthesiology,  
Perioperative and Pain  
Medicine  
Brigham and Women's Hospital  
Boston, MA  
Disclosures: Edwards Lifesciences,  
14; Sorin Group, 14; St Jude  
Medical, 14

## Linda Shore-Lesserson, MD FAHA FASE

Professor  
Anesthesiology  
Hofstra Northshore-LIJ School of  
Medicine  
Director, Cardiovascular  
Anesthesiology  
Northshore-LIJ Medical Center  
New Hyde Park, NY  
Disclosures: Grifols, 4; Elcam  
Medical, 4; Haemonetics, 3

## George Silvay, MD PhD

Professor  
Department of Anesthesiology  
Icahn School of Medicine at Mount  
Sinai  
New York, NY  
Disclosures: 1

## Saket Singh, MD

Vice Chair for Quality  
Department of Anesthesia  
Allegheny Health Network  
Clinical Assistant Professor  
Temple University School of  
Medicine  
Pittsburgh, PA  
Disclosures: 1

## Nikolaos J. Skubas, MD FASE DSc

Professor  
Clinical Anesthesiology and  
Cardiothoracic Surgery  
Director, Cardiac Anesthesia  
Attending Anesthesiologist  
Weill Cornell Medical College  
New York, NY  
Disclosures: 1

## Robert N. Sladen, MBChB FCCM

Professor and Executive Vice Chair  
College of Physicians and Surgeons  
Columbia University  
New York, NY  
Disclosures: 1

## Roman Sniecinski, MD FASE

Associate Professor, Anesthesiology  
Fellowship Program Director, Adult  
Cardiothoracic Anesthesiology  
Emory University School of  
Medicine  
Atlanta, GA  
Disclosures: Covidien, 9; Grifols, 11  
Grifols, 9; ViroPharma, 9

## Gautam Sreeram, MD

Assistant Professor  
Anesthesiology  
Emory University School of  
Medicine  
Atlanta, GA  
Disclosures: 1

## Mark Stafford-Smith, MD CM FRCPC FASE

Professor  
Anesthesiology  
Vice Chair, Education  
Director, Adult Cardiothoracic  
Anesthesiology Fellowship  
Department of Anesthesiology  
Duke University Medical Center  
Durham, NC  
Disclosures: 1

## Michele L. Sumler, MD

Assistant Professor  
Emory University School of  
Medicine  
Atlanta, GA  
Disclosures: 1

## Sugantha Sundar, MD

Assistant Professor  
Anesthesia  
Beth Israel Deaconess Medical  
Center  
Boston, MA  
Disclosures: 1

# Faculty

## Thoralf M. Sundt, III, MD

Chief, Division of Cardiac Surgery  
Massachusetts General Hospital  
Edward D. Churchill Professor of  
Surgery  
Harvard Medical School  
Boston, MA  
Disclosures: 1

## Madhav Swaminathan, MD FASE

Associate Professor  
Anesthesiology  
Clinical Director, Cardiothoracic  
Anesthesiology  
Duke University Medical Center  
Durham, NC  
Disclosures: 1

## Justiaan Swanevelder, MBChB MMed(Anes) FCA(SA) FRCA

Professor  
Head, Department of Anaesthesia  
University of Cape Town  
Cape Town, South Africa  
Disclosures: Did not disclose

## Kenichi Tanaka, MD

Professor  
Director, Cardiac Anesthesiology  
Division of Cardiothoracic  
Anesthesiology  
University of Maryland School of  
Medicine  
Baltimore, MD  
Disclosures: Grifols, 9; TEM  
Systems, 4; Octapharma, 4

## Bradley S. Taylor, MD MPH

Director, Coronary  
Revascularization  
University of Maryland Medical  
Center  
Baltimore, MD  
Disclosures: Medtronic, 3

## Mark A. Taylor, MD FASE

Associate Professor  
Chief, Anesthesia  
Forbes Hospital Allegheny Health  
Network  
Pittsburgh, PA  
Disclosures: 1

## Nelson L. Thaemert, MD

Assistant Program Director,  
Cardiothoracic Anesthesiology  
Fellowship  
Department of Anesthesiology,  
Pain, and Perioperative  
Medicine  
Brigham and Women's Hospital  
Boston, MA  
Disclosures: 1

## Walker Thomas, BA RDCS FASE

Instructor, School of Medicine  
Department of Anesthesiology  
University of Nebraska Medical  
Center  
Omaha, NE  
Disclosures: 1

## Annemarie Thompson, MD

Professor  
Anesthesiology and Medicine  
Director, Residency Program  
Department of Anesthesiology  
Division of Cardiothoracic  
Anesthesiology  
Duke University  
Durham, NC  
Disclosures: 1

## Daniel A. Tolpin, MD

Assistant Professor  
Anesthesiology Assistant Director  
Associate Program Director,  
Cardiothoracic Anesthesia  
Fellowship  
Division of Cardiovascular  
Anesthesiology  
Texas Heart Institute, Baylor  
St. Luke's Medical Center  
Houston, TX  
Disclosures: 1

## Christopher A. Troianos, MD

Professor  
Chief, Anesthesiology  
West Penn Hospital  
Allegheny Health Network  
Pittsburgh, PA  
Disclosures: 1

## Avery Tung, MD FCCM

Professor  
Quality Chief, Anesthesia  
Department of Anesthesia and  
Critical Care  
University of Chicago  
Chicago, IL  
Disclosures: Critical Care, 6;  
*Anesthesia & Analgesia*, 6

## Konstantine Tzimas, MD

Assistant Professor, Anesthesiology  
Codirector, Adult CT Fellowship  
University of Rochester  
Rochester, NY  
Disclosures: 1

## Ratna Vadlamudi, MD

Emory University Hospital  
Atlanta, GA  
Disclosures: 1

## Joost van der Maaten, MD

Consultant,  
Cardiothoracic Anesthesia and  
Intensive Care  
Section Cardiac Anesthesia  
Departments of Anesthesiology  
and Intensive Care  
University Medical Center  
Groningen  
Groningen, Netherlands  
Disclosures: 1

## Diederik Van Dijk, MD

Professor  
Intensive Care Medicine  
University Medical Center Utrecht  
Utrecht, Netherlands  
Disclosures: 1

## Annette Vegas, MDCM FRCPC FASE

Associate Professor  
Anesthesiology  
Toronto General Hospital  
University of Toronto, Canada  
Toronto, ON, Canada  
Disclosures: 1

## Peter Von Homeyer, MD FASE

University of Washington  
Seattle, WA  
Disclosures: 1

## Gebhard Wagener, MD

Associate Professor  
Clinical Anesthesiology  
Department of Anesthesiology  
Columbia University  
New York, NY  
Disclosures: 1

## Chad E. Wagner, MD

Associate Professor  
Anesthesia and Critical Care  
Vanderbilt University  
Nashville, TN  
Disclosures: 1

## Weipeng Wang, MD PhD

Professor  
Vice Chairman, Department of  
Anesthesiology  
Cardiovascular Institute and Fuwai  
Hospital  
National Center for Cardiovascular  
Diseases  
Peking Union Medical College  
Chinese Academy of Medical  
Sciences  
Disclosures: 1

## Andrew Weisinger, MD FASE

Chair, Department of  
Cardiovascular Anesthesia  
Providence Hospital  
Columbia, SC  
Disclosures: 1

## Ian J. Welsby, MBBS BSc FRCA

Associate Professor  
Anesthesiology and Critical Care  
Duke University Medical Center  
Durham, NC  
Disclosures: 1

## George Burke Whitener, MD

Assistant Professor  
Medical University of South  
Carolina  
Charleston, SC  
Disclosures: 1

## William S. Whitley, MD

Clinical Chief, Cardiothoracic  
Anesthesia  
Piedmont Hospital  
Decatur, GA  
Disclosures: 1

## Justin W. Wilson, MD

Assistant Professor  
Anesthesiology  
Director, Perioperative  
Echocardiography Services  
University of Texas Health Science  
Center at San Antonio  
San Antonio, TX  
Disclosures: 1

## Rick Sai-Chuen Wu, MD

Associate Professor  
China Medical University Hospital  
Taichung, Taiwan  
Director of Foreign Affairs and  
Board Trustee  
Taiwan Society of Cardiovascular  
Anesthesia  
Disclosures: 1

## Josh Zimmerman, MD FASE

Associate Professor  
Director, Perioperative  
Echocardiography  
Director, Preoperative Clinic  
University of Utah Department of  
Anesthesiology  
Salt Lake City, UT  
Disclosures: 1

## David A. Zvara, MD

Professor  
Chair, Department of  
Anesthesiology  
The University of North Carolina at  
Chapel Hill  
Chapel Hill, NC  
Disclosures: 1



# Faculty

## International Leaders

Jae-Hyon Bahk, MD PhD (ASCA  
South Korea)

Yee Eot Chee, MBBS MHA MA  
FANZCA FHKAM PGDipECHO  
PTEeXAM ASCeXAM (Hong  
Kong)

Sophia Chew, MMED (Anaes)  
MBBS FANZCA(Singapore)

Y-F Chow, MD MBBS FANZCA  
FHKCA FHKAM PG Dip Echo  
MSc (Hong Kong)

David Daly, MBBS FANZCA  
MCLinEpi (Australia)

Subid Ranjan Das, MBBS  
FRCA FFARCSI FHKCA  
FHKAM(Anaes) (Hong Kong)

Stefan J. M. Dieleman, MD  
(Netherlands)

Balthazar Eberle, MD  
(Switzerland)

Joerg Ender, MD (Germany)

Stephanie Fischer, MB BCh  
FCA(SA) (South Africa)

Carlos Galhardo Jr., MD (Brazil)

Tony Gin, MD (Hong Kong)

Donna Greenhalgh, MBChB  
FRCA FFICM (United Kingdom)

Michael P. W. Grocott, MBBS  
MD BSc FRCA FRCP FFICM  
(United Kingdom)

Fabio Guarracino, MD (Italy)

Nian Chih Hwang, MBBS  
FFARCSI FAMS GDACU  
(Singapore)

Yunseok Jeon, MD (South  
Korea)

Suhaini Kadiman, MD (ASCA  
Malaysia)

Andrew Klein, MD FRCA  
(United Kingdom)

Sophia ANG Bee Leng, MD  
(Singapore)

Marc J. Licker, MD  
(Switzerland)

Yatin Mehta, MD MNAMS  
FRCA FAMS (India)

Shay McGuinness, MBChB  
FRCA FANZCA FFICM (New  
Zealand)

Jose Mariano Soares de  
Moraes, MD PhD (Brazil)

Chirojit Mukherjee, MD  
(Germany)

Arne Neyrinck, MD PhD  
(Belgium)

Minoru Nomura, MD PhD  
(ASCA Japan)

Florian Nuevo, MD (Philippines)

Makoto Ozaki, MD (Japan)

Marco Ranucci, MD FESC (Italy)

Peter M. J. Rosseel, MD  
(Netherlands/Germany)

Michael Sander, MD (Germany)

Manfred D. Seeberger, MD  
(Switzerland)

Justiaan Swanevelder, MBChB  
MMed(Anes) FCA(SA) FRCA  
(South Africa)

Weipeng Wang, MD PhD  
(ASCA China)

Rick Sai-Chuen Wu, MD  
(Taiwan)

# Schedule

## Saturday, April 11

7-8 am

Marquis Foyer

### Continental Breakfast

8-10 am

Marquis Ballroom 1-5

### Opening Session

Moderator: Andrew D. Shaw, MB FRCA FCCM

|              |   |
|--------------|---|
| 8-8:05 am    | Welcome Remarks Andrew D. Shaw, MB FRCA FCCM  |
| 8:05-8:15 am | Opening Ceremony and Presentation of Distinguished Service Award<br>Scott T. Reeves, MD MBA FACC FASE |
| 8:15-8:35 am | ASA Update John Abenstein, MSEE MD, ASA President   |
| 8:35-9:15 am | Cardiac Surgery and Anesthesia: Past, Present, and Future Davy Cheng, MD MSc FRCPC FCAHS CCPE         |
| 9:15-10 am   | <b>Keynote:</b> Health, Wellness, and Professionalism Michael F. Roizen, MD                           |

10-10:30 am

Marquis Foyer

### Morning Break

10:30 am-12:30 pm

Liberty LM

### The Interventional Cath Lab: When Is "Good" the Enemy of "Perfect"

Moderator: Wendy L. Gross, MD MHCM

|                   |  |
|-------------------|--|
| 10:30-10:50 am    | What Does "Inoperable" Mean? Expanding Target Populations: Collaborative Assessment<br>Nelson L. Thaemert, MD              |
| 10:50-11:10 am    | Expectations and Results: Improving Measurements, Optimizing Results, and Extending Our Reach<br>Douglas C. Shook, MD FASE |
| 11:10-11:30 am    | When the Unpredicted Happens: Structural Surprises in the Cath Lab George Djaiani, MD FRCA FRCPC                           |
| 11:30-11:50 am    | When Should We Just Say No? R. Lebron Cooper, MD   |
| 11:50 am-12:10 pm | Collaborative Medicine and Joint Venture Finance Wendy L. Gross, MD MHCM   |
| 12:10-12:30 pm    | Discussion   |

10:30 am-12:30 pm

Liberty IJK

### A Potpourri of Updates in the Thoracic Cavity

Moderator: Wanda M. Popescu, MD

|                   |   |
|-------------------|---|
| 10:30-10:50 am    | Novel Approaches in the Thoracic Surgery Frank C. Detterbeck, MD          |
| 10:50-11:10 am    | Vats, Rats vs. Thoracotomy: Show Me the Data! E. Andrew Ochroch, MD MSCE  |
| 11:10-11:30 am    | Acute Lung Injury After Thoracic Surgery Marc Licker, MD                  |
| 11:30-11:50 am    | Methods of Lung Preservation Before Transplantation Arne Neyrinck, MD PhD |
| 11:50 am-12:10 pm | The Artificial Lung: Are We There Yet? Laura Niklason, MD                 |
| 12:10-12:30 pm    | Discussion  |

10:30 am-12:30 pm

Marquis Ballroom 1-5

### Transfusion Practice Around the World (Audience Response Session)

Moderator: Daryl Oakes, MD

|                   |  |
|-------------------|--|
| 10:30-10:50 am    | Blood Component Therapy: A Rational Approach to Transfusion Protocols Carlos Galhardo, Jr., MD   |
| 10:50-11:10 am    | Evaluate and Optimize Preoperative Patient Risk Factors to Minimize Perioperative Transfusion and Transfusion-Related Adverse Outcome C. David Mazer, MD |
| 11:10-11:30 am    | Point-of-Care Testing of Coagulation: Which Tests and When? Kenichi Tanaka, MD   |
| 11:30-11:50 am    | Optimal Transfusion Practice: Can We Minimize Transfusion-Related Injury? Keyvan Karkouti, MD  |
| 11:50 am-12:10 pm | Factor Concentrates: An Update Ian J. Welsby, MBBS BSc FRCA  |
| 12:10-12:30 pm    | Discussion   |

12:30-1:30 pm

Marquis Foyer & Salons 12-14

### Lunch on Your Own with Exhibitors

### Scientific Posters: Perioperative Medicine Abstracts

1:30-3:30 pm

Liberty IJK

### Adult Congenital (Structural) Heart Disease

Moderator: Gregory M. Janelle, MD FASE

|              |  |
|--------------|--|
| 1:30-1:50 pm | Adult Congenital Heart Surgery in 2014 Weipeng Wang, MD PhD          |
| 1:50-2:10 pm | Adult Congenital Heart Disease in the Cath Lab Minoru Nomura, MD PhD |

# Schedule

|              |   |
|--------------|---|
| 2:10–2:30 pm | A Growing Population: Improved Outcomes and Expectations in Congenital Cardiac Anomalies<br><i>James A. DiNardo, MD</i> |
| 2:30–2:50 pm | Single Ventricle Physiology: A Review <i>Alexander Mittnacht, MD FASE</i>   |
| 2:50–3:10 pm | Perioperative Management of the Adult Congenital Parturient <i>Laurie Davies, MD</i>                                    |
| 3:10–3:30 pm | Discussion  |

**1:30–3:30 pm**

**Liberty LM**

## Organ Crosstalk in Cardiac Surgery and Critical Care

**Moderator:** *G. Burkhard Mackensen, MD PhD FASE*

|              |  |
|--------------|--|
| 1:30–1:50 pm | Heart-Brain Cross-Talk: What Do We Need to Know? <i>G. Burkhard Mackensen, MD PhD FASE</i>       |
| 1:50–2:10 pm | AKI: Which Organ Interactions Are Most Relevant? <i>Shay McGuinness, MBChB FRCA FANZCA FFICM</i> |
| 2:10–2:30 pm | Acute Lung Injury: Cardiopulmonary Interactions <i>Stephanie Fischer, MB BCh FCA(SA)</i>         |
| 2:30–2:50 pm | Brain, Heart, Lung, Kidney, Liver: Who Wins the Fight? <i>Jerrold H. Levy, MD FAHA FCCM</i>      |
| 2:50–3:10 pm | Heart-Liver Interactions in CT Surgery <i>Ravi Vivekanand Joshi, MD</i>                          |
| 3:10–3:30 pm | Discussion   |

**1:30–3:30 pm**

**Marquis Ballroom 1-5**

## Pulmonary Hypertension: Pearls of Wisdom (Audience Response Session)

**Moderator:** *Srikantha Rao, MBBS MD MS*

|              |  |
|--------------|--|
| 1:30–1:50 pm | Inhaled Pulmonary Vasodilator Therapy <i>Robert N. Sladen, MBChB FCCM</i>  |
| 1:50–2:10 pm | Management of RV Dysfunction in Cardiac Surgery <i>Rick Sai-Chuen Wu, MD</i>   |
| 2:10–2:30 pm | TEE Evaluation of RV Dysfunction <i>Alina Nicoara, MD FASE</i>   |
| 2:30–2:50 pm | Acute Massive Pulmonary Embolism: Management of Acute RV Failure <i>Konstantine Tzimas, MD</i>   |
| 2:50–3:10 pm | Perioperative Implications of Severe Pulmonary HTN: What You Should Know About This High-Risk Surgical Population <i>Karsten Bartels, MD</i> |
| 3:10–3:30 pm | Discussion   |

**3:30–4 pm**

**Marquis & Liberty Foyers**

## Afternoon Break

**4–6 pm**

**Liberty IJK**

## Global Finance in Perioperative Cardiovascular Care

**Moderator:** *Davy Cheng, MD MSc FRCPC FCAHS CCPE*

|              |   |
|--------------|---|
| 4–4:20 pm    | ObamaCare: AHA/ACC Cardiac Surgeon's Perspective <i>Michael J. Mack, MD</i>                           |
| 4:20–4:40 pm | ObamaCare: Cardiac Anesthesiologist's Perspective <i>Solomon Aronson, MD MBA FACC FACCP FAHA FASE</i> |
| 4:40–5 pm    | European Perspective <i>Peter M. J. Rosseel, MD</i>   |
| 5–5:20 pm    | Australian Perspective <i>David Daly, MBBA FANZCA MCLinEpi</i>  |
| 5:20–5:40 pm | Asian Perspective <i>Subid Ranjan Das, MBBS FRCA FFARCSI FHKCA FHKAM (Anaes)</i>                      |
| 5:40–6 pm    | Discussion  |

**4–6 pm**

**Liberty LM**

## Perioperative Echocardiography in Heart Failure Patients

**Moderator:** *Christopher A. Troianos, MD*

|              |  |
|--------------|--|
| 4–4:20 pm    | Assessment of Right Heart Failure with TEE <i>Manfred D. Seeberger, MD</i>   |
| 4:20–4:40 pm | The Anesthesiologist's Guide to Diastolic Heart Failure <i>Justiaan Swanevelder, MBChB MMed(Anes) FCA(SA) FRCA</i> |
| 4:40–5 pm    | New Surgical Treatment Options for Right Heart Failure <i>Sasha K. Shillcutt, MD FASE</i>                          |
| 5–5:20 pm    | Echocardiographic Approach to LVAD Insertion <i>Julian Stephens Bick, MD</i>                                       |
| 5:20–5:40 pm | Bridge to Noncardiac Surgery: How to Manage LVADs Outside the Cardiac Suite <i>Candice R. Montzingo, MD</i>        |
| 5:40–6 pm    | Discussion   |

**4–6 pm**

**Marquis Ballroom 1-5**

## 3D TEE Is for Everybody (Audience Response Session)

**Moderator:** *Alina Nicoara, MD FASE*

|              |   |
|--------------|---|
| 4–4:20 pm    | Integrating 3D TEE in the OR Workflow <i>Douglas C. Shook, MD FASE</i>                |
| 4:20–4:40 pm | Case Study: The Role of 3D TEE in TAVR <i>Joerg Ender, MD</i>                         |
| 4:40–5 pm    | Case Study: 3D TEE in Functional MR <i>Daniel Bainbridge, MD FRCPC</i>                |
| 5–5:20 pm    | Case Study: 3D TEE in Degenerative Mitral Valve Disease <i>Georges Desjardins, MD</i> |
| 5:20–5:40 pm | Case Study: Myocardial Deformation by 3D TEE <i>Aman Mahajan, MD PhD</i>              |
| 5:40–6 pm    | Discussion  |

# Schedule

## Sunday, April 12

7–8 am

Marquis Foyer

### Continental Breakfast

8–9:30 am

Marquis Ballroom 1–5

### Revascularization Conference: PCI vs. OPCAB vs. CABG

Moderator: Linda Shore-Lesserson, MD FAHA FASE

|              |   |
|--------------|---|
| 8–8:25 am    | PCI Is Best Jeffrey A. Brinker, MD FACC FSCAI |
| 8:25–8:50 am | OPCAB Is Best Yatin Mehta, MD MNAMS FRCA FAMS |
| 8:50–9:15 am | CABG Is Best Michael J. Mack, MD              |
| 9:15–9:30 am | Panel Discussion                              |

9:30–10:30 am

Marquis Foyer

### Morning Break

10:30 am–12:30 pm

Liberty IJK

### Perioperative Organ Protection: Role of Translational and Clinical Research

Moderator: C. David Collard, MD MS

|                   |   |
|-------------------|---|
| 10:30–10:50 am    | Evidence-Based Neuroprotection in Cardiac Surgery Hilary P. Grocott, MD FRCP FASE                   |
| 10:50–11:10 am    | Role of Big Data in Perioperative Organ Protection Stefan J. M. Dieleman, MD                        |
| 11:10–11:30 am    | Does Genetic Variation Contribute to Perioperative Morbidity? J. Daniel Muehlschlegel, MD MMSc FAHA |
| 11:30–11:50 am    | How Can We Protect the Kidneys During Cardiac Surgery? Shay McGuinness, MBChB FRCA FANZCA FFICM     |
| 11:50 am–12:10 pm | Myocardial Protection: Insights from Cross-Species Research Mihai V. Podgoreanu, MD FASE            |
| 12:10–12:30 pm    | Discussion  |

10:30 am–12:30 pm

Marquis Ballroom 1–5

### Perioperative Management of Cardiac Implantable Electrical Devices (Audience Response Session)

Moderator: Douglas C. Shook, MD FASE

|                   |  |
|-------------------|--|
| 10:30–10:50 am    | Temporary Pacemakers: Uses and Indications Makoto Ozaki, MD  |
| 10:50–11:10 am    | Guidelines for Perioperative Management of CIEDs Mias Pretorius, MBChB MSCI  |
| 11:10–11:30 am    | As, Vs, Ds, Bi-Vs, and ICDs: Review of Cardiac Implantable Electrical Devices Annemarie Thompson, MD                                   |
| 11:30–11:50 am    | Pro-Con Debate: Pro—Anesthesiologists Should Learn to Interrogate CIEDs Peter Schulman, MD   |
| 11:50 am–12:10 pm | Pro-Con Debate: Con—Anesthesiologists Should Not Be Responsible for Interrogating Permanently Implantable Devices Aman Mahajan, MD PhD |
| 12:10–12:30 pm    | Discussion   |

10:30 am–12:30 pm

Liberty LM

### Coagulation Challenges in Cardiovascular Anesthesia

Moderator: Priya A. Kumar, MD

|                   |  |
|-------------------|--|
| 10:30–10:50 am    | TEG/ROTEM: What Do I Need to Know and Is It of Any Real Use? C. David Mazer, MD          |
| 10:50–11:10 am    | Antifibrinolytics: Should We Reconsider Aprotinin? Jose Mariano Soares de Moraes, MD PhD |
| 11:10–11:30 am    | Topical Pro-Coagulants Ian J. Welsby, MBBS BSc FRCA                                      |
| 11:30–11:50 am    | Role of Factor 7 in Massive Transfusion. Better Late than Never? Kenichi Tanaka, MD      |
| 11:50 am–12:10 pm | Anti-Platelet Agents and Cardiac Anesthesia: Quo Vadis? Jerrold H. Levy, MD FAHA FCCM    |
| 12:10–12:30 pm    | Discussion   |

12:30–1:30 pm

Marquis Ballroom 6–10, Foyer, & Salons 12–14

### Lunch and Grand Opening of Exhibits

### Scientific Posters: Basic Science, CV Anesthesia, Coagulation, Structural Heart Disease, and Thoracic Anesthesia Abstracts

1:30–3:30 pm

Marquis Ballroom 1–5

### Minimally Invasive Cardiac Surgery (Audience Response Session)

Moderator: Mo Ghotbi, MD

|              |   |
|--------------|---|
| 1:30–1:50 pm | Patient Selection and Anesthetic Considerations for Percutaneous Pulmonary Valve Replacement Andrew Pitkin, MRCP FRCA |
| 1:50–2:10 pm | Percutaneous Mitral Surgery: Here to Stay or Gone Tomorrow? Philip Jones, MD MSc(Clin Trials) FRCPC                   |
| 2:10–2:30 pm | OPCAB George Djaiani, MD FRCA FRCPC   |
| 2:30–2:50 pm | Robotic Cardiac Surgery: Long-Term Outcomes and Future Trends Gregory A. Nuttall, MD                                  |

# Schedule

|              |  |
|--------------|--|
| 2:50–3:10 pm | Anesthesia for Off-Pump VAD Placement <i>Robert J. Deegan, MBChD PhD</i> |
| 3:10–3:30 pm | Discussion   |

**1:30–3:30 pm**

**Liberty IJK**

## Tricuspid Valve Disease: What's the Big Deal?

**Moderator: Tara Brakke, MD FASE**

|              |   |
|--------------|---|
| 1:30–1:50 pm | Tricuspid Disease in Cardiac Surgery: Does It Matter? (Outcome Review) <i>Yee Eot Chee, MBBS MHA MA FANZCA FHKAMPGDipECHO PTEeXAM ASCeXAM</i> |
| 1:50–2:10 pm | Tricuspid Anatomy and Repair: the Basics <i>Balthasar Eberle, MD</i>  |
| 2:10–2:30 pm | Echo Evaluation of TR: How Bad Is It? <i>G. Burkhard Mackensen, MD PhD FASE</i>   |
| 2:30–2:50 pm | Tricuspid Regurgitation in the Setting of Right Heart Failure <i>Alina Nicoara, MD FASE</i>   |
| 2:50–3:10 pm | Moderate Tricuspid Regurgitation in Cardiac Surgery: Do We Fix? <i>Bradley S. Taylor, MD MPH</i>  |
| 3:10–3:30 pm | Discussion  |

**1:30–3:30 pm**

**Liberty LM**

## Fluid Therapy in Cardiovascular Surgery

**Moderator: Wanda M. Popescu, MD**

|              |   |
|--------------|---|
| 1:30–1:50 pm | Practical Aspects of Fluid Management <i>Albert Perrino, Jr. MD</i>   |
| 1:50–2:10 pm | The Third Space: Fact or Fiction? <i>Sophia Chew, MMED(Anes) MBBS FANZCA</i>  |
| 2:10–2:30 pm | Fluid Responsiveness Is Not the Same as Fluid Deficiency: How to Tell the Difference <i>J. Mauricio Del Rio, MD</i> |
| 2:30–2:50 pm | Does the Choice of Crystalloid Make a Difference? <i>Janet Martin, PharmD PhD</i>                                   |
| 2:50–3:10 pm | Hemoglobin-Based Oxygen Carriers <i>Steven E. Hill, MD</i>  |
| 3:10–3:30 pm | Discussion  |

**3:30–4 pm**

**Marquis Ballroom 6-10**

## Afternoon Break and Refreshments with Exhibits

**4–6 pm**

**Liberty LM**

## TEE for Mitral Regurgitation: A Comprehensive Approach

**Moderator: Sasha K. Shillcutt, MD FASE**

|              |   |
|--------------|---|
| 4–4:20 pm    | Mitral Regurgitation (Type I) <i>Nian Chih Hwang, MBBS FFARCSI FAMS GDAcu</i> |
| 4:20–4:40 pm | Mitral Regurgitation (Type II) <i>Minoru Nomura, MD PhD</i>                   |
| 4:40–5 pm    | Mitral Regurgitation (Type III) <i>Feroze Mahmood, MD</i>                     |
| 5–5:20 pm    | Intraop MR: What the Surgeon Wants to Know <i>Bradley S. Taylor, MD MPH</i>   |
| 5:20–5:40 pm | The Mitral Exam: Putting It All Together <i>Madhav Swaminathan, MD FASE</i>   |
| 5:40–6 pm    | Discussion  |

**4–6 pm**

**Liberty IJK**

## ECMO: Do We Still Need Ventilators?

**Moderator: Donna Greenhalgh, MBChB FRCA FFICM**

|              |   |
|--------------|---|
| 4–4:20 pm    | Does Echocardiography Influence ECMO Management? <i>Justiaan Swanevelder, MBChB MMed(Anes) FCA(SA) FRCA</i> |
| 4:20–4:40 pm | ECMO as an Alternative to Ventilation <i>Tony Gin, MD</i>   |
| 4:40–5 pm    | How to Set Up an ECMO Service <i>Jason D. Kennedy, MD</i>   |
| 5–5:20 pm    | Management of Bugs and Blood in ECMO <i>Julian Barker, MD</i>   |
| 5:20–5:40 pm | Now What? Common Problems That Arise in ECMO and How to Fix Them <i>Annette Vegas, MDCM FRCPC FASE</i>      |
| 5:40–6 pm    | Discussion  |

**4–6 pm**

**Marquis 1-5**

## SCA/STS: Guidelines for Valvular Heart Disease (Audience Response Session)

**Moderator: Stanton K. Shernan, MD FAHA FASE**

|           |   |
|-----------|---|
| 4–4:30 pm | The Importance of the Heart Team and Heart Valve Centers of Excellence <i>Michael J. Mack, MD</i>                         |
| 4:30–5 pm | The Impact of the AHA Guidelines for Valvular Heart Disease for Cardiac Surgery <i>Thoralf M. Sundt, III, MD</i>          |
| 5–5:30 pm | The Impact of the AHA Guidelines for Valvular Heart Disease for Cardiac Anesthesia <i>Nikolaos J. Skubas, MD FASE DSc</i> |
| 5:30–6 pm | Panel Discussion  |

**6–7 pm**

**Marquis Ballroom 6-10**

## Networking Reception with Exhibits

# Schedule

## Monday, April 13

7-8 am

Marquis Ballroom 6-10

### Continental Breakfast with Exhibits

8-10 am

Marquis 1-5

### FOCUS: Human Factors in the Cardiac Operating Room (Audience Response Session)

Moderators: James H. Abernathy, III, MD MPH FASE FAHA; Jonathan B. Mark, MD

Panel Members: Sarah Henrickson Parker, PhD; Patricia C. Seifert, MSN RN FAAN; Kenneth G. Shann, CCP; Douglas C. Shook, MD FASE; Thoralf M. Sundt, III, MD

This session will incorporate a panel discussion and a conversation with the audience.

10-10:30 am

Marquis Ballroom 6-10

### Morning Break and Coffee with Exhibits

10:30 am-12:30 pm

Liberty NOP

### Best Abstracts Session 1

Moderator: Aman Mahajan, MD PhD

10:30 am-12:30 pm

Marquis 1-5

### International Perspectives on Best TAVR Practices (Audience Response Session)

Moderator: G. Burkhard Mackensen, MD PhD FASE

10:30-10:50 am Fast-Track Pathways for TAVR Patients to Reduce Cost and LOS Balthasar Eberle, MD

10:50-11:10 am Strategies for Success as the Anesthesia Leader for TAVR in the Heart Team Model Daniel Bainbridge, MD FRCPC

11:10-11:30 am The Role of Echocardiographic Imaging for TAVR Andrew Klein, MD FRCA

11:30-11:50 am Update on the Latest TAVR Technology and Clinical Trials Chirojit Mukherjee, MD

11:50 am-12:10 pm What Can Go Wrong and What to Do When It Does John G. Augoustides, MD FASE FAHA

12:10-12:30 am Discussion

10:30 am-12:30 pm

Liberty LM

### Neuromonitoring

Moderator: Daryl Oakes, MD

10:30-10:50 am Should We Be Monitoring Depth of Anesthesia During CPB? Nelson L. Thaemert, MD

10:50-11:10 am Optimizing Cerebral Blood Flow During CPB: Monitoring Cerebral Autoregulation Suhaini Kadiman, MD

11:10-11:30 am Role of TEE and Epi-aortic Scanning in Preventing Embolic Cerebrovascular Events Kathryn Glas, MD MBA FASE

11:30-11:50 am CNS Protection During Circulatory Arrest for Ascending Aortic Procedures Hilary P. Grocott, MD FRCP FASE

11:50 am-12:10 pm Spinal Cord Protection During Thoracic Aortic Procedures Albert T. Cheung, MD

12:10-12:30 am Discussion

10:30 am-12:30 pm

Liberty IJK

### Process Measures for Quality Improvement

Moderator: C. David Collard, MD MS

10:30-10:50 am Temperature Management Sophia ANG Bee Leng, MD

10:50-11:10 am Beta-Blocker Management Martin J. London, MD

11:10-11:30 am Glucose Management Andra E. Duncan, MD MS

11:30-11:50 am VTE Management Chad E. Wagner, MD

11:50 am-12:10 pm Antibiotic and Infection Management Paul Pisklak, MD

12:10-12:30 pm Discussion

12:30-1:30 pm

Marquis Ballroom 6-10,

### Lunch with Exhibits

Foyer, Salons 12-14

### Scientific Posters: Echocardiography and Quality Improvement Abstracts



# Schedule

**12:45-1:15 pm**

**Annual Business Meeting**

**Marquis 1-5**

**1:30-3:30 pm**

**Critical Care Controversies**

**Moderator: Laureen L. Hill, MD MBA**

|              |   |
|--------------|---|
| 1:30-1:50 pm | Controversies in Defining and Determining Death in Critical Care <i>Tony Gin, MD</i>    |
| 1:50-2:10 pm | Is There a Place for Corticosteroid Treatment Anymore? <i>Stefan J. M. Dieleman, MD</i> |
| 2:10-2:30 pm | What's the Best Glucose Value for a Heart Patient? <i>Andra E. Duncan, MD MS</i>        |
| 2:30-2:50 pm | Is Low Tidal Volume Ventilation Low Enough? <i>Ronald Pauldine, MD</i>                  |
| 2:50-3:10 pm | Therapeutic Hypothermia in 2015 <i>Avery Tung, MD FCCM</i>                              |
| 3:10-3:30 pm | Discussion  |

**Liberty LM**

**1:30-3:30 pm**

**Enhancing Recovery (EACTA Session) (Audience Response Session)**

**Moderator: Donna Greenhalgh, MBChB FRCA FFICM**

|              |  |
|--------------|--|
| 1:30-1:50 pm | Fast-Track Cardiac Surgery <i>Joerg Ender, MD</i>  |
| 1:50-2:10 pm | Can Perioperative Fluid Balance Improve Outcome? <i>Michael Sander, MD</i>                               |
| 2:10-2:30 pm | Enhanced Recovery Decreases Surgical Morbidity <i>Michael P. W. Grocott, MBBS MD BSc FRCA FRCP FFICM</i> |
| 2:30-2:50 pm | Enhanced Recovery in Thoracic Surgery <i>Donna Greenhalgh, MBChB FRCA FFICM</i>                          |
| 2:50-3:10 pm | Improving and Predicting Outcomes After Cardiac Surgery <i>Marco Ranucci, MD FESC</i>                    |
| 3:10-3:30 pm | Discussion   |

**Marquis 1-5**

**1:30-3:30 pm**

**International Quality Issues in Cardiac Surgery**

**Moderator: Saket Singh, MD**

|              |   |
|--------------|---|
| 1:30-1:50 pm | How to Meet Quality Mandates <i>Sophia ANG Bee Leng, MD</i>                                       |
| 1:50-2:10 pm | What Is Quality? <i>Yunseok Jeon, MD</i>  |
| 2:10-2:30 pm | How and What to Measure <i>Marek Brzezinski, MD PhD</i>   |
| 2:30-2:50 pm | The Economics of Quality <i>David A. Zvara, MD</i>  |
| 2:50-3:10 pm | The Benefits of Taking Part in Database Projects <i>James H. Abernathy, III, MD MPH FASE FAHA</i> |
| 3:10-3:30 pm | Discussion  |

**Liberty IJK**

**3:30-4 pm**

**Afternoon Break and Refreshments with Exhibits**

**Marquis Ballroom 6-10**

**4-6 pm**

**Cardiopulmonary Bypass Disasters**

**Moderator: Wendy L. Pabich, MD**

|              |  |
|--------------|--|
| 4-4:20 pm    | Massive Transfusion and ESRD Patients <i>Fabio Guarracino, MD</i>          |
| 4:20-4:40 pm | Sudden Unexpected Aortic Dissection <i>Yatin Mehta, MD MNAMS FRCA FAMS</i> |
| 4:40-5 pm    | Massive Air Embolism <i>G. Burkhard Mackensen, MD PhD FASE</i>             |
| 5-5:20 pm    | Severe Metabolic Acidosis <i>Albert T. Cheung, MD</i>                      |
| 5:20-5:40 pm | Vasoplegia and Its Management <i>Mark Stafford-Smith, MD CM FRCPC FASE</i> |
| 5:40-6 pm    | Discussion   |

**Liberty IJK**

# Schedule

## Monday, April 13 (continued)

4-6 pm

Marquis 1-5

### Super Echo

**Moderators:** Kathryn Glas, MD MBA FASE; Sasha K. Shillcutt, MD FASE

**Panelists:** Manfred D. Seeberger, MD; James A. DiNardo, MD; Stanton K. Shernan, MD FAHA FASE; Sasha K. Shillcutt, MD FASE; Kathryn Glas, MD MBA FASE

|              |   |
|--------------|---|
| 4-4:15 pm    | Transesophageal Echocardiography Vector Flow Mapping Clarifies the Reasons of a Mismatch Between Preoperative Doppler Study Data and the Activities of Daily Living (ADL) of the Patient with RVOT Stenosis Combined with Patent Ductus Arteriosus and Severe Pulmonary Artery Hypertension <i>Hirota Ito, MD</i> |
| 4:15-4:30 pm | The Value of Real-Time 3D Epicardial Echocardiography During the Ross Procedure: A Novel Approach Using a RT3D TEE Probe <i>Marie-Eve Chamberland, MD</i>   |
| 4:30-4:45 pm | Coronary Sinus Ostial Atresia with Unroofed Coronary Sinus Precluding Retrograde Cardioplegia <i>Kimberly Kesner, MD</i>  |
| 4:45-5 pm    | Failed Transcatheter Sapien Tricuspid Valve-in-Valve Replacement <i>Jeremy Bennett, MD</i>  |
| 5-5:15 pm    | Confirmation of Flow in the Left Circumflex Artery by Transesophageal Echocardiography to Avoid Coronary Artery Surgical Revascularization <i>Cory Maxwell</i>  |
| 5:15-5:30 pm | When Tubes Fly: Echo for Innovative Tricuspid Valve Reconstruction <i>Natalie Silverton, MD</i>   |
| 5:30-5:45 pm | Removal of Intracardiac Thrombus in a Patient with Intracranial Hemorrhage <i>Jennie Ngai, MD</i>   |
| 5:45-6 pm    | Discussion  |

4-6 pm

Liberty LM

### Anemia and Solutions

**Moderator:** Donna Greenhalgh, MBChB FRCA FFICM

|              |  |
|--------------|--|
| 4-4:20 pm    | Jehovah's Witness Patients and Low Hb <i>Peter M. J. Rosseel, MD</i>                   |
| 4:20-4:40 pm | Anemia and Comorbidity: Does It Make a Difference? <i>Colleen Koch, MD MS MBA FACC</i> |
| 4:40-5 pm    | Cell Salvage Is Beneficial in All Patients <i>Marco Ranucci, MD FESC</i>               |
| 5-5:20 pm    | Cell Salvage Is Not Beneficial in All Patients <i>Jae-Hyon Bahk, MD PhD</i>            |
| 5:20-5:40 pm | Is EPO the Answer? <i>Joost van der Maaten, MD</i>                                     |
| 5:40-6 pm    | Discussion   |

## Tuesday, April 14

7-8 am

Marquis Ballroom 6-10

### Continental Breakfast with Exhibits

8-10 am

Marquis 1-5

### Earl Wynands Lecture

**Moderators:** Davy Cheng, MD MSc FRCPC FCAHS CCPE; Andrew D. Shaw, MB FRCA FCCM

|              |  |
|--------------|--|
| 8-8:45 am    | Which Is Worse for the Kidneys: Anemia or Blood Transfusion? <i>Keyvan Karkouti, MD</i>  |
| 8:45-9:30 am | The Importance of the AKI to CKD Transition in Cardiac Surgery <i>Lakhmir Chawla, MD</i> |
| 9:30-10 am   | Panel Discussion   |

10-10:30 am

Marquis Ballroom 6-10

### Morning Break and Coffee with Exhibits

10:30 am-12:30 pm

Liberty NOP

### Best Abstracts Session 2

**Moderator:** Martin J. London, MD

10:30 am-12:30 pm

Liberty LM

### Aortic Root to Aortic Arch Repair

**Moderator:** George Silvay, MD PhD

|                   |  |
|-------------------|--|
| 10:30-10:50 am    | Neuromonitoring in Aortic Arch Surgery <i>Faculty Hilary P. Grocott, MD FRCPC FASE</i>           |
| 10:50-11:10 am    | Anesthetic Considerations for Hybrid Approaches to the Aortic Arch <i>Weipeng Wang, MD PhD</i>   |
| 11:10-11:30 am    | Aortic Root Surgery: Reimplantation, Remodeling, or Replacement <i>Brian J. Gelfand, MD FACS</i> |
| 11:30-11:50 am    | Evolving Approaches to Acute Type-A Dissections <i>Daryl Oakes, MD</i>                           |
| 11:50 am-12:10 pm | Perfusion Strategies for Aortic Arch Surgery <i>Miklos Kertai, MD PhD</i>                        |
| 12:10-12:30 pm    | Discussion   |

# Schedule

10:30 am–12:30 pm

Marquis 1-5

## The Right Heart (Audience Response Session)

Moderator: G. Burkhard Mackensen, MD PhD FASE

|                   |  |
|-------------------|--|
| 10:30–10:50 am    | The Right Heart Needs Help: What Do I Do? Y-F Chow, MD MBBS FANZCA FHKCA FHKAM PG Dip Echo MSc |
| 10:50–11:10 am    | Echocardiographic Assessment of the RV Stephen A. Esper, MD MBA                                |
| 11:10–11:30 am    | Tricuspid Valve Repair Versus Replacement Feroze Mahmood, MD                                   |
| 11:30–11:50 am    | How to Get the Pulmonary Pressure Right Eric Jacobsohn, MBChB MHPE FRCPC                       |
| 11:50 am–12:10 pm | When Right Goes Wrong: Right Ventricular Assist Device vs. ECMO Peter Von Homeyer, MD FASE     |
| 12:10–12:30 pm    | Discussion   |

10:30 am–12:30 pm

Liberty IJK

## Global Approaches to Quality and Safety

Moderator: Philip Jones, MD MSc(Clin Trials) FRCPC

|                   |   |
|-------------------|---|
| 10:30–10:50 am    | High-Reliability Organizations in Healthcare Florian Nuevo, MD                                    |
| 10:50–11:10 am    | Hospital Quality and Physician Performance Metrics for Cardiac Anesthesiologists Yunseok Jeon, MD |
| 11:10–11:30 am    | Checklists and Cardiac Anesthesia Janet Martin, PharmD PhDeq                                      |
| 11:30–11:50 am    | How to Teach Quality Improvement to Our Trainees Mark Stafford-Smith, MD CM FRCPC FASE            |
| 11:50 am–12:10 pm | Best (Safe) Practices in Cardiac Anesthesia Nancy A. Nussmeier, MD                                |
| 12:10–12:30 pm    | Discussion  |

12:30–1:30 pm

Marquis Ballroom 6-10, Foyer, Salons 12-14

## Dessert with Exhibits

## Scientific Posters: Perioperative Medicine Abstracts and Interesting Case Reports

1:30–3:30 pm

Liberty LM

## Descending Thoracic Aortic Surgery

Moderator: Tara Brakke, MD FASE

|              |  |
|--------------|--|
| 1:30–1:50 pm | Updates on Neuroprotection for Thoracic Aortic Procedures Jae-Hyon Bahk, MD PhD                                    |
| 1:50–2:10 pm | Endovascular Repair: Anesthetic Management and Monitoring Recommendations Georgios (George) Nicolaou, MB BCh FRCPC |
| 2:10–2:30 pm | Guideline Review: Indications for Surgery Nikolaos J. Skubas, MD FASE DSc  |
| 2:30–2:50 pm | Open Repair: Anesthetic Management and Monitoring Recommendations Albert T. Cheung, MD                             |
| 2:50–3:10 pm | Hemodynamic Management and End Organ Protection Josh Zimmerman, MD FASE  |
| 3:10–3:30 pm | Discussion   |

1:30–3:30 pm

Liberty IJK

## Research: How an SCA Research Award Contributed to My Career

Moderator: Paul M. Heerdt, MD PhD FCCP

|              |  |
|--------------|--|
| 1:30–1:50 pm | Overview of the SCA Grant Program Paul M. Heerdt, MD PhD FCCP                                      |
| 1:50–2:10 pm | How an SCA Grant Influenced My Career Path Matthias L. Riess, MD PhD                               |
| 2:10–2:30 pm | My SCA Grant as a Component of a Multicenter Trial Diederik Van Dijk, MD                           |
| 2:30–2:50 pm | Where I Stand with My Current SCA Grant Nina C. Hauck-Weber, PhD                                   |
| 2:50–3:10 pm | Panel: How to Get Published in the <i>British Journal of Anesthesia</i> Hugh Hemmings, MD PhD FRCA |
| 3:10–3:30 pm | Panel: How to Get Published in <i>Anesthesia and Analgesia</i> Charles W. Hogue, MD                |

1:30–3:30 pm

Marquis 1-5

## Problem Solving in Anticoagulation for CPB (Audience Response Session)

Moderator: Linda Shore-Lesserson, MD FAHA FASE

|              |  |
|--------------|--|
| 1:30–1:50 pm | Heparin Sensitivity and Resistance Nian Chih Hwang, MBBS FFARCSI FAMS GDAcu                              |
| 1:50–2:10 pm | Heparin Dosing: Too Much, Too Little, or Just Right? David Daly, MBBA FANZCA MCLinEpi                    |
| 2:10–2:30 pm | Alternatives to Heparin Stephen A. Esper, MD MBA   |
| 2:30–2:50 pm | Heparin Induced Thrombocytopenia: Diagnosis and Management During CPB Andra E. Duncan, MD MS             |
| 2:50–3:10 pm | Heparin Reversal and Protamine Reactions Yee Eot Chee, MBBS MHA MA FANZCA FHKAMPGDipECHO PTEeXAM ASCeXAM |
| 3:10–3:30 pm | Discussion   |

3:30–4 pm

Marquis & Liberty Foyers

## Afternoon Break

# Schedule

**Tuesday, April 14** (continued)

**4–6 pm**

**Liberty LM**

## **Percutaneous Valve Surgery**

**Moderator: Gautam Sreeram, MD**

- |              |   |
|--------------|---|
| 4–4:20 pm    | Who Needs Open-Valve Surgery Anymore? Patient Selection for Percutaneous vs. Open-Valve Procedures<br><i>Logan Kosarek, MD</i>          |
| 4:20–4:40 pm | Which and Why? Transfemoral, Transapical, and Transaortic Approaches <i>Ratna Vadlamudi, MD</i>   |
| 4:40–5 pm    | Does My Patient Need a General Anesthetic? Options for Anesthesia in the Cath Lab and Hybrid Room<br><i>Fabio Guarracino, MD</i>        |
| 5–5:20 pm    | Ensuring Successful Deployment: Echo for Percutaneous Valves <i>Chirojit Mukherjee, MD</i>  |
| 5:20–5:40 pm | Will My Patient Wake Up and Live a Productive Life? Neurologic Outcomes and Future Areas of Investigation<br><i>Karsten Bartels, MD</i> |
| 5:40–6 pm    | Discussion  |

**4–6 pm**

**Liberty IJK**

## **SOCCA**

**Moderator: Lauren L. Hill, MD MBA**

- |              |  |
|--------------|--|
| 4–4:20 pm    | Optimizing Neuropsychological Function in the ICU Patient: OR to ICU Continuum <i>David Grenda, MD PhD</i> |
| 4:20–4:40 pm | Endocrine Predictors of Outcome in Critical Illness <i>Peter Von Homeyer, MD FASE</i>                      |
| 4:40–5 pm    | To What End? Emerging Technologies for Organ Perfusion Assessment <i>Gebhard Wagener, MD</i>               |
| 5–5:20 pm    | Renal Replacement Therapy: Does Dose Matter? <i>Abbas Al-Qamari, MD</i>                                    |
| 5:20–5:40 pm | Critical Care Articles of the Year <i>Kevin W. Hatton, MD FCCM</i>   |
| 5:40–6 pm    | Discussion   |

**4–6 pm**

**Marquis 1–5**

## **Ventricular Assist Device (VAD) Update (Audience Response Session)**

**Moderator: J. Daniel Muehlschlegel, MD MMSc FAHA**

- |              |  |
|--------------|--|
| 4–4:20 pm    | What's New in Ventricular Support: Review of VAD Technologies <i>Josh Zimmerman, MD FASE</i>         |
| 4:20–4:40 pm | RV Failure During LVAD Placement: Mechanisms and Management <i>Annette Vegas, MDCM FRCPC FASE</i>    |
| 4:40–5 pm    | Anesthesia for VAD Placement: Clinical Pearls <i>Jason D. Kennedy, MD</i>                            |
| 5–5:20 pm    | Managing VAD Patients Undergoing Noncardiac Surgical Procedures <i>Eugene A. Hessel, II, MD FACS</i> |
| 5:20–5:40 pm | Total Artificial Heart <i>K. Annette Mizuguchi, MD PhD MMSc</i>                                      |
| 5:40–6 pm    | Discussion   |

# Schedule: Workshops

Workshops Coordinator: Michael P. Eaton, MD

## Saturday, April 11

10 am-1 pm

Liberty NOP

### Morning Workshop

#### Workshop 1: Percutaneous Valve

Moderators: Kathryn Glas, MD MBA FASE; Gautam Sreeram, MD

TAVR: Where We Are in 2015 Joerg Ender, MD

Mitral and Pulmonic Valves: State of the Art G. Burkhard Mackensen, MD PhD FASE

Optimal Imaging Modalities for Percutaneous Valves Candice R. Montzingo, MD

Controversial Topics in Anesthetic Management Brian J. Gelfand, MD FACS; Konstantine Tzimas, MD

Challenging Cases Joerg Ender, MD; Madhav Swaminathan, MD FASE

Hands-On Stations

Assessment of Percutaneous Aortic Valves Stanton K. Shernan, MD FAHA FASE; Annemarie Thompson, MD;

Fabio Guarracino, MD

Assessment of Percutaneous Mitral and Pulmonic Valve Repair Techniques Chirojit Mukherjee, MD; Candice R.

Montzingo, MD; G. Burkhard Mackensen, MD PhD FASE

2-5 pm

Liberty NOP

### Afternoon Workshop

#### Workshop 2: Transthoracic Echocardiography

Moderator: Tara Brakke, MD FASE

The Basic TTE Exam Josh Zimmerman, MD FASE

Basic TTE Views and the Comparison TEE Views Sasha K. Shillcutt, MD FASE

Expanding Your Practice: A Cardiac Anesthesiologist's Guide to TTE Julian Stephens Bick, MD

Hands-On Stations

Heartworks Simulator Josh Zimmerman, MD FASE; Julian Stephens Bick, MD

CAE Simulator Candice R. Montzingo, MD; Walker Thomas, BA RDCS FASE

GE Machine Live Models Nicholas W. Markin, MD; Jonathan Ho, MD

Philips Machine Live Models Sasha K. Shillcutt, MD FASE; Ravi Vivekanand Joshi, MD

## Sunday, April 12

9:30 am-12:30 pm

Liberty NOP

### Morning Workshop

#### Workshop 3: Fundamentals of Aortic Reconstruction

Moderators: Bradley S. Taylor, MD MPH; Andrew Weisinger, MD FASE

Introduction Bradley S. Taylor, MD MPH; Andrew Weisinger, MD FASE

Hands-On Stations

CSF Drainage Jason D. Kennedy, MD; K. Annette Mizuguchi, MD PhD MMSc

Point-of-Care Coag Testing Gregory A. Nuttall, MD; Kenichi Tanaka, MD

Airway Management R. Lebron Cooper, MD; Yasdet Maldonado, MD

TEVAR Tools and Techniques Bradley S. Taylor, MD MPH; Jacob T. Gutsche, MD

Neurologic Monitoring Daryl Oakes, MD; Suhaini Kadiman, MD

Cannulation-Bypass Support C. David Collard, MD MS; Chad E. Wagner, MD

2-5 pm

Liberty NOP

### Afternoon Workshop

#### Workshop 4: Cardiopulmonary Bypass

Moderators: Eugene A. Hessel, II, MD FACS; Gregory M. Janelle, MD FASE

Introduction Gregory M. Janelle, MD FASE

Basics of Perfusion: Equipment/Monitoring Andrew Pitkin, MRCP FRCA

Evidence-Based Perfusion Goals Eugene A. Hessel, II, MD FACS

Complications Kenneth G. Shann, CCP

Hands-On Stations

Basic Circuit

Going On and Coming Off CPB

Complications Perfusionist David C. Fitzgerald, BS CCP; Robert C. Groom, MS CCP; Uriah Dudgeon, MHS CCP;

Ron Angona, MS CCP

# Schedule: Workshops

## Monday, April 13

2-5 pm

Liberty NOP

### Workshop 5: Advanced Transesophageal Echocardiography

Moderator: *Feroze Mahmood, MD*

How Does This Thing Work? Learning to Teach Echo with a Simulator *Feroze Mahmood, MD*

Beyond Good and Bad: Quantitative Analysis of Right Ventricular *Alexander Mittnacht, MD FASE*

Strain and Speckle Tracking for Ventricular Function *Alina Nicoara, MD FASE*

TEE Imaging in Infectious Conditions: Endocarditis and Aortic Root Abscess *Ravi Vivekanand Joshi, MD*

Hands-On Stations

Echo Simulation: Training the Trainer *Feroze Mahmood, MD*

Quantitative Right Ventricular Assessment *Alexander Mittnacht, MD FASE; Kimberly Howard-Quijano, MD MS*

Speckle and Strain Tracking *Alina Nicoara, MD FASE; Madhav Swaminathan, MD FASE*

What a Mess! TEE Imaging in Acute Endocarditis *Ravi Vivekanand Joshi, MD*

## Tuesday, April 14

2-5 pm

Liberty NOP

### Workshop 6: Case-Based Echocardiography

Moderators: *Alina Nicoara, MD FASE; Sasha K. Shillcutt, MD FASE*

Case-Based, Small-Group Discussions

Tricuspid Regurgitation in MV Surgery: When to Intervene *Nicholas W. Markin, MD*

Unsuspected AS in a CABG Patient *Candice R. Montzingo, MD*

Challenges in Adult Congenital TEE *Christopher A. Troianos, MD*

Post Valve Repair Assessment: When to Return to Bypass *Nikolaos J. Skubas, MD FASE DSc*

Valvular Lesions in the VAD Patient: When to Fix *Annemarie Thompson, MD*

Disasters in the Cath Lab *Wanda M. Popescu, MD*

## Wednesday, April 15

8-11 am

Shaw/Ledroit

### Workshop 7: Fellow Transesophageal Echocardiography Review Session

Moderators: *William (Skip) C. Culp, Jr., MD FASE; Roman Snieciński, MD FASE*

Ultrasound Physics *Madhav Swaminathan, MD FASE*

Artifacts and Pitfalls *Justiaan Swanevelde, MBChB MMed(Anes) FCA(SA) FRCA*

Hemodynamic Calculations *Mary Beth Brady, MD FASE*

Congenital Heart Defects *Kathryn Rouine-Rapp, MD*

Diastology *Wanda M. Popescu, MD*

Closing Remarks and Panelist Q & A

8-11 am

University DC/Catholic University

### Workshop 8: 3D TEE

Moderators: *Sasha K. Shillcutt, MD FASE*

Introduction to 3D Imaging Modalities and Live 3D Acquisition *Nicholas W. Markin, MD*

Gated 3D Imaging: 3D Full Volume and Color Flow Imaging *Candice R. Montzingo, MD FASE*

Common Applications and 3D Workflow in the OR *Douglas C. Shook, MD FASE*

Hands-On Stations

Station 1: (Basic) *George Burke Whitener, MD*

Station 2: (Intermediate) *Alina Nicoara, MD FASE*

Station 3: (Basic) *Logan Kosarek, MD; Erik P. Anderson, MD*

Station 4: (Basic) *Candice R. Montzingo, MD FASE; Tara Brakke, MD FASE*

Station 5: (Intermediate) *Josh Zimmerman, MD FASE*

Station 6: (Intermediate) *Walker Thomas, BA RDCS FASE*

Station 7: (Off-cart laptop, Advanced) *Georges Desjardins, MD*

Station 8: (Off-cart laptop, Advanced) *Nicholas W. Markin, MD*



# Schedule: Workshops

8–11 am

Capitol/Congress

## Workshop 9: EP—Perioperative Management of Pacers and ICDs

*Moderators: Jonathan Ho, MD; Saket Singh, MD*

Guidelines for Perioperative Management of Patients with a Cardiac Implantable Electrical Device *Annemarie Thompson, MD*

Pacemaker Function and Programming *Aman Mahajan, MD PhD*

Pacemaker Failures: What's Real, What's Not! *Peter Schulman, MD*

Hands-On Stations

Station 1: *Kimberly Howard-Quijano, MD MS*

Station 2: *Aman Mahajan, MD PhD*

Station 3: *Annemarie Thompson, MD*

Station 4: *Jonathan D. Leff, MD*

Station 5: *Peter Schulman, MD*

Station 6: Temporary Pacing *J. Prince Needlankavil, MD*

Station 7: Chest X Ray *J. Prince Neelankavil, MD*

# Schedule: Fellow/Junior Faculty Program

## Saturday, April 11

10–11 am

Marquis Foyer & Salons 12–14

### Complex Case Poster Presentations

Moderators: Makoto Ozaki, MD; Robert M. Savage, MD FACC; Daniel A. Tolpin, MD; John A. Fox, MD; Albert T. Cheung, MD; Sugantha Sundar, MD; Antonio Hernandez, MD; Mark T. Neslon, MD MED

1–2 pm

Monument

### Complex Case Discussion with Expert Panel

Panelists: James H. Abernathy, III, MD MPH FASE FAHA; Colin Royse, MD MBBS FANZCA; Annemarie Thompson, MD

2–3 pm

Monument

### A Career in CT Anesthesiology: Mission Possible

Panelists: Joerg Ender, MD; Colleen Koch, MD MS MBA FACC; William S. Whitley, MD

3:30–4:45 pm

Monument

### PBLD: Transcatheter Aortic Valve Replacement

James H. Abernathy, III, MD MPH FASE FAHA; Ioanna Apostolidou, MD; Dalia Banks, MD FASE; Wendy K. Bernstein, MD MBA; Mark A. Chaney, MD; Albert T. Cheung, MD; J. Mauricio Del Rio, MD; Joerg Ender, MD; John A. Fox, MD; Carlos Galhardo, Jr., MD; Brian J. Gelfand, MD FACS; Donna Greenhalgh, MBChB FRCA FFICM; Antonio Hernandez, MD; Nian Chih Hwang, MBBS FFARCSI FAMS GDACU; Colleen Koch, MD MS MBA FACC; Chirojit Mukherjee, MD; J. Prince Neelankavil, MD; Makoto Ozaki, MD; Colin Royse, MD MBBS FANZCA; Robert M. Savage, MD FACC; Jack Shanewise, MD FASE; Michele L. Sumler, MD; Sugantha Sundar, MD; Nelson L. Thaemert, MD; Annemarie Thompson, MD; Daniel A. Tolpin, MD; William S. Whitley, MD; Justin W. Wilson, MD

5–6 pm

Marquis Foyer & Salons 12–14

### Complex Case Poster Presentations

Moderators: Makoto Ozaki, MD; Robert M. Savage, MD FACC; Daniel A. Tolpin, MD; Wendy K. Bernstein, MD MBA; Justin W. Wilson, MD; Nian Chih Hwang, MBBS FFARCSI FAMS GDACU; Mark A. Chaney, MD; Jack Shanewise, MD FASE; J. Mauricio Del Rio, MD; J. Prince Neelankavil, MD

## Sunday, April 12

10–11 am

Marquis Foyer & Salons 12–14

### Complex Case Poster Presentations

Moderators: John A. Fox, MD; Albert T. Cheung, MD; Dalia Banks, MD FASE; Sugantha Sundar, MD; Wendy K. Bernstein, MD MBA; Michele L. Sumler, MD; Nelson L. Thaemert, MD; Brian J. Gelfand, MD FACS; Ioanna Apostolidou, MD; Chirojit Mukherjee, MD

5–6 pm

Marquis Foyer & Salons 12–14

### Complex Case Poster Presentations

Moderators: Antonio Hernandez, MD; Mark T. Nelson, MD MED; Justin W. Wilson, MD; Michele L. Sumler, MD; Nelson L. Thaemert, MD; Brian J. Gelfand, MD FACS; Ioanna Apostolidou, MD; Carlos Galhardo, Jr., MD; Douglas C. Shook, MD FASE; John A. Fox, MD

## Wednesday, April 15

8 am–11 am

Shaw/Ledriot

### Workshop 7: Fellow Transesophageal Echocardiography Review Session

Moderators: William (Skip) C. Culp, Jr., MD FASE; Roman Sniecinski, MD FASE

Ultrasound Physics Madhav Swaminathan, MD FASE

Artifacts and Pitfalls Justiaan Swanevelde, MBChB MMed(Anes) FCA(SA) FRCA

Hemodynamic Calculations Mary Beth Brady, MD FASE

Congenital Heart Defects Kathryn Rouine-Rapp, MD

Diastology Wanda M. Popescu, MD

Closing Remarks and Panelist Q & A

# Schedule: PBLDs

## Problem-Based Learning Discussions

PBLD Coordinator: Michael P. Eaton, MD

Each table is limited to 15 participants and 2 faculty members to allow for small-group interaction, discussion, and exchange of ideas.

| Sunday, April 12 (6:45–8 am)    |   |                |
|---------------------------------|---|----------------|
| PBLD 1                          | Modifying Renal Injury Risk in Cardiovascular Surgery <i>Sophia Chew, MMED(Anes) MBBS FANZCA; Stephanie Fischer, MB BCh FCA(SA)</i>                   | Magnolia       |
| PBLD 2                          | Lung Transplantation <i>Arne Neyrinck, MD PhD; Kam Ghadimi, MD</i>  | Cherry Blossom |
| PBLD 3                          | Navigating Off-Pump CABG Surgery <i>George Djaiani, MD FRCA FRCPC; Yong G. Peng, MD PhD FASE</i>  | Dogwood        |
| PBLD 4                          | Rational Treatment of Post-CPB Bleeding <i>Matthew A. Klopman, MD FASE; Kenichi Tanaka, MD</i>  | Scarlet Oak    |
| PBLD 5                          | Negotiating Payments for Anesthesia Services with Bundling and Capitation <i>Solomon Aronson, MD MBA FACC FACCP FAHA FASE; Nelson L. Thaemert, MD</i> | Silver Linden  |
| PBLD 6                          | Lung Protective Ventilation in the OR—It Does Matter! <i>Mary Beth Brady, MD FASE; Adam S. Evans, MD MBA</i>  | Tulip          |
| PBLD 7                          | Avoiding Problems with Pacemakers and ICDs <i>Jonathan Ho, MD; Annemarie Thompson, MD</i>   | Senate         |
| PBLD 8                          | Preventing and Managing Neurological Dysfunction After Cardiac Surgery <i>Srdjan Jelacic, MD; Hilary P. Grocott, MD FRCP FASE</i>                     | Mint           |
| PBLD 9                          | STS/SCA: Functional MR <i>Stanton K. Sherman, MD FAHA FASE; Bradley S. Taylor, MD MPH</i>   | Treasury       |
| Monday, April 13 (6:45–8 am)    |   |                |
| PBLD 10                         | Brain Protection During Deep Hypothermic Circulatory Arrest <i>Yasdet Maldonado, MD; Andrew Klein, MD FRCA</i>  | Magnolia       |
| PBLD 11                         | ECMO in Practice <i>Tony Gin, MD; James J. Lynch, MD</i>  | Cherry Blossom |
| PBLD 12                         | Robotic Cardiac Surgery <i>Daniel Bainbridge, MD FRCPC; J. Devin Roberts, MD</i>  | Dogwood        |
| PBLD 13                         | Noncardiac Surgery and the Adult Congenital Heart Patient <i>James A. DiNardo, MD; Viviana G. Nasr, MD</i>  | Scarlet Oak    |
| PBLD 14                         | Transcatheter Aortic Valve Replacement (TAVR) <i>Chirojit Mukherjee, MD; Konstantine Tzimas, MD</i>   | Silver Linden  |
| PBLD 15                         | Prevention and Management of Atrial Fibrillation After CT Surgery <i>Jacob T. Gutsche, MD; Peter Schulman, MD</i>                                     | Tulip          |
| Tuesday, April 14 (6:45–8 am)   |   |                |
| PBLD 16                         | Descending Thoracic Aortic Repair: Spinal Cord Protection Strategies <i>Sophia ANG Bee Leng, MD; Georgios (George) Nicolaou, MBBCh FRCPC</i>          | Magnolia       |
| PBLD 17                         | Global Health: How Can I Do My Share as a Cardiac Anesthesiologist? <i>Davy Cheng, MD MSc FRCPC FCAHS CCPE; Ellen M. Dailor, MD</i>                   | Cherry Blossom |
| PBLD 18                         | Conflict Resolution <i>Manfred D. Seeberger, MD; David A. Zvara, MD</i>   | Dogwood        |
| PBLD 19                         | Ventricular Assist Devices: Troubleshooting After Implantation <i>Robert J. Deegan, MB BCh PhD; Annette Vegas, MDCM FRCPC FASE</i>                    | Scarlet Oak    |
| PBLD 20                         | Blood Conservation and Management <i>Keyvan Karkouti, MD; Jerrold H. Levy, MD FAHA FCCM</i>   | Silver Linden  |
| PBLD 21                         | Teaching and Learning TTE in a Busy Practice <i>Tara Brakke, MD FASE; Josh Zimmerman, MD FASE</i>   | Tulip          |
| Wednesday, April 15 (6:45–8 am) |   |                |
| PBLD 22                         | Cardiac Surgery in the Parturient <i>Gautam Sreeram, MD; Michele L. Sumler, MD</i>  | Magnolia       |
| PBLD 23                         | The Perioperative Surgical Home in Cardiac Surgery: Pre-Op Optimization to 30 Days Post-Op <i>Logan Kosarek, MD; George Silvay, MD PhD</i>            | Cherry Blossom |
| PBLD 24                         | Mitral Repairs: Acute Severe Mitral Regurgitation <i>Nicholas W. Markin, MD; Minoru Nomura, MD PhD</i>  | Dogwood        |
| PBLD 25                         | Pregnancy and HOCM <i>Mary Beth Brady, MD FASE; Nadia Hensley, MD</i>   | Scarlet Oak    |
| PBLD 26                         | What to Do About Secondary Tricuspid Regurgitation <i>Georges Desjardins, MD; Ratna Vadlamudi, MD</i>   | Silver Linden  |

# Scientific Abstracts and Posters

## Best of Meeting Abstract Oral Presentations: Session 1

**Monday, April 13, 10:30 am-12:30 pm**

### Room: Liberty NOP

**1:** Severity of Tricuspid Regurgitation Associated With Long-Term Mortality in a 21,000-Patient Cohort of Cardiac Surgical Patients

*Jamahal Luxford, MBBS; Carolyn Butler; Kerry Wilusz, BA; Douglas Shook, MD FASE; Danny Muehlschlegel, MD; John Fox, MD; Stanton Shernan, MD FASE; Brigham and Women's Hospital*

**2:** Increased Sirtuin 3 Expression and Signaling Confers Natural Cardioprotection in Hibernating Mammals

*Mihai Podgoreanu, MD; Qing Ma, MD; Zhiquan Zhang, PhD; Quintin Quinones; Brian Barnes, PhD; Duke University; University of Alaska*

**3:** Aortic Atheroma Increase the Risk of Long-Term Mortality

*Carolyn Butler; Kerry Wilusz, BA; Chuan-Chin Huang, ScD; Stanton Shernan, MD FASE; Danny Muehlschlegel, MD; Brigham and Women's Hospital*

**4:** A Multistate Analysis of Post-Operative Morbidity and Mortality Rates for Carotid Artery Stenting (CAS) al-ra

*Robert White, MD; Bess Storch, MD; Wu Wu, MPH; Licia Gaber-Baylis, BA; Gregory Giambone, MS; Akshay Bhat Meng; Ramin Zabih, PhD; Peter Fleischut, MD; Kane Pryor, MD; NewYork-Presbyterian Hospital/Weill Cornell Medical College; New York University; Cornell University*

**5:** Myocardial Longitudinal Strain Predicts the Need for Inotropic Support After Cardiopulmonary Bypass

*Richard Sheu, MD; Xiaohong Li; Andra Duncan, MD; Cleveland Clinic*

**6:** Improved Ability to Predict Postoperative Atrial Fibrillation With the McSPI AFRisk Index Versus the CHA2DS2Vasc or POAF Scores

*Nathan Waldron; Mary Cooter, MSc; Rebecca Klinger, MD MS; Miklos Kertai, MD PhD; Mihai Podgoreanu, MD; Mark Stafford-Smith, MD; Mark Newman, MD; Joseph Mathew, MD; Duke University*

**7:** Molecular Mechanism of Anesthetic-Induced Depression of Myocardial Contraction

*Tao Meng, PhD Student; Wei Dong Gao, PhD MD; Johns Hopkins University School of Medicine*

**8:** Acute Right Ventricular Failure After Heart Transplantation: Trends and Patient Characteristics

*David Ruffin, MD; Mary Cooter, MSc; Mark Stafford-Smith, MD; Raquel Bartz, MD MMCI; Madhav Swaminathan, MD FASE; Carmelo Milano, MD; Chetan Patel, MD; Alina Nicoara, MD*

## Best of Meeting Abstract Oral Presentations: Session 2

**Tuesday, April 14, 10:30 am-12:30 pm**

### Room: Liberty NOP

**9:** PPAR $\gamma$  Agonist Rosiglitazone Provides Neuroprotection in Atherosclerosis-Prone JCR Rats Following Deep Hypothermic Circulatory Arrest: A Pivotal Role of Sirtuin 6

*Qing Ma, MD; Zhiquan Zhang, PhD; Mihai Podgoreanu, MD; Duke University Medical Center*

**10:** Effects of Metabolic Syndrome With or Without Obesity on Outcomes After Coronary Artery Bypass Graft: A Cohort and 5-Year Study

*Fei Xu, MD; Hushan Ao; Fuwai Hospital*

**11:** Effects of Race and Common Genetic Variation on Therapeutic Response Disparities in Postoperative Atrial Fibrillation

*Nazish Hashmi, MB BS; Mary Cooter, MSc; Yi-Ju Li, PhD; Miklos Kertai, MD PhD; Joseph Mathew, MD; Mark Stafford-Smith, MD; Mark Newman, MD; Madhav Swaminathan, MD FASE; John Alexander, MD MHS; Mihai Podgoreanu, MD; Duke University Medical Center*

**12:** Impact of Acute Kidney Injury on Long-Term Kidney Function in Patients Undergoing LVAD Placement

*Mias Pretorius, MBCHB MSCI; Frederic Billings, MD; Vanderbilt University Medical Center; Vanderbilt University School of Medicine*

**13:** Intravenous Lidocaine Reduces Transcerebral Inflammatory Response During Cardiac Surgery

*Rebecca Klinger, MD MS; Igor Akushevich; Miles Berger, MD PhD; Mihai Podgoreanu, MD; Mark Stafford-Smith, MD; Mark Newman, MD; Thomas Ortel, MD PhD; Ian Welsby, MBBS FRCA; Jerrold Levy; Joseph Mathew, MD; Duke University Medical Center*

**14:** Flow Cytometry Reveals Species-Specific, Tissue-Specific, and Hibernation-State-Specific Differences in Innate Immunity and Response to Surgical Ischemia-Reperfusion

*Quintin Quinones; Qing Ma, MD; Michael Smith, MS; Janet Staats, BS; Cliburn Chan, MBBS PhD; Kent Weinhold, PhD; Brian Barnes, PhD; Mihai Podgoreanu, MD; Duke University; University of Alaska Fairbanks*

**15:** Gene Expression in Human Left Atria of Patients With and Without Atrial Fibrillation After Cardiac Surgery

*Martin Sigurdsson, MD PhD; Mahyar Heydari, PhD; Louis Saddic, MD PhD; Tzuu-Wang Chang, PhD; Stanton Shernan, MD FASE; Danny Muehlschlegel, MD; Simon Body, MD; Brigham and Women's Hospital*

**16:** Validation of the FORE-SIGHT Elite Pediatric Tissue Oximeter in Children

*Viviane Nasr, MD; Lisa Bergersen, MD MPH; Paul Benni, PhD; Rachel Bernier, MPH; Michelle Anderson, RN BSN; Barry Kussman, MBCH*

# Scientific Abstracts and Posters

## Poster Session 1: Perioperative Medicine Abstracts

Saturday, April 11, 12:30-1:30 pm

### Room: Marquis Foyer & Salons 12-14

**17:** Poor Post-Operative Blood Pressure Control in Cardiac Surgery Patients Is Associated With Acute Kidney Injury and Death

*Felix Balzer, MD MSC; Solomon Aronson, MD MBA; Sascha Treskatsch, MD; Claudia Spies, MD; Professor Li Ding, MS MA; Jason Campagna, MD PHD; Michael Sander, MD; Charite Duke University School of Medicine; The Medicines Company, Inc.*

**18:** The Effects of Dexmedetomidine on Postoperative Renal Function in Valvular Heart Surgery: A Randomized, Placebo-Controlled Study

*Lee Woo Kyung; Jae-Kwang Shim, MD; Yon Hee Shim, MD PhD; Young-Lan Kwak, MD; Yonsei University College of Medicine*

**19:** Intraoperative Awareness in Cardiac Surgery: A Large Retrospective Observational Study

*Qingshui Zheng Bachelor; Qian Wang, MD; Hushan Ao*

**20:** Dexmedetomidine Reduces Delirium After Cardiac Surgery: A Randomized, Controlled Trial

*George Djaiani, MD; Natalie Silverton, MD; Rita Katznelson, MD; Rima Styra, MD MEd; Jo Carroll, RN BHA; Vivek Rao MD PhD; Ludwik Fedorko, MD PhD FRCPS; Toronto General Hospital; UHN*

**21:** Serum Glial Fibrillary Acid Protein Levels Are Associated With Postoperative Neurocognitive Dysfunction After Non-Cardiac But Not Cardiac Surgery

*Charles Hogue, MD; Tommy Rappold, BS; Daijiro Hori, MD; Allen Everett, MD; Gayane Yenokyan, PhD; Charles Brown, MD; Andrew Laflam, BS; The Johns Hopkins University School of Medicine; The Johns Hopkins University; The Johns Hopkins University*

**22:** Cortical Amyloid Burden Is Not Significantly Associated With Early Cognitive Dysfunction After Cardiac Surgery

*Rebecca Klinger, MD MS; Olga James, MD; Salvador Borges-Neto, MD; Tiffany Bisanar, RN BSN CCRP; Yi-Ju Li, PhD; William White, MPH; Mark Newman, MD; Pudu Doraiswamy, MBBS; Joseph Mathew, MD; Duke University Medical Center*

**23:** Clinical Prediction Model for Post-Cardiac Surgery Atrial Fibrillation in an Asian Population

*Lian Ti, MBBS; Wei Zhang Nil; Sophia Chew; Weiling Liu, BSc; National University Health System Singapore; Yong Loo Lin School of Medicine; Singapore General Hospital; National University Health System*

**24:** Risk Stratification in Cardiac Surgery by the Combined Use of Cerebral Oxygen Saturation and Growth-Differentiation Factor 15

*Matthias Heringlake, MD; Hauke Paarmann, MD; Anna Beilharz; Astrid Berggreen, MD; Efstratios Charitos, MD PhD; University of Luebeck*

**25:** The Association of Baseline Frailty and Postoperative Delirium After Cardiac Surgery

*F. Louis Kirk, MD; Andrew LaFlam, BS; Laura Max; Karin Neufeld, MD MPH; Charles Hogue, MD; Aliaksei Pustavoitau, MD; Charles Brown, MD; Johns Hopkins*

**26:** The Effects of Atrial Pacing for Hemodynamic Recovery Immediately After Rapid Ventricular Pacing in Transcatheter Aortic Valve Replacement

*Prakash Patel, MD; William Vernick, MD; Wilson Szeto, MD; Robert Li, MD; Jeremy Kukafka, MD; Michael Fabbro; John Augoustides, MD; Jacob Gutsche, MD; University of Pennsylvania; Penn Presbyterian Medical Center*

**27:** 6-Minute Walk Test as a Predictor of Perioperative Ischemic Events

*Andrew Disque; Christine Nguyen-Buckley, MD; Anahat Kaur Dhillon, MD; Jacques Neelankavil, MD*

**28:** Serum Nitric Oxide Is an Early Marker of Inflammation Following Cardiac Surgery

*Tsz Chuen Chan; Kimberly Howard-Quijano, MD MS; Ji Youn Youn, PhD; Jennifer Scovotti, MA; Aman Mahajan, MD PhD; Hua Linda Cai, MD PhD; UCLA*

**29:** Respiratory Failure After Open Repair of Thoracic and Thoracoabdominal Aortic Aneurysms

*Dan Farber; Charles Acher, MD; Erich Marks, MD; Charles Acher, MD; Martha Wynn, MD; UW-Madison Hospital and Clinics*

**30:** Albumin Administration Within One Day of On-Pump Cardiac Surgery Is Associated With Improved Survival When Compared With Crystalloid Fluid Therapy

*Adam Kingeter, MD; Sibyl Munson; David Hayashida, BA; Martin Bunke, MD; Andrew Shaw, FCCM FRCA MB*

**31:** Comparison of Postoperative Cognitive Dysfunction in Patients Undergoing Conventional vs. Miniaturized Cardiopulmonary Bypass: A Randomized, Controlled Trial  
*Lian Ti, MBBS; An Shing Ang, Student; Sophia Chew; Weiling Liu, BSc; National University Health System Singapore; Yong Loo Lin School of Medicine; Singapore General Hospital; National University Health System*

**32:** The Reno-Protective Effect of Intraoperative Dexmedetomidine Infusion in Elective Coronary Bypass Graft Surgery

*Anantachote Vimuktanandana, MD; Faculty of Medicine, Chulalongkorn University, Bangkok, NA*

**33:** Transthoracic Echocardiography to Assess Intravascular Volume Status and Predict Hypotension After Induction of General Anesthesia in Non-Cardiac Surgery Patients

*Christopher Tanaka, MD; Ofer Burshtain, MD; Shenche Hsieh, PharmD MS; Singh Nair, MD; Jonathan Leff, MD; Montefiore Medical Center*

**34:** The Incidence of Major Adverse Kidney Events (MAKE) Following Cardiac Surgery

*Frederic Billings, MD; Mias Pretorius, MBCHB MSCI; Andrew Shaw, FCCM FRCA MB; Vanderbilt University*



# Scientific Abstracts and Posters

## Poster Session 1: Perioperative Medicine Abstracts

**Saturday, April 11, 12:30–1:30 pm** (continued)

**35:** Intraoperative Left Ventricular Longitudinal Strain and Strain Rate Do Not Predict Postoperative N-Terminal Pro B-Type Natriuretic Peptide Concentrations  
*Geoffrey Lively, MD; Xiaohong Li; Andra Duncan, MD; Cleveland Clinic*

**36:** Management of Post-Operative Pain in Transcatheter Aortic Valve Replacements: How Can We Do Better?  
*Lingesh Sivanesan, MD; Nikolaos Skubas, MD DSC FASE; Andrew Sosa, MD; Rajiv Shah, MD; Shreyajit Kumar, MD; Weill Cornell Medical Center*

**37:** Does Impaired Right Ventricular Function Impact Postoperative Outcomes After Cardiac Surgery?  
*Sanyo Tsai; Andra Duncan, MD; Cleveland Clinic Foundation*

**38:** Intrabdominal Hypertension and Acute Kidney Injury After Cardiac Surgery (IAH-KICS): Interim Analysis and Early Study Trends  
*Michael Mazzeffi; Karin Wallace, RN BSN CCRN; Philip Roman, MD MPH; Patrick Odonkor, MD; Seema Deshpande, MD; Ashanpreet Grewal, MD; Erik Strauss, MD; Wendy Bernstein, MD MBA; Daniel Herr, MD; James Gammie, MD; Patrick Stafford, BS; La Toya Stubbs, BS; Peter Rock, MD MBA; Faisal Cheema, MD; University of Maryland School of Medicine; University of Maryland School of Medicine; University of Maryland*

**39:** The Association of Post-Cardiac Surgery Delirium and Increased Length of Stay, Length of Stay in the ICU, and Hospital Charges  
*Daria Lyman, MD; Andrew LaFlam, BS; Laura Max; Karin Neufeld, MD MPH; Ashish Shah, MD; Glenn Whitman, MD; Charles Hogue, MD; Charles Brown, MD; Johns Hopkins*

**40:** Paravertebral Analgesia in Transapical Transcatheter Aortic Valve Replacement  
*Justin Poltak, MD; Frederick Cobey, MD MPH FASE; John Augoustides, MD; Christopher Connors, MD; Maine Medical Center; Tufts Medical Center; University of Pennsylvania*

**41:** Withdrawn

**42:** Paravertebral Nerve Block Does Not Improve Arterial Oxygen Tension After Mini-Thoracotomy for Minimally Invasive CABG: A Retrospective Review  
*Brady Warnick, MD FRCPC; Marc Ruel, MD MPH FRCSC; Benjamin Sohmer, MD; University of Ottawa Heart Institute*

**43:** Effect of Sodium Bicarbonate on Prevention of Acute Kidney Injury in High-Risk Patients Undergoing Off-Pump Coronary Artery Bypass  
*Sowoon Ahn, MD; Sung Yong Park, MD; JongChan Kim, MD; YoungLan Kwak, MD PhD; CHA Bundang Medical Center; Ajou University College of Medicine; Yonsei University College of Medicine*

**205:** Postoperative Nausea or Vomiting Apfel Score Validity Among Cardiac Surgery Patients  
*Vincent J. Umbrain, MD PhD; Christian Verborgh, PhD; Jan I. Poelaert; Jan Nijs*

**44:** Anesthetic Management of Patients With Left Ventricular Assist Devices Presenting for Endoscopy  
*William Mauermann, MD; David Barbara, MD; Juan Pulido, MD; David Olsen, MD; Mayo Clinic Rochester*

**45:** The Effect of High Spinal Anesthesia on the Incidence of Delirium Following Cardiac Surgery: A Historical Case-Control Study  
*Andrea Petropolis, MD; Doug Maguire, MD; Stephen Kowalski, MD; Hilary Grocott, MD; Trevor Lee, MD; Rakesh Arora, MD PhD FRCSC*

**46:** Variation in Acute Kidney Injury Rates Following First- and Second-Staged Sequential Single-Lung Transplants in a Patient Cohort  
*Adam Varady, MD; Mark Stafford-Smith, MD; Jennifer Hauck, MD; Matthew Hartwig, MD; Madhav Swaminathan, MD FASE; Mihai Podgoreanu, MD; Joseph Mathew, MD; Duke University Medical Center*

**47:** Serum Fluoride Levels During Long-Term Volatile Sedation Within the Intensive Care Unit  
*Angela Jerath, MBBS FANZCA; Kelvin Wong, BSc; Deep Grewal, MD; Niall Ferguson, MD FRCPC; Andrew Steel, MB BS MRCP FRCA FFICM FRCPC EDIC; George Djaiani, MD; Marcin Wasowicz, MD PhD; Toronto General Hospital; University of Toronto*

**48:** Cardiopulmonary Bypass and Acute Pulmonary Dysfunction Following Cardiac Surgery  
*Ryan Butterworth, MD; Jonathan Wanderer, MD MPhil; Andrew Shaw, FCCM FRCA MB; Frederic Billings, MD; Vanderbilt University*

**49:** Non-Cardiac Anesthesiologists Can Safely Provide Care for Patients Supported by Ventricular Assist Devices Presenting for Non-Cardiac Surgery: A 10-Year Retrospective Review From a High-Volume Tertiary Care Center  
*Joseph Hinchey, MD PhD; Marc Stone, MD; Adam Evans, MD; Christopher Sattler; Mount Sinai*

**50:** Progression of Mitral Regurgitation After Lung Transplantation  
*Sharon McCartney, MD; Mary Cooter, MSc; Zainab Samad, MBBS MHS FAC; Joseph Sivak, MD; Anthony Castleberry, MD MMCI; Stephen Gregory, MD; John Haney, MD; Matthew Hartwig, MD; Madhav Swaminathan, MD FASE; Duke University Medical Center*

**51:** The Inflammatory Response Between Miniaturized and Conventional Cardiopulmonary Bypass After Cardiac Surgery in an Asian Population  
*Lian Ti, MBBS; Roderica Ng; Sophia Chew; Weiling Liu, BSc; National University Health System; Yong Loo Lin School of Medicine; Singapore General Hospital*

**52:** Apicoaortic Conduit: The Rise and Fall of a Procedure for High-Risk Patients in the TAVR Era  
*John McNeil, MD; David Lehenbauer, MD; John Conte, MD; Bryan Maxwell, MD; Johns Hopkins Hospital*



# Scientific Abstracts and Posters

**53:** Patient Characteristics and Surgical Factors Associated With Intraoperative Inhaled Nitric Oxide in Adult Cardiac Surgery

*Megan Krajewski, MD; Mary Cooter, MSc; Betsy Hale, BS; Anne Cherry, MD; Duke University*

**54:** Perioperative Dexmedetomidine Improves Outcome of Pediatric Cardiac Surgery Patients

*Lei Li, MD; Hushan Ao; Fuwai Hospital*

**55:** Intraoperative Beat-by-Beat Blood Pressure Variability (Area Under the Curve) and Postoperative Outcome in Cardiac Surgery: A Pilot Study

*Fernando Mujica, MD; Balachundhar Subramaniam, MD MPH; Thomas Heldt, PhD; Priyam Mathur, MS; Kamal Khabbaz, MD; Adam Lerner, MD; Varesb Prasad; Beth Israel Deaconess Medical Center; Massachusetts Institute of Technology*

**56:** Perioperative Takotsubo Cardiomyopathy: A Systematic Review of Published Cases

*Matthew Bean; Manuel Castresana, MD; Shvetank Agarwal, MD; Resident; Professor; Assistant Professor*

**57:** Influence of Left Ventricular Distension Associated With Ventricular Fibrillation During Pulmonary Valve Replacement on Postoperative Outcomes

*Ji-Hyun Lee, MD; Eun-Jin Chung; In-kyung Song, MD; Jae-Hyon Bahk, MD; Jin-Tae Kim, MD; Eun-Hee Kim, MD; Seoul National University Hospital*

**58:** Impact of Dexmedetomidine for Sedation in Cardiac Surgery on Post-Operative Atrial Fibrillation Incidence and ICU Length of Stay

*Anupama Gopinath; Brian Kelly; Janis Breeze, MPH; Barbara Oxley, MS RN; John Devlin, PharmD FCCM; Russel Roberts, PharmD; Michael England, MD; Kenneth Warner, MD; Frederick Cobey, MD MPH FASE; Tufts Medical Center*

**59:** Microvascular Reactivity and Clinical Outcomes in Cardiac Surgery

*Susie Yoon, MD; Chang-Hoon Koo, MD; Jae-Hyon Bahk, MD; Deok-Man Hong, MD; Yunseok Jeon, MD; Seoul National University Hospital*

**60:** Cardioprotection With Volatile Anesthesia During Coronary Artery Bypass Grafting

*Nikola Bradic, MD; Ino Husedzinovic, MD PhD Professor; Andrej Sribar, MD; Cardiac Anesthesiology and Critical Care Medicine; Cardiac Anesthesiology and Critical Care*

**61:** The Impact of Perioperative  $\beta$ -Blockers on Outcomes in Patients Undergoing Cardiac Surgery

*Bo Dou, master's degree; Fei Xu, MD; Shan Ao*

**62:** A Retrospective Chart Analysis of Patients Undergoing Transmyocardial Laser Revascularization

*Shvetank Agarwal, MD; Sachin Bahadur, MBBS; Manuel Castresana, MD; Georgia Regents University*

**63:** Postoperative Pain Management by Morphine After the Cardiovascular Surgery

*Koichiro Seki, MD; Hiroko Fukushima; Yuki Higa, MD; Atsuko Takata; Toshihiro Nohmi, MD; IMS Katsushika Heart Center*

**64:** Impact of Dedicated Liver Transplant Anesthesia Team on Patient Safety and Clinical Outcomes in a Tertiary Care Medical Center

*Anoop Chhina, MD; Dragos Galusca, MD; R. Lebron Cooper, MD; William Alarcon, MD; Naveen Gandreti, MDFASE*

# Scientific Abstracts and Posters

## Poster Session 2: Basic Science, CV Anesthesia, Coagulation, Structural Heart Disease, and Thoracic Anesthesia Abstracts

Sunday, April 12, 12:30-1:30 pm

### Room: Marquis Foyer & Salons 12-14

**65:** Thoracic Epidural Anesthesia Suppresses Cardiac Excitability Induced by Stellate Ganglion Stimulation in a Porcine Model

Kimberly Howard-Quijano, MD MS; Kentaro Yamakawa, MD; Tatsuo Takamiya, MD; Wei Zhou, PhD FAHA; Jeffrey Ardell, PhD; Kalyanam Shivkumar, MD PhD; Aman Mahajan, MD PhD; University of California-Los Angeles; UCLA

**66:** Platelet Activation as a Determinant of Inflammation and Tissue Injury in a Rat Model of Deep Hypothermic Circulatory Arrest

Jorn Karhausen, MD PhD; Hae Woong Choi, PhD; Laura Mitrescu, BS; Qing Ma, MD; Soman Abraham, PhD; Duke University; Duke University Medical Center

**67:** MiR-155 Ablation Reduces the Rate of Paralysis in a Mouse Model of TAAA Patients

Hamdy ElSayed Awad, MD; Sujatha Bhandary, MD; Anna Bratasz, PhD; Soumya Bouchachi; Motaz Abas, BS; Esmerina Tili, PhD; Ohio State University

**68:** Effects of Digoxin 24-Hour Exposure on Gene Expressions Related to Ventricular Remodeling in Cultured Cardiomyocytes

Henry Liu, MD; Marcia Henry, PhD; Geoffrey Liu, BA; Lisa Sangkum, MD; Nakeisha Landry-Pierre, MD; Sabrina Bent, MD; Alan Kaye, MD PhD; Frank Rosinia, MD; Tulane University Medical Center; LSUHSC-New Orleans

**69:** Changes in Myocardial Angiotensin II Levels During Cardiopulmonary Bypass in Cardiac Surgery

Michael Manning, MD PhD; Dawn Bowles, PhD; Michael Watson, BS; Mihai Podgoreanu, MD; Duke University; Duke

**70:** Administration of Protamine Via Ascending Aorta May Improve Hemodynamic Stability and Postoperative Oxygenation

Joseph Roberts, MD; Edris Negron, MD; Kristen Wroblewski, MS; Ross Gaudet, MD; Mark Chaney, MD; University of Chicago

**71:** LOXL2: A Novel Target in Vascular Stiffness

Jochen Steppan, MD; Daijiro Hori; Steven An, PhD; Dan Berkowitz, MD; Lakshmi Santhanam, PhD; Johns Hopkins University

**72:** Aging and Autonomic Regulation of Right Ventricular Contraction Pattern

Paul Heerdt, MD PhD; Emma Heerdt; Cornell University; Greenwich High School

**73:** Epigallocatechin-3-Gallate, a Green Tea Catechin, Protects the Heart Against Regional Ischemia-Reperfusion Injuries Through Activation of RISK Survival Pathways in Rats

Kyung Yoo, MD PhD; Chonnam National University Hospital, Gwangju, Gwangju

**74:** Intraoperative Autologous Blood Donation in Cardiac Surgery: Physiological Changes in Oxygen Transport and Utilization

Matthew Bean; Julian Bass, CCP RRT; Mary Arthur, MD; Sanjay Dwarakanath, MD; Georgia Regents University

**75:** Macrophage Characteristics Persists Long After CPB Even After Uncomplicated Heart Surgery in Certain Individuals

Krzysztof Laudanski, MD PhD; George Worthen, MD; Jacob Gutsche, MD; Pawan Alturi; Wilson Szeto, MD; University of Pennsylvania; Children's Hospital of Philadelphia

**76:** Transcaval Delivery of Transcatheter Aortic Valve Replacement in a Patient Unsuitable for Femoral, Apical, or Transaortic Approaches

William Nelson, MD; Rosemary Uzomba, MD; Brigham and Women's Hospital

**77:** The Use of Dexmedetomidine and Intravenous Acetaminophen for the Prevention of Postoperative Delirium in Cardiac Surgery Patients Over 60 Years of Age: A Pilot Study

Jason O'Neal, MD; Shruthi Dighe, MBBS MPH; Kashaine Gray, BS; Adam Lerner, MD; Daniel Talmor, MD; Edward Marcantonio, MD; Balachundhar Subramaniam, MD MPH; Beth Israel Deaconess Medical Center

**206:** Mast Cell Specific Chymase as an Early Marker of Inflammatory Activation Following Aortic Circulatory Arrest Procedures

Sreekanth R. Cheruku, MD; Yi-Ju Li, PhD; Wenjing Qi, PhD; Laura Mitrescu, BS; Miklos D. Kertai, MD PhD; G. Chad Hughes, MD; Joseph P. Mathew, MD; Jorn Karhausen, MD PhD

**78:** Impact of Opening Hours of the Post-Anesthetic Care Unit on Performance of a Fast Track Protocol

Chris Grass; Sarah Eibel, MD; Waseem Zakhary; Stefan Probst; Joerg Ender, MD; Heartcenter University Leipzig

**79:** Sedation Strategies for Procedures in the Cardiac Electrophysiology Laboratory

Julie DeVore, DO MPH; Anne Kamarchik, MD; Samir Saba, MD; Raveen Bazaz, MD; Kathirvel Subramaniam, MD MPH; University of Pittsburgh Medical Center

**80:** Sedation for Transfemoral TAVI: No General Anesthesia, No Problems?

Patrick Mayr, MD; Gunther Wiesner, MD PhD; Thomas Ried, MD; Juergen Knorr, MD; Peter Tassani, MD PhD; Deutsches Herzzentrum Muenchen, TUM

**81:** Anesthesia Management for the Transcatheter Aortic Valve Replacement

Nikola Bradic, MD; Ino Husedzinovic, MD PhD Professor; Andrej Sribar, MD; Daniel Unic, MD; Cardiac Anesthesiology and Critical Care Medicine; Cardiac Anesthesiology and Critical Care; Cardiac Surgery

**82:** Heparin Concentration (Hepcon HMS) vs. ACT-Guided Anticoagulation During Cardiac Surgery: A Meta-Analysis

Thomas Varughese, MBBS FRCA; Ravi Taneja, MBBS; Janet Martin, PhD; Blackpool Teaching Hospitals NHS Foundation Trust; University of Western Ontario

# Scientific Abstracts and Posters

**83:** Risk Factors for Excessive Perioperative Blood Loss in Infants and Children Undergoing Surgery for Congenital Heart Disease

Kim Won Ho, MD; Hyo Jin Kim; Eunhee Kim, MD; Chung Su Kim; Samsung Changwon Hospital; Samsung Medical Center

**207:** Cardiopulmonary Bypass and Lung Ultrasound

Clayne Benson, MD; Justin Tawii, MD; Andrew Xavier, MD; Dennis P. Phillips, DO; Kathivvel Subramiam

**84:** A Randomized, Double-Blinded Trial Comparing the Efficacy of Tranexamic Acid and Epsilon-Aminocaproic Acid in Reducing Bleeding and Transfusion in Cardiac Surgery

Fiore Toscano, MD; Linda Shore-Lesserson, MD; Jonathan Leff, MD; Montefiore Medical Center; NSHS/Hofstra University

**85:** Lean Team Approach to Patient Blood Management

Eduardo Rodrigues, MD; Stephanie Helmer, MD; Ashley Crofton, Bachelors in Health Administration; Nilda Figueroa, RN; Frank Ray, MBA; Megan Gaul, Finances; Matthew Lundy; LINDSAY ABBEY, MHA; Nydia Matteu, MHA MT MLT(ASCP) SBB; Nancy Dawson, MD; Lia Toader; Mayo Clinic Florida; Mayo Clinic; CERNER

**86:** Incidence of Bleeding Complications and Symptomatic Thrombosis During Extracorporeal Membrane Oxygenation: A Retrospective Cohort Study

Michael Mazzeffi; Keshava Rajagopal, MD PhD; Si Pham MD; Joy Lee, BS; Raymond Rector, CCP LP; Daniel Herr, MD; Kenichi Tanaka, MD

**87:** Morbidity Associated With the Use of Recombinant Factor VIIa in Pediatric Patients

Laura Downey, MD; Morgan Brown, MD; James DiNardo, MD; Lucille Packard Children's Hospital at Stanford University; Boston Children's Hospital; Boston Children's Hospital

**88:** The Utility of Routine Preoperative Coagulation Testing in Cardiac Surgery Patients

Tammy Mai, DO; Michael Eaton, MD; Peter Knight, MD

**89:** The Ability of the Transfusion Risk Understanding Scoring Tool (TRUST) and Thromboelastometry FIBTEM A10 to Predict Bleeding and Transfusion in Cardiac Surgical Patients

Michelle Shirak, MD; Melissa Cushing, MD; Michele Steinkamp, RN; Elizabeth Lemoine, BA; Thorsten Haas, MD; Natalia Ivascu, MD; Weill Cornell Medical College; University of Zurich

**90:** Is Point-of-Care Testing Cost Effective in a Mid-Size Community Hospital? A Retrospective Chart Review

Patrick Ziemann-Gimmel, MD; Bart Warne, CCP; Derek Muehrcke, MD FACS; Allison Goldfarb, CRNA DNP; Coastal Anesthesiology Consultants; Flagler Hospital

**91:** Retrospective Matching Study: The Prophylactic Use of Recombinant Activated Factor VII In Aortic Surgery

Jingya Li, Master of Medicine; Hongwen Ji; State Key Laboratory of Cardiovascular Disease, Fuwai Hospital, National Center for Cardiovascular Diseases, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing, China

**92:** Using Platelet Aggregometry to Detect Coagulopathy in Aortic Replacement Surgery: A Pilot Study

Jia-Lin Chen, MD; Nathan Waldron; Ian Welsby, MBBS FRCA; Duke University

**93:** Quality Control of PCC Usage in Cardiac Surgery

Daniel Betterly, MD; Kamrouz Ghadimi, MD; Ian Welsby, MBBS FRCA; Duke

**94:** Risk Factors for Predicting Early Postoperative Bleeding After the Intermediate Bleeding Risk Cardiac Procedures

Eunhee Kim, MD; Eunjung Oh, MD; Seunghyeon Lee, MD; Jong Hwan Lee, MD PHD; Sangmin Lee, MD PhD; Samsung Medical Center

**95:** Obesity-Reduced Blood Loss and Transfusions in Patients Undergoing Coronary Artery Bypass

Mingya Wang, Bachelor; Hushan Ao; Fuwai Hospital, Chinese Academy of Medical Sciences

**96:** Change of the PA Flow Profile Immediately After the TCPC Conversion From APC-Fontan

Satoshi Kurokawa, MD; Shiori Sakuma, MD; Keita Sato, MD; Shihoko Iwata, MD; Yusuke Seino, MD; Minoru Nomura, MD; Tokyo Women's Medical University

**97:** Validation of the FORE-SIGHT Elite Tissue Oximeter for Measurement of Somatic Oxygenation in Children

Barry Kussman, MBBCH; Paul Benni, PhD; Lisa Bergersen, MD MPH; Rachel Bernier, MPH; Michelle Anderson, RN BSN; Viviane Nasr, MD; Boston Children's Hospital; CASMED, Branford, CT

**98:** Infants With Large, Single, or Multiple Ventricular Septal Defects and Preoperative Clinically Proven/Culture Positive Sepsis: Is Deferring Surgery the Solution?

Pravin Saxena, MD; Rajesh Sharma, MD; Anil Bhan, MD; Yatin Mehta, MD MNAMS FRCA; Medanta Medicity, Gurgaon, India; Medanta Medicity, Gurgaon, India

**99:** Anesthesia Management of a 43-Year-Old Male With Congenitally Corrected Transposition of Great Arteries and Review of Literature

Gustavo Munoz, MD; Roberto Diaz, MD; Sanjay Dwarakanath, MD; Georgia Regents University

**100:** Outcome of Neonates and Small Infants Undergoing Arterial Switch Operation With Preexisting Positive Markers of Sepsis: A Single-Center Experience

Pravin Saxena, MD; Rajesh Sharma, MD; Anil Bhan, MD; Yatin Mehta, MD MNAMS FRCA; Medanta Medicity; Medanta Medicity

**101:** Retrospective Study of Complete Atrioventricular Canal Defects: Anesthetic and Perioperative Challenges

Aniruddha Janai; Wilfried Bellinghausen; Martin Kostelka; Farhad Bakhtiary; Joerg Hamsch, MD; Ingo Dähnert, MD; Jörg Ender; Heartcenter University Leipzig, Germany

**102:** The Effects of Lateral Positioning and One-Lung Ventilation on Stroke Volume Variation Using Pulse Contour Measurements: A Prospective Study

Teresa Moon, MD; Shital Vachhani, MD; Piotr Kwater, MD; Ensor Joe, PhD; January Tsai, MD; Gabriel Mena, MD; UT MD Anderson Cancer Center

# Scientific Abstracts and Posters

## Poster Session 2: Basic Science, CV Anesthesia, Coagulation, Structural Heart Disease, and Thoracic Anesthesia Abstracts

Sunday, April 12, 12:30-1:30 pm

### Room: Marquis Foyer & Salons 12-14

**103:** Management of Massive Hemoptysis

Luiz Maracaja, MD, University of Texas Health Science Center at San Antonio - Assistant Professor; Alejandro Hernandez, MD, Yale School of Medicine - Cardiothoracic Anesthesia Fellow; Yale School of Medicine

**104:** Comparison of Individually Modified Angled Tube and Conventional Angled Tube in Double-Lumen Tube Insertion: A Randomized, Controlled Clinical Trial

Jeong Jin Min, MD; Jong Hwan Lee, MD PhD; Sangmin Lee, MD PhD; Eunjung Oh, MD; Seunghyeon Lee, MD; Samsung Medical Center

**105:** Knowing the Angle of Right Upper Lobe Bronchus Brings the Resurgence of the R-DLT

Jean Bussi eres, MD; Michel Gingras; Lindsay Perron, MD; Jacques Somma; IUCPQ; Laval University

**106:** Knowing the Length of the Right Main Stem Bronchus Allows the Safe Use of the R-DLT

Jean Bussi eres, MD; Michel Gingras; Lindsay Perron, MD; Jacques Somma; IUCPQ; Laval University

**107:** The Clinical Effectiveness of Pulmonary Artery Catheters Use on Costs and Long-Term Outcomes in Coronary Artery Bypass Grafting Surgery

Fei Xu, MD; Hushan Ao; Fuwai Hospital

**108:** Risk of Acute Kidney Injury in Thoracic Surgery by Fluid Restriction and Use of Hydroxyethyl Starch

Yeon-Kyeong Yoo, MD; Hyun Joo Ahn; Jie Ae Kim; Mikyung Yang; Samsung Medical Center

**109:** Perioperative Management of Large Anterior Mediastinal Mass in 13-Year-Old Patient

Emil Malamud, MD; Abisola Ayodeji; Maimonides Medical Center

**110:** Algorithm for Performing One-Lung Isolation in Patients With Aberrant Tracheal Bronchi

Michael Adeleye, MD; Tao Hong, MD; Georgia Regents University

# Scientific Abstracts and Posters

## Poster Session 3: Echocardiography Abstracts and Quality Improvement Abstracts

**Monday, April 13, 12:30–1:30 pm**

### Room: Marquis Foyer & Salons 12-14

**111:** Aortic Valve Coaptation Surface Area in the Setting of Aortic Insufficiency: 3D TEE Analysis of an Ex-Vivo Porcine and Finite Element Models  
*Marie-Eve Chamberland, MD; Talal Al-Atassi, MD MPH; Munir Boodhwani, MD MMSc; Michel Labrosse, PhD; Hadi Toeg, MD MSc; Benjamin Sohmer, MD*

**112:** Evaluation of Left Ventricular Strain Using Speckle Tracking Echocardiography: A Comparison Between Two-Dimensional and Three-Dimensional Approaches  
*Junaid Nizamuddin, MD; Tiffany Lee, MD; Sajid Shahul; Beth Israel Deaconess Medical Center; University of Chicago*

**113:** How Well Do Three-Dimensional Echocardiographic Measurements of Mitral Valve Prostheses Correlate With the Manufacturer's Standard Measurements?  
*Pingping Song, MD; Charles Nyman, MB BCh; Danny Muehlschlegel, MD; Stanton Shernan, MD FASE; John Fox, MD; Chuan-Chin Huang, ScD; Anne Purcell, BS; Douglas Shook, MD FASE; Brigham and Women's Hospital*

**114:** Four-Dimensional Transesophageal Echocardiographic Evaluation of Mitral Valve Function After MitraClip Procedure  
*Tatyana Shkolnikova, MD; Kei Togashi, MD MPH; Donald Oxorn, MD; Thomas Jones, MD; Mark Reisman, MD; G. Burkhard Mackensen, MD PhD FASE; University of Washington; University of Washington; Seattle Children's*

**115:** A Comparison of 2D and 3D Transesophageal Echocardiography in the Assessment of Mitral Valve Paravalvular Leaks  
*William Nelson, MD; Kerry Wilusz, BA; Chuan-Chin Huang, ScD; Stanton Shernan, MD FASE; Charles Nyman, MB BCh; Brigham and Women's Hospital*

**116:** Left Ventricular Epicardial and Endocardial Strain Response to Acute Alterations in Preload  
*Reed Harvey, MD; Kimberly Howard-Quijano, MD MS; Kentaro Yamakawa, MD; Tatsuo Takamiya, MD; Wei Zhou, PhD FAHA; Einat Mazor, BA RDCS; Aman Mahajan, MD PhD; UCLA; University of California–Los Angeles*

**117:** Withdrawn

**118:** Method for Imaging the Delivery of Blood Cardioplegia Using Transesophageal Echocardiography  
*Luiz Maracaja, MD, University of Texas Health Science Center at San Antonio - Assistant Professor; Raj Modak, MD, Yale School of Medicine - Cardiothoracic Anesthesia Fellow; Olabode Ogunwole, MD, Yale School of Medicine - Assistant Professor; Robert Schonberger, MD; University of Texas Health Science Center at San Antonio; Yale School of Medicine*

**119:** Comparison of Aortic Stenosis Grading Parameters Between Preoperative Transthoracic and Pre-Bypass Transesophageal Echocardiography  
*George Whitener, MD; Joseph Sivak, MD; Igor Akushevich; Zainab Samad, MBBS MHS FACC; Madhav Swaminathan, MD FASE; Medical University of South Carolina; Duke University*

**120:** Speckle-Tracking Analysis in Intraoperative Transesophageal Echocardiography: A Comparison to Simpson's and 3D Full-Volume Methods in Assessment of Left Ventricular Volumes and Ejection Fraction  
*Natalie Hamilton, MD; Kari Obma, MD; Tamas Seres, MD; University of Colorado*

**121:** Does Left Ventricular Strain Predict Postoperative Morbidity After Aortic Valve Replacement in Patients With Preserved Ejection Fraction?  
*Abraham Sonny, MD; Andra Duncan, MD; Cleveland Clinic, Cleveland, OH*

**122:** Association of Paravalvular Leak on Echocardiography After Transcatheter Aortic Valve Replacement With Mortality: The Agreement of Transesophageal and Transthoracic Echocardiography.  
*Claire Dakik, MD; Emily Teeter, MD; Mary Cooter, MSc; Jeffrey Gaca, MD; Mark Stafford-Smith, MD; Brandi Bottiger, MD*

**123:** Calculating Effective Regurgitant Orifice Area by the Standard PISA Method Underestimates Functional Mitral Regurgitation Severity  
*Phebe Ko, MD; James Hardy, MD; John Fox, MD; Douglas Shook, MD FASE; Frederick Cobey, MD MPH FASE; Chuan-Chin Huang, ScD; Stanton Shernan, MD FASE; Brigham and Women's Hospital; Tufts Medical Center*

**124:** Pulmonary Artery Acceleration Time Does Not Accurately Estimate Pulmonary Artery Pressures in Patients Under General Anesthesia  
*Walter Quiroga Robles, MD; Christopher Tanaka, MD; Chaim Feigen; Michael Kho; Singh Nair, MD; Jonathan Leff, MD; Cynthia Taub, MD; Montefiore Medical Center/AECOM*

**125:** Patterns of Rheumatic Heart Disease in a Large Cohort of Rwandan Surgical Patients  
*Carly Guthrie, MD; JaBaris Swain, MD; Claudia Sotillo, MSIV; Chuan-Chin Huang, ScD; Kerry Wilusz, BA; Joseph Mucumbitsi, MD MMed; Leon Mutesa, MD PhD; Ralph Bolman, MD; Luigino Nascimben, MD PhD; Danny Muehlschlegel, MD; Martin Zammert, MD; Brigham and Women's Hospital; King Faisal Hospital*

**126:** Two-Dimensional Transesophageal Echocardiography for Regional Evaluation of Intraoperative Right Ventricular Function: Is There a Role for Something Different Than Tricuspid Annular Plane Systolic Excursion?  
*Alejandro Hernandez, MD; Farzad Ebrahimi, MD; Feng Dai, PhD; Raj Modak, MD; Department of Anesthesia*



# Scientific Abstracts and Posters

## Poster Session 3: Echocardiography Abstracts and Quality Improvement Abstracts

**Monday, April 13, 12:30–1:30 pm** (continued)

**127:** Intraoperative Right Ventricular Longitudinal Strain Is Not Associated With Adverse Outcomes After Left Ventricular Assist Device Implantation

Jackson Rowe, BS; Daniel Beck, MD; Angela Moss, MS Biostatistics; Tamas Seres, MD; Jennifer Dorosz, MD; Ashok Babu; T. Brett Reece, MD FACS FAHA; David Fullerton, MD; Joseph Cleveland, MD; Karsten Bartels, MD; University of Colorado Denver; Anesthesiology; Kaiser Permanente Denver

**128:** Low Agreement Between TTE and TEE on Evaluation of Less-Than-Severe Mitral Valve Regurgitation

Jonathan Hadaway, MD; Yong Peng, MD PhD; Terrie Vasilopoulos, PhD; University of Florida

**129:** Worsening Myocardial Performance Index Correlates With Increased Mortality in Sepsis

Junaid Nizamuddin, MD; Shahzad Shaefi, MD; Sajid Shahul; Beth Israel Deaconess Medical Center, Harvard Medical School; Beth Israel Deaconess Medical Center, Ha; University of Chicago

**130:** Diastolic Dysfunction as a Prognostic Factor for Patients Undergoing Transcatheter Aortic Valve Replacement

Jeffrey Lyvers, MD; Philip Krapchev, MD; Andrew Weintraub, MD; Bonnie Corrigan, RN BSN; Frederick Cobey, MD MPH FASE; Tufts Medical Center

**131:** The Relationship Between Pulmonary Vein Flow Propagation Velocity and Pulmonary Artery Occlusion Pressure Using M-Mode Color Flow Doppler Echocardiography

Farzad Ebrahimi, MD; Alejandro Hernandez, MD; Feng Dai, PhD; Raj Modak, MD; Yale University

**132:** Bedside Focused Transthoracic Echocardiography in the Assessment of Acute Cardiopulmonary Abnormalities in the Post-Anesthesia Care Unit

Megan Lanigan, MD; Colin Boettcher, BA; Mojca Remskar Konia, MD PhD; Rehan Siddiqui, MD; Ying Lu, None; Michael Wall, MD; Ioanna Apostolidou, MD; University of Minnesota

**133:** Focused Cardiac Ultrasound (FoCUS): A Survey of Training Practices

Frederick Conlin, MD; Neil Connelly, MD; Adam Schwabauer, DO; Karthik Raghunathan, MD MPH; Jennifer Friderici; Research Assistant Professor

**134:** Transesophageal Echocardiography and Transthoracic Echocardiography Have a Low Agreement When Assessing Moderate RV and LV Systolic Dysfunction

Jason Drennan, DO; Yong Peng, MD PhD; Terrie Vasilopoulos, PhD; Robert Covington; University of Florida

**135:** Evaluating Right Ventricular Function With Transesophageal Echocardiography Before and After Pulmonary Artery Thromboendarterectomy Performed Under Deep Hypothermic Circulatory Arrest

Adrian Ionescu, MD; Vipin Mehta, MD FFARCSI; Massachusetts General Hospital - Harvard Medical School

**136:** Correlation Between Trans-Hepatic and Subcostal IVC Views to Assess IVC Variation: A Pilot Study

Jacobo Moreno Garijo, MD; Massimiliano Meineri, MD; Duminda Wijeyesundera, MD PhD; Toronto General Hospital; University Health Network.

**137:** Moderate Correlation and Fair Agreement Comparing Transthoracic Echocardiography (TTE) vs. Transesophageal Echocardiography (TEE) Modalities in Left Atrial (LA) and Left Ventricular End Diastolic Diameter (LVED) Measurements

Robert Covington; Terrie Vasilopoulos, PhD; Yong Peng, MD PhD; University of Florida

**138:** The Current State of Transesophageal Echocardiography at U.S. Academic Medical Centers

Aris Sophocles, MD; Prakash Patel, MD; Jacob Gutsche, MD; John Augoustides, MD; Ronak Shah, MD; Lance Atchley, MD; Univ of Pennsylvania; University of Pennsylvania

**139:** Intraoperative Pulmonary Artery Acceleration Time as a Predictor of Systolic Pulmonary Artery Pressure

Joshua Quick, MD; Frederick Cobey, MD MPH FASE; Philip Krapchev, MD; Tufts Medical Center

**140:** Evaluation of Alfieri Repair With Doppler Technique vs. Planimetry Shows Different Results When Comparing Intraoperative and Pre-Discharge Measurements

Auhood Bukhary; Jaqueline Grace Da Rocha e Silva, MD; Joerg Ender, MD; Heart Center, University Leipzig

**141:** Intraoperative Pressure Half-Time Measurements by Transesophageal Echocardiography as an Endpoint for Goal-Directed Percutaneous Mitral Balloon Valvuloplasty

William Grubb, MD; Sagar Mungekar, MD; Lilianna Cohen, MD FACC; Mohammad Chaudhry; Rutgers Robert Wood Johnson Medical School; Rutgers Robert Wood Johnson Medical School

**142:** Intraoperative Right and Left Ventricular Strain and Strain Rate Do Not Predict Postoperative Atrial Fibrillation After Cardiac Surgery

Jody Chou, MD; Andra Duncan, MD; Xiaohong Li

**143:** The Role of Transesophageal Echocardiography in Endocardial Lead Extraction for Cardiac Implantable Electronic Device Related Infection: A Single-Center Experience

Luyang JIANG; Yi Feng, MD; Hui Ju, MD; Yan Jiang, MD; Peking University People's Hospital

**144:** Acute Risk Change in Cardiothoracic Admissions to Intensive Care (ARCTIC): A New Metric for Identifying Quality of Care in Cardiac Surgery

Tim Coulson; Michael Bailey, PhD MSc BSc(hons); Chris Reid, PhD; Dan Mullany; Lavinia Tran, PhD; David Pilcher

**145:** Effects of Modified Ultrafiltration on Vancomycin Levels During Cardiopulmonary Bypass

Daniel Hernandez Barajas, MD; Aaron Seller, DO; Nikolaus Gravenstein, MD; Kent Berg, MD MBA; Jennifer Ashton, PharmD; Ettore Crimi, MD; Univeristy of Florida; University of Florida; UF Health



# Scientific Abstracts and Posters

**146:** Intraoperative Midazolam Does Not Delay Extubation After Coronary Artery Bypass Grafting  
*Philip Roman, MD MPH; Sarah Cardillo, MD; Megan Anders, MD; Michael Mazzeffi; University of Maryland*

**147:** Influence of Perioperative Factors on Early Extubation  
*Brian Kelly; Frederick Cobey, MD MPH FASE; Anupama Gopinath; Stefan Ianchulev, MD; Kenneth Warner, MD*

**148:** Increased Tracheal Cuff Pressure During Insertion of a Transoesophageal Echocardiography Probe: A Prospective Observational Study  
*Chang-Hoon Koo, MD; Yunseok Jeon, MD; Deok-Man Hong, MD; Jae-Hyon Bahk, MD; Susie Yoon, MD; Seoul National University Hospital*

**149:** Organ Donation Referral and Practice Audit on a Cardiac Intensive Care Unit  
*Norfaizan Ahmad, MB ChB; Sheffield UK; FRCA UK; Jonathan Rosser; Helen Brown, Registered general nurse; Sean Clinton, Consultant Cardiac Anaesthesia; Northern General Hospital NHS Trust; NHSBT UK*

**150:** Effect of Anesthesia Practice Models on Measurable Outcomes in a Community Cardiac Surgery Program  
*Narisa Apichatibutra, MD; Wilfred Lewis, MD; Nathan Marengi, MD; Johanna O'Connor, MD; Ann Toran, MD FACS; North Shore Medical Center*

**151:** Use of Bairhugger® and AllonThermoWrap® in Transcatheter Aortic Valve Replacement Surgery for Maintenance of Normothermia  
*Brian Kelly; Maurice Joyce, MD MED; Frederick Cobey, MD MPH FASE; Andrew Weintraub, MD; Stefan Ianchulev, MD; Jiten Patel*

**152:** The Association of Intraoperative Midazolam Dose in Older Adults and Time to Extubation After Cardiac Surgery  
*Sunberri Murphy, DO; Ami Naik, MD; Laeben Lester, MD; Ashish Shah, MD; Charles Hogue, MD; Glenn Whitman, MD; Viachaslau Barodka, MD; Charles Brown, MD; Johns Hopkins*

**153:** Analgesia Post-Cardiac Surgery Survey  
*Norfaizan Ahmad, MB ChB; Sheffield UK; FRCA UK; Alison Parnell, Consultant Cardiothoracic Anaesthesia; Tom Bendinger; Patrick Knowles, Consultant Cardiothoracic Anaesthesia; Northern General Hospital NHS Trust*

**154:** Enhanced Recovery Is Safe and Facilitates Early Discharge in Cardiac Surgery  
*Thomas Varughese, MBBS FRCA; William Simpson, BSc MB ChB FRCA; Gillian Hardman, MBBS; Helen Saunders, MB ChB; Antony Walker, MB ChB FRCS(CTh) MD; Amal Bose, MD; Blackpool Teaching Hospitals NHS Foundation Trust; Blackpool Teaching Hospitals NHS Foundation; Blackpool Teaching Hospitals NHS Trust*

**155:** Implementation of a Dedicated Stroke Team for Diagnosis and Treatment of Postoperative Strokes Following Cardiac Surgery  
*Gregory Kim; Germaine Cuff, PhD; Andre Bryan, MD; Peter Neuburger, MD; Marc Kanchuger, MD*

**156:** Trend of Change in the Intraoperative Blood Glucose and Serum Potassium Level of Adult Patients Undergoing Off-Pump Coronary Artery Bypass (OPCAB) Surgery  
*Kapil Gupta, MD; Delhi, Delhi, India*

**157:** Costs of Hospitalization and Anesthesia of Coronary Artery Bypass Graft Surgery in Beijing From 2010 to 2011  
*Sipong Chen, MD; Hushan Ao; Xin Zhang, BD; Capital Medical University; Fuwai Hospital*

# Scientific Abstracts and Posters

## Poster Session 4: Perioperative Medicine Abstracts and Interesting Case Reports

**Tuesday, April 14, 12:30-1:30 pm**

### Room: Marquis Foyer & Salons 12-14

**158:** Cardiorespiratory Dynamics of Using Volatile Agents for Long-Term Intensive Care Unit Sedation

Angela Jerath, MBBS FANZCA; Deep Grewal, MD; Andrew Steel, MB BS MRCP FRCA FFICM FRCPC EDIC; Niall Ferguson, MD FRCPC; George Djaiani, MD; Marcin Wasowicz, MD PhD; Toronto General Hospital

**159:** Echocardiography Did Not Provide a Predictive Value for Postoperative Atrial Fibrillation in Lung And Esophageal Cancer Surgery

Javier Lasala, MD; Juan Cata, MD; Jose Banchs, MD FACC FASE; Reza Mehran, MD; Di Ai, MD PhD; MD Anderson Cancer Center

**160:** Recent Pattern of Statin Use in Cardiac Surgery on Stroke and Mortality Outcomes

Vanetta Levesque, MD; Manuel Fontes, MD; Mihai Podgoreanu, MD; Mark Newman, MD; Joseph Mathew, MD; Mark Stafford-Smith, MD; Miklos Kertai, MD PhD; Duke University Medical Center

**161:** Elevated Preoperative Hemoglobin A1c Level Is Not Associated With Major Adverse Events in Patients Undergoing Isolated Valvular Cardiac Surgery

Amit Bardia, MMBS; Priyam Mathur, MS; Adam Lerner, MD; Kamal Khabbaz, MD; Daniel Talmor, MD; Balachundhar Subramaniam, MD MPH; Beth Israel Deaconess Medical Center

**162:** Withdrawn

**163:** Patterns of Early Distant Organ Injury Following Adult Cardiac Surgery

Antonio Hernandez, MD; Andrea Westman, MD; Andrew Shaw, FCCM FRCA MB; Frederic Billings, MD; Vanderbilt University

**164:** Greater Intraoperative Fluid Administration Increases the Risk for Primary Graft Dysfunction After Lung Transplantation

Mariya Geube, MD; Silvia Perez-Protto, MD; Tory McGrath, MD; Andra Duncan, MD; Dongsheng Yang, MS; Daniel Sessler, MD

**165:** Prediction of Fluid Responsiveness in Patients With Atrial Fibrillation: Peep-Induced Increase in Central Venous Pressure vs. Passive Leg Raising

Young Song, MD; Jae-Kwang Shim, MD; Yon Hee Shim, MD PhD; Lee Woo Kyung; Young-Lan Kwak, MD; Yonsei University College of Medicine

**166:** Impact of Aorta Cross-Clamp and Cardioplegia on Myocardial Injury

Jeremy Bennett, MD; Susan Eagle, MD; Frederic Billings, MD; Vanderbilt University

**167:** Platelet Counts and Postoperative Stroke in Coronary Artery Bypass Surgery

Aimen El Manafi, MD MB ChB; Mary Cooter, MSc; Manuel Fontes, MD; Jorn Karhausen, MD PhD; Mark Stafford-Smith, MD; Mihai Podgoreanu, MD; Mark Newman, MD; Joseph Mathew, MD; Miklos Kertai, MD PhD; Duke University Medical Center

**168:** Impact of Increments of Propofol-Dosage on Left Ventricular Systolic Function During Propofol-Remifentanyl Anesthesia for Cardiac Surgery

Tae-Yop Kim, MD PhD; Cheol-Hwan Park; Won-Kyoung Kwon; Nazri Mohamed, MD (UKM); Woon-Seok Kang; Joon Hum Yon, MD; Tae-Yoon Seong; Konkuk University Medical Center; Konkuk University School of Medicine; Sanggye Paik Hospital, Inje University; Konyang University Medical Center

**169:** Is Antibiotic Prophylaxis Warranted for the Prevention of Infective Endocarditis of the Native Bicuspid Aortic Valve?

Yuka Kiyota, MD MPH; Karam Habchi, BS BA; Vanessa Monteiro Vieira, Bachelor of Science in Biochemistry; Marzia Leacche, MD; Simon Body, MBChB MPH FAHA; Brigham and Women's Hospital

**170:** Pituitary Apoplexy After On-Pump Coronary Artery Bypass Grafting in a Patient With Known Pituitary Macroadenoma

Blas Catalani, MD MPH; Sudipta Sen, MD; LSUHSC - Shreveport

**171:** Postoperative Nausea and Vomiting in Cardiac Surgery Patients and Caloric Intake: Is There a Link?

Elisabeth De Waele, MD; Karlien De Bondt; Vincent Umbrain, MD PhD; Duncam Nguyen; Herbert Spapen, MD PhD SCCM FCCM; University Hospitals Brussels

**172:** Immunosuppressive, Antiretroviral, and Perioperative Management of Two Human Immunodeficiency Virus-Positive Patients Undergoing Orthotopic Heart Transplantation

Antonio Hernandez Conte, MD; Jon Kobashigawa, MD; Deanna Dilibero, PharmD; Michelle Kittleson, MD PhD; Lorraine Lubin, MD; Manxu Zhao, MD; W. David Hardy, MD; Fardad Esmailian, MD; General Anesthesia Specialists Partners; Cedars-Sinai Medical Center

**173:** Suboptimal Transseptal Puncture Leading to Device Capture in Anterolateral Chords During MitraClip Procedure, A Case Report

Amish Jasapara, MD; Chirojit Mukherjee, MD; Joerg Ender, MD; Heartcenter, University Leipzig, Germany; Heartcenter, University Leipzig, Germany

**174:** Extra Cardiac Tumor Misdiagnosed as a Left Atrial Myxoma

Si-Oh Kim, MD; Kwangook Choi; Seong Wook Hong; Dongho Jung; Younghoon Jeon; Kyungpook National University Hospital

# Scientific Abstracts and Posters

**175:** Stroke Following Lariat Closure of Left Atrial Appendage  
*Kelly Kohorst, MD; Christopher Ellis, MD FACC FHRS; Michael Baker, MD; Robert Deegan, MD PhD; Vanderbilt Univ Med Ctr*

**176:** Case of Penetrating Cardiac Trauma Utilizing Adenosine to Facilitate Surgical Management  
*Charles Minh; Maninder Singh, MD; MetroHealth Medical Center*

**177:** Pregnancy in Women With Fontan Physiology: The Role of Fontan Type in Maternal Cardiovascular and Obstetric Complications  
*Melissa McCabe, MD; Richard Hong, MD; Jamil Aboulhosn, MD FACC FSCAI; Mary Canobbio, MN FAAN FAHA; University of California Los Angeles*

**178:** The Perioperative Management of an Adult Patient With Univentricular Heart, Who Underwent Fenestrated Fontan Procedure With Use of Extracardiac Conduit  
*Shihoko Iwata, MD; Yoko Hramura, MD; Ai Ogiwara; Kou Ishikawa; Fumiko Ono; Yuji Hirasaki, MD; Minoru Nomura, MD; Tokyo Women's Medical Univ; Tokyo Women's Medical University Hospital*

**179:** Percutaneous Coronary Sinus Catheter Placement by Anesthesiologists in Minimally Invasive Cardiac Surgery in Our Academic Center  
*Satoshi Hanada, MD; Michael Swerczek, MD; Kenichi Ueda, MD; University of Iowa*

**180:** General Anesthesia vs. Sedation for Transcatheter Aortic Valve Replacement  
*Michelle Scanlon, DO; Gregory Kim; Glen Quigley, MD MBA; Brent Luria, MD; Peter Neuburger, MD; Robert Nampiaparampil, MD; Marc Kanchuger, MD; Jennie Ngai, MD*

**181:** Intraoperative Management of Patients With Left Ventricular Assist Devices Undergoing Endoscopic Procedures  
*Dennis Thiel, MD; Julia Sobol, MD MPH; Columbia University Medical Center*

**182:** Transcatheter Medtronic Melody® Valve-in-Valve Implantation for Bioprosthetic Mitral Valve Dysfunction  
*Winston Choi, MD; Thomas Jones, MD; Srdjan Jelacic, MD; Donald Oxorn, MD; Mark Reisman, MD; G. Burkhard Mackensen, FASE MD PhD; University of Washington SOM*

**183:** Use of Venous-Arterial ECMO to Manage Hypoxemia and Acute Cardiogenic Shock Induced by Catecholamines From Pheochromocytoma  
*Rehan Ali, MD; Suryanarayan Pothula, MD*

**184:** Postoperative Outcomes After Percutaneous Left Atrial Appendage Ligation With the LARIAT Device: A Case Series  
*Marc Gutierrez, MD; Mias Pretorius, MBCHB MSCI; Christopher Ellis, MD FACC FHRS; Vanderbilt University Medical Center*

**185:** Transesophageal Echocardiographic Identification of Left Ventricular Assist Device Inflow and Outflow Cannulas: A Case Series  
*Andrea Westman, MD; Mias Pretorius, MBCHB MSCI; Vanderbilt University Medical Center*

**186:** Percutaneous Closure of Aortic Pseudoaneurysm Using a Type II Amplatzer Vascular Plug With Transesophageal Echocardiography Guidance  
*Hyo Jin Kim; Eunjung Oh, MD; Seunghyeon Lee, MD; Eunhee Kim, MD; Jeong Jin Min, MD; Jong Hwan Lee, MD PhD; Sangmin Lee, MD PhD; Samsung Medical Center*

**187:** Alfieri Stitch to Manage Mitral Regurgitation After Surgical Excision of a Mitral Valve Myxoma  
*Charles Minh; Maninder Singh, MD; MetroHealth Medical Center*

**188:** Embolization of a Percutaneous Atrial Septal Closure Device  
*Rhett Hadley, MD; Anand Mehta, MD; Cleveland Clinic*

**189:** Changing Mechanisms of Mitral Regurgitation During Repair and Role of Transesophageal Echocardiography in Outcome  
*Sohail Mahboobi, MD; Chhavi Manchanda; Ghaith Abdulkarim, MBBS; Lahey Clinic Medical Center; Lahey Hospital & Medical Center*

**190:** Aortic Root Rupture During Transcatheter Aortic Valve Replacement  
*Nikola Bradic, MD; Ino Husedzinovic, MD PhD, Professor; Andrej Sribar, MD; Daniel Unic, MD; Cardiac Anesthesiology and Critical Care Medicine; Cardiac Surgery*

**191:** Acute Limb Ischemia Caused by a Primary Cardiac Tumor in an 18-Year-Old  
*Hamdy ElSayed Awad, MD; Lisa Weaver, MD; Motaz Abas, BS; Mashhood Salahuddin, BS; Michael Essandoh, MD; Sujatha Bhandary, MD; Ohio State University*

**192:** The Perioperative Management of a Patient With Transposition of Great Arteries Who Received Redo Aortic Valve Replacement Due to Implanted Freestyle Valve Insufficiency  
*Shihoko Iwata, MD; Ai Ogiwara; Yoko Hramura; Fumiko Ono; Kou Ishikawa; Minoru Nomura, MD; Tokyo Women's Medical Univ; Tokyo Women's Medical University Hospital*

**193:** Acute Respiratory Compromise During Left Ventricular Assist Device Implantation  
*Michael Demos, MD; Oscar Aljure, MD; Univ of Miami Miller School of Medicine; University of Miami Miller School of Med*

**194:** Continuous Paravertebral Blockade for Post-Thoracotomy Pain Following Transapical Transcatheter Aortic Valve Replacement: A Case Series  
*Timothy Heinke, MD; Bristol Henderson, MD; George Guldán, MD; Daniel Steinberg, MD; James Abernathy, MD MPH; Medical University of South Carolina*

**195:** The Elephant in the Room: Anesthetic Considerations for a Patient With Carney Complex  
*Darian Rice, MD PhD; Robert O'Donnell, MD; Naval Medical Center Portsmouth*

**196:** A Case of "Takotsubo" Cardiomyopathy Uncovered During General Anesthesia With Eventual Cardiovascular Collapse Requiring Epinephrine Rescue  
*Robert Trainer, MD; Jian Zhang, MD; Jimmie Watkins, MD PhD DDS*

# Scientific Abstracts and Posters

## Poster Session 4: Perioperative Medicine Abstracts and Interesting Case Reports

**Tuesday, April 14, 12:30-1:30 pm** (continued)

**197:** Posterior Mitral Chordae Rupture During Balloon Mitral Valvuloplasty Requiring Surgical Intervention

*Mohammad Chaudhry; Alann Solina, MD; Rutgers-Robert Wood Johnson Medical School*

**198:** Intraoperative Use of Echo Contrast to Facilitate Diagnosis of Apparent Left Atrial Appendage Mass

*Kelly Kohorst, MD; Jason Kennedy, MD; Robert Deegan, MD PhD; Vanderbilt University Medical Center*

**199:** Aversion for Avulsion: A Case of Traumatic Tricuspid Rupture

*Nicholas Goehner, MD; Wendy Bernstein, MD MBA; University of Maryland Medical Center*

**200:** Atrial Myxoma Involving Right Upper Pulmonary Vein in an Elderly Patient: An Unusual Presentation

*Joshua Newby, DO; Sudhakar Subramani, MD DNB PDCC MMed*

**201:** Anomalous Coronary Artery: An Unusual Case

*Christopher Ahrens, DO; Rajeswari Chintapalli, MD; Saint Louis University*

**202:** Anaesthesia Management for "Anomalous Origin of Left Coronary Artery from Pulmonary Artery" Repair

*Kapil Gupta, MD; Delhi, Delhi, India*

**203:** Anesthetic Considerations and Management of a Patient With Stanford Type A Aortic Dissection Extending From the Aortic Root to the Right Common Iliac: A Story of Survival

*Visal Patel, MD; Union City, NJ*

**204:** Broad Beta Disease

*Majid Ghodsi, MD; Tehran, Iran, Iran, Islamic Republic*

# Resident/Fellow Complex Case Presentations

## Complex Case Poster Presentations I

Saturday, April 11, 10-11 am

### Room: Marquis Foyer & Salons 12-14

**B1:** Infective Endocarditis of Primary Pacemaker Lead Device Resulting in Severe Tricuspid Regurgitation Not Amenable to Percutaneous Intervention

*Brittney Williams, MD BA; Wendy Bernstein, MD MBA*

**B10:** Acute Heart Failure for Urgent Surgery: Takotsubo Cardiomyopathy Identified Prior to Anesthetic Induction  
*Lauren Steffel, MD; Jessica Brodt, MD, Stanford, CA; Stanford University School of Medicine*

**B11:** Temperature Probe Position Confounding Double Lumen Endotracheal Tube Placement for Ventriculopleural Shunt  
*Jacob Schaff, MD; Michael Hershey, MD; Minjae Kim, MD MS; Sumeet Goswami, MD MPH; Columbia University Medical Center*

**B12:** Cardiopulmonary Resuscitation and Cardiac Arrest in the Acute Postoperative Cardiac Surgery Patient: A Case of Coronary Graft Dehiscence Following Cardiac Massage  
*Brandon Lebow, MD; Owings Mills, MD; Wendy Bernstein, MD MBA, Baltimore, MD; Michael Mazzeffi, Fellow; Fellowship Director; Faculty Advisor*

**B13:** Perioperative Considerations of Post-Myocardial Infarction Ventricular Septal Defect: Case Series  
*Nidhi Sheokand, MBBS, Iowa City, IA; Sudhakar Subramani, MD DNB PDCC MMed, Iowa City, IA; United States University of Iowa Hospital; University of Iowa*

**B14:** Anesthetic Management of Patient With Large Anterior Mediastinal Mass With SVC Syndrome for SVC Stenting  
*Bradley Graustein, MD, Portland, ME*

**B15:** Early Left Main Coronary Artery Occlusion After Surgical Aortic Valve Replacement  
*Jacqueline Lagoy, MD, New York, NY; Muoi Trinh, MD, New York, NY; Mount Sinai School of Medicine, New York, NY; Mount Sinai School of Medicine, New York*

**B16:** Prophylactic Right-Sided Tandem Heart for Management of Potential Right Heart Failure Before Placement of a LVAD: A Novel Single-Vessel Percutaneous Approach  
*Ankit Jain, MBBS, North Arlington, NJ; Albert Ju, MD, Glen Ridge, NJ; Resident; Attending Anesthesiologist*

**B17:** Transesophageal Echocardiogram Guided Right Ventricular Assist Device Cannulation During Minimally Invasive Left Ventricular Assist Device Implantation  
*Nicholas Anast, MD, Mountain View, CA; Ryan Mahaffey, MD, Palo Alto, CA; Lindsay Raleigh, MD, San Francisco, CA; Jessica Brodt, MD, Stanford, CA; Albert Cheung, MD, Stanford, CA; Stanford School of Medicine*

**B19:** 3D Transesophageal Echocardiography Facilitates Transcatheter Closure and Management of Left Ventricular Outflow Tract to Left Atrial Fistula  
*Julio Benitez-Lopez, MD, Miami, FL; Jadelis Giquel, MD, Miami, FL; Christina Matadial, MD, Miami, FL; Oscar Aljure,*

*MD, Miami, FL; Ricardo Martinez-Ruiz, MD, Miami, FL; Jackson Memorial Hospital; University of Miami*

**B2:** Primary Pulmonary Artery Sarcoma: An Elusive and Rare Entity  
*Heather Hayanga, MD MPH, Baltimore, MD; Farrah Sajan, MD, Baltimore, MD; Ana Parsee, MD, Baltimore, MD; Stephen Yang, MD; Kenton Zehr, MD, Baltimore, MD; Laeben Lester, MD, Baltimore, MD; The Johns Hopkins Hospital*

**B20:** Go With the Flow: Ruptured Sinus of Valsalva Into the Right Atrium  
*Wendy Nguyen, MD, Baltimore, MD; Seema Deshpande, MBBS, Baltimore, MD; University of Maryland*

**B21:** Hemodynamic Monitoring During a Total Aortic Arch Replacement in a Patient With a Bovine-Configuration Aortic Arch Aneurysm  
*Adrian Ionescu, MD, Boston, MA; Jason Qu, MD, Charlestown, MA; Massachusetts General Hospital - Harvard Medical School*

**B22:** Torsades de Pointes Secondary to Amiodarone Infusion in HIV Patient Taking Antiretroviral Therapy  
*Brian Fischer, MD PhD, Milwaukee, WI; William O'Byrne, MD, Milwaukee, WI; Medical College of Wisconsin*

**B23:** Cardiopulmonary Bypass and Deep Hypothermic Circulatory Arrest in a Patient With Inherited Antithrombin Deficiency  
*Abraham Sonny, MD, Cleveland, OH; Shiva Sale, MD, Beachwood, OH; Cleveland Clinic, Cleveland, OH*

**B24:** Emergent Removal of Embolized Atrial Septal Occluder Device and Defect Repair  
*Parker Gaddy, MD; Eric Nelson, DO*

**B25:** Successful ECMO Support Withdrawal via Bilateral Single Lumen Bronchial Intubation on a Patient With a Tracheo Esophageal Fistula Repair  
*Oscar Aljure, MD, Miami, FL; Yilam Rodriguez, MD, Miami, FL; Mona Ehasz, DO, Hollywood, FL; Jadelis Giquel, MD, Miami, FL; Nestor Villamizar, MD, Miami, FL; Anthony Panos, Miami Beach, FL; John Sciarra, MD, Miami, FL; University of Miami/Jackson Memorial Hospital*

**B26:** Cardiac Sarcoidosis: Challenging Anesthetic Management  
*Alexandra Baracan; Daniela Orza, MD; Cornel Mihalache, MD*

**B27:** Oxygenator Thrombosis Upon Initiation of Cardiopulmonary Bypass Leading to Cerebral Infarction  
*Aaron Mittel, MD, Boston, MA; Balachundhar Subramaniam, MD MPH, Lexington, MA; Adam Lerner, MD, Georgetown, MA; Beth Israel Deaconess Medical Center; Harvard Medical School; Beth Israel Deaconess Medical Center*

**B29:** Anomalous Hepatic Vein to Left Atrium Connection With Severe Mitral Regurgitation Resulting in Massive Left Atrium  
*Michael Dutt, MD; Muoi Trinh, MD, New York, NY; Mount Sinai Hospital*



# Resident/Fellow Complex Case Presentations

## Complex Case Poster Presentations I

**Saturday, April 11, 10-11 am** (continued)

**B3:** Anesthetic Management of a Young Adult Patient With Congenital Heart Disease Presenting for EGD

*Abisola Ayodeji, Brooklyn, NY; Jason Fu, MD, Bayside, NY; Kalpana Tyagaraj, MD, Staten Island, New York; Maimonides Medical Center*

**B30:** Transaortic Valve Gradients After Aortic Valve Replacement and Mitral Valve Replacement

*Leonid Gorelik, MD, Columbus, OH; Michael Essandoh, MD, Columbus, OH; Sujatha Bhandary, MD, Columbus, OH; The Ohio State University/Ross Heart Hospital*

**B31:** New Severe Mitral Regurgitation After Ventricular Aneurysm Repair

*Leonid Gorelik, MD; Michael Essandoh, MD, Columbus, OH; Galina Dimitrova, MD, Columbus, OH; The Ohio State University/Ross Heart Hospital*

**B32:** Percutaneous Valve-in-Valve Deployment for Severe Symptomatic Bioprosthetic Tricuspid Valve Stenosis as an Alternative to Redo Sternotomy or Thoracotomy

*Bruce Kaufman, MD; Neal Duggal, MD, Ypsilanti, MI; University of Michigan*

**B33:** Transesophageal Echocardiographic Evaluation of a Double Chambered Right Ventricle Diagnosed in Adulthood

*Oscar Aljure, MD, Miami, FL; Frank Gencorelli, MD, Miami, FL; Yiliam Rodriguez, MD, Miami, FL; Richard Kardon, DO, Miami, FL; Eliot Rosenkranz, MD, Miami, FL; University of Miami/Jackson Memorial Hospital*

**B34:** Intraoperative Diagnosis of an Asymptomatic Ascending Aortic Rupture

*Megan Kostibas, MD, Columbia, MD; Mary Beth Brady, MD, Cockeysville, MD; Viachaslau Barodka, MD, Baltimore, MD; Heather Hayanga, MD MPH, Baltimore, MD; Johns Hopkins Hospital; Johns Hopkins Hospital; Assistant Professor of Anesthesiology*

**B35:** A Successful Heart Transplant But a Sutured in Central Line Tip: A Re-Exploration That Could Be Avoided!

*Ankit Jain, MBBS, North Arlington, NJ; Rajendra Raval, MD, Warren, NJ; Resident; Attending Anesthesiologist*

**B36:** Convergent Atrial Fibrillation Ablation: Anesthetic Considerations

*Kailian Chen; Walter Bethune, MD, Brooklyn, NY; Maimonides Medical Center*

**B37:** Use of Mechanical Support for Failing Single Ventricle Physiology

*Paul Jacobs, DO, Seattle, WA; Michael Hall, MD, Seattle, WA; Fellow, Cardiothoracic Anesthesiology; Faculty Mentor*

**B38:** Ross Procedure in a Patient With Bicuspid Pulmonary Valve

*Eva Caroline Gebhard, Montreal, QC, Canada; Georges Desjardins, MD FRCPC FASE, Montréal, QC, Canada; Christian Ayoub; Jennifer Cogan, MD, Montreal, QC; Pierre Couture, MD, Montreal, QC; Andre Denault, MD, Longueuil, QC, Canada; Alain Deschamps, MD PhD, Montreal, QC, Canada; Jean-Sebastien Lebon, MD, Westmount, QC, Canada; Claudia Viens, MD, Montreal, QC, Canada; Ismail El-Hamamsy, MD PhD, Montreal, Quebec, Canada; Antoine Rochon, MD, Montreal, QC, Canada; Montreal Heart Institute*

**B39:** Minimally Invasive Mitral Valve Replacement in a Patient With Previous Sternotomy and Severe Pulmonary Hypertension Requiring One-Lung Ventilation

*Hilda Alfaro, MD, London, ON, Canada; Ivan Iglesias, MD FRCPC FASE, London, ON, Canada; Mauricio Giraldo; Cardiac Anesthesiologist; Cardiac Anesthesia Fellow; Cardiac Anesthesiologist; Neuro Anesthesia Fellow*

**B4:** Intraoperative Diagnosis and Management of a Left Atrial Intramural Hematoma

*Esther Garazi, MD; David Buric, BS; Harish Siddaiah, MD; Ricardo Martinez-Ruiz, MD*

**B40:** Septic Thrombus Removal and Aortic Valve Replacement in an End-Stage Renal Disease Patient With Fungal Septicemia

*John Albert, MD, Cleveland, OH*

**B41:** Anesthetic Management of Superior Vena Cava Syndrome Due to an Aortic Pseudoaneurysm in a Redo Aorta Operation: A Rare Clinical Presentation

*Natasha Malackany; Jennifer Hargrave, DO, Cleveland, OH; The Cleveland Clinic*

**B42:** Perioperative Management of Giant Right Atrial Myxoma

*Jacob Uhler, MD, Dublin, OH; Michael Essandoh, MD, Columbus, OH; Michael Andritsos, MD, Dublin, OH; The Ohio State University Wexner Medical Center*

**B44:** Fatal Arterial Air Embolism in a Patient With Left Ventricular Assistant Device (LVAD) During Transplant Surgery

*Nelson Gonzalez, MD; John Murkin Murkin, Professor of Anesthesiology (Senate), London, ON, Canada; Schulich Medicine Western University*

**B45:** Ligation of Tracheoesophageal Fistula (TEF) in a Neonate With Complex Congenital Heart Disease (CHD)

*Deborah Romeo, MD ScM, Cincinnati, OH; Joanna Rosing, MD, Cincinnati, OH; Erica Lin, MD, Cincinnati, OH; Cincinnati Children's Hospital Medical Center*

**B46:** Intraoperative Management of Pulmonary and Tricuspid Valve Replacement for Carcinoid Right Disease

*Sarah Dodd, MD, Rochester, MN; Martin Abel, MBBCH; Kent Rehfeldt, MD; Mayo Clinic*



# Resident/Fellow Complex Case Presentations

**B47:** Pulmonary Artery Aneurysm Involving the Main and Left PA in a Patient With Pulmonic Stenosis

*Mina Oftadeh, DO, Chicago, IL; Pierre LeVan, MD, Maywood, IL; Taqdees Sheikh, MD, Maywood, IL; Neal Mehta, Chicago, IL; Loyola University Medical Center*

**B48:** Placement of Transcatheter Bioprosthetic Aortic Valve in Descending Aorta for Treatment of Severe Aortic Valve Regurgitation

*Pablo Guzman, MD; Jayson Morgan, MD; Raj Makkar, MD; Wen Cheng, MD; Robert Siegel, MD; Antonio Conte, MD MBA; Daniel Sullivan, MD*

**B49:** TEE Finding of Systolic Anterior Motion of the Mitral Valve During Orthotopic Liver and Small Bowel Transplantation

*Cale Kassel; Nicholas Markin, MD, Omaha, NE; Thomas Nicholas, MD, Omaha, NE; University of Nebraska Medical Center*

**B5:** Repair of Acute Type A Aortic Dissection in a Spanish-Speaking Jehovah's Witness Patient

*Andrew Schroeder, MD, Madison, WI; Andrew Anderson, DO, Madison, WI; Richard Wolman, MD MA, Madison, WI; University of Wisconsin*

**B50:** Large Right Atrial Myxoid Malignancy Diagnosed by Echocardiography

*Austin Adams, MD; Nathan McIntire, MD; Mike Fee, MD*

**B51:** Rescue Transcatheter Aortic Valve Replacement for Cardiogenic Shock Secondary to Stenosis of a Bioprosthetic Aortic Valve

*Lindsay Raleigh, MD, San Francisco, CA; Nicholas Anast, MD, Mountain View, CA; Ryan Mahaffey, MD, Palo Alto, CA; Charles Hill, MD, Stanford, CA; Albert Cheung, MD, Stanford, CA; Vidya Rao, MD MBA, Stanford, CA; Stanford University School of Medicine*

**B52:** The Perioperative Management of an Adult Patient With a Symptomatic Mediastinal Mass

*Bradley Hammond, DO, Wilmington, DE; Cherie Erkmen, MD, Philadelphia, PA; Scott Schartel, DO, Dresher, PA; Michael Keresztury, MD, Philadelphia, PA; Yidy Salamanca, MD; Glen Burnie, MD; TUHS*

**B53:** Septal Resection for Hypertrophic Obstructive Cardiomyopathy: VSD That Led to an Orthotopic Heart Transplant

*Philip Choi, DO; Pingle Reddy, MD FASE, Glen Allen, VA; David Farr, MD, Chesterfield, VA; Virginia Commonwealth University*

**B54:** Superior Vena Cava Syndrome Following Adult Open Cardiac Surgery

*Todd Peacock, MD, Winston-Salem, NC; Benjamin Morris, MD, Winston-Salem, NC; Wake Forest Baptist Health*

**B55:** Anesthetic Management of Patient With Cor Triatrium, Persistent Left SVC, and Severe Pulmonary Hypertension

*John Anderson-Dam, MD; Johanna Schwarzenberger, MD, Los Angeles, CA; UCLA*

**B56:** One-Lung Ventilation in the Setting of Pulmonary Hypertension and a Left Ventricular Assist Device

*Eleanor Vega, MD, Portland, OR; Valerie Sera, MD DDS, Portland, OR; Oregon Health and Science University*

**B57:** Innominate Artery and Aortic Arch Aneurysm With Contained Rupture and Tracheal Compression

*Nelson Burbano; Anand Mehta, MD; Asha Singh, MD*

**B58:** Extracorporeal Membrane Oxygenation Placement Complicated by Hepafin-Induced Thrombocytopenia and Hemorrhagic Shock

*Nelson Burbano; Donn Marciniak, MD, Broadview Heights, OH; Asha Singh, MD, Cleveland, OH; Cleveland Clinic Foundation*

**B59:** Remifentanyl and Succinylcholine Use in TAVR Procedures Facilitating Early Extubation

*Farhan Mazhar, MD, Schaumburg, IL; Chiranjeev Saha, MD MS, Oak Park, IL; Resident; Attending*

**B6:** Pericardial Window With Acute Pulmonary Edema Managed With Extracorporeal Membrane Circulation (ECMO) and Intraoperative Use of the TandemHeart System

*Alexandra Lewis; Sugantha Sundar, MD*

**B60:** Simultaneous Endovascular and Surgical Repair of Multiple Aortic Anomalies in a Patient With Turner Syndrome

*Eleanor Vega, MD, Portland, OR; Stephen Robinson, MD, Portland, OR; Oregon Health and Science University*

**B7:** Two Dissecting Ascending Aneurysms With Pericardial Rupture

*Tyson Vandagriff, MD, Columbia, MO; Joseph Reeves-Viets, MD MBA, Columbia, MO; University of Missouri- Columbia; University of Missouri-Columbia*

**B8:** Alternative Management of Post-Deployment Embolization of Prosthetic Aortic Valve Into the Left Ventricle Following TAVR

*Jonathan Hadaway, MD, Gainesville, FL; Julia Bauerfeind, MD, Gainesville, FL; Dustin Hegland, MD, Gainesville, FL; J. Christopher Goldstein, MD, Gainesville, FL; University of Florida*

**B9:** Like a Rock: Atypical Presentation of a Heavily Calcified Atrial Myxoma

*Chinwe Nwosu, MD, Baltimore, MD; Seema Deshpande, MBBS, Baltimore, MD; Resident; Assistant Professor*

**B239:** Reoperative Mechanical Aortic Valve Replacement in a Patient With Dwarfism

*Craig Belon, MD; Joanthan Hastie*

**B240:** Transesophageal Echocardiography Revealed Left Arterial Rupture in Patient With Whom Left Ventricle Rupture Were Suspected After Mitral Valve Replacement

*Toshihiro Kono, MD; Yoshihiko Ohnishi, MD; Kenji Yoshitani, MD*

# Resident/Fellow Complex Case Presentations

## Complex Case Oral Presentation With Expert Panel

Saturday, April 11, 1–2 pm

### Room: Monument

Profound Hypotension Caused by an Unrecognized Aortocaval Fistula in a Patient Undergoing Coronary Artery Bypass Grafting

*Ryan Butterworth, MD; Mias Pretorius, MBCHB MScI; Nashville, TN; Vanderbilt University Medical Center*

Novel Cannulation Approach for TandemHeart™ Right Ventricular Assist Device in Setting of Internal Jugular Venous Thrombosis and Bilateral Subclavian Stenosis

*Stacy Krueth, Los Angeles, CA; Danny Ramzy, MD PhD, Los Angeles, CA; Antonio Conte, MD MBA, Los Angeles, CA; Lorraine Lubin, MD, Playa Del Ray, CA; Diba Daneshrad, MD, Cedars Sinai Medical Center; Cedars-Sinai Medical Center*

The Cabral Baffle: Achieving Hemostasis in a Patient With a Pseudoaneurysm of the Mitral-Aortic Intervalvular Fibrosa Undergoing Redo Aortic Root Replacement With Homograft for Endocarditis

*Adrian Ionescu, MD, Boston, MA; Carolyn Mehaffey, MD Boston, MA; Massachusetts General Hospital–Harvard Medical School*

Transcatheter Closure of Aortopulmonary Fistula: Role of Intraoperative Transesophageal Echocardiography

*Abraham Sonny, MD, Cleveland, OH; Anand Mehta, MD, Cleveland, OH; Cleveland Clinic, Cleveland, OH*

# Resident/Fellow Complex Case Presentations

## Complex Case Poster Presentations II

Saturday, April 11, 5-6 pm

### Room: Marquis Foyer & Salons 12-14

**B28:** Coronary Artery Graft Thrombosis From Undiagnosed Factor V Leiden Deficiency Immediately After Coronary Artery Bypass Surgery

Vandy Gaffney, MD MS, North Augusta, SC; Tyler Lee Evans, DO, Evans, GA; Vikas Kumar, Augusta, GA; Sanjay Dwarakanath, MD, Augusta, GA; Resident Physician; Supervising Physician

**B100:** Rare Complication of Atrio-Esophageal Fistula After Ablation for Atrial Fibrillation

Michael Fabbro; Jonathan Frogel, MD, Philadelphia, PA; Jared Feinman, MD, Philadelphia, PA; Prakash Patel, MD, Newtown, PA; University of Pennsylvania

**B101:** CPAP and Sedation for SVC Stent Placement for Severely Symptomatic SVC Syndrome: The Best Anesthetic in a Difficult Situation!

Man Piu Wong, MD, Boston, MA; John Fox, MD, Hanover, MA; Robert Pilon, MD, Boston, MA; Alisa Suzuki Han, MD, Boston, MA; Galina Davidiyuk, MD PhD, Boston, MA; Brigham and Women's Hospital

**B102:** Sepsis and Cardiopulmonary Bypass

Wesley Allen, MD, Columbia, MO; Magda Miller, MD, Columbia, MO; Joseph Reeves-Viets, MD MBA, Columbia, MO; University of Missouri-Columbia

**B103:** Acute Ischemic Ventricular Septal Defect and Inferior Wall Aneurysm Necessitating Emergent Veno-Arterial Extracorporeal Life Support Complicated by Heparin-Induced Thrombocytopenia and Non-Coronary Aortic Valve Thrombus on Bivalirudin

Gregory Weiss, MD, Lafayette, Colorado; Kari Obma, MD, Denver, CO; University of Colorado Hospital

**B104:** Open Heart Implantation of a Melody Valve in a Native Mitral Valve With Mitral Annular Calcification

John Charoonbara, MD, Belleville, NJ; Himani Bhatt, DO MPA, Forest Hills, NY; Icahn School of Medicine at Mount Sinai

**B105:** Massive Air Embolism Treated With Targeted Temperature Management

Tyler Lee Evans, DO, Evans, GA; Erin Switzer, DO, Evans, GA; Vikas Kumar, Augusta, GA; Sanjay Dwarakanath, MD, Augusta, GA; Manuel Castresana, MD, Augusta, GA; Georgia Regents University

**B106:** Concurrent Transcatheter Aortic and Mitral Valve-in-Valve Implantation via the Transapical Approach in a High-Risk Patient With Double Degenerated Bioprostheses

Loreen Mane, MD; Ettore Crimi, MD, Gainesville, FL; Thomas Beaver, MD, Gainesville, FL; University Florida, College of Medicine

**B107:** The Central Role of Nitric Oxide in Vasopressor-Refractory Protamine Hypotension

June Chan, MBBS FANZCA, New York, NY; Adam Lichtman, MD FASE, Brooklyn, NY; Emil Bogdanov, MD, New York, NY; New York Presbyterian Hospital-Weill Cornell Medical Center

**B108:** Postoperative Neurologic Compromise Related to Migration of Native Valve Fragment Following Robotic Mitral Valve Annuloplasty

Michelle Scanlon, DO; Gregory Kim; Glen Quigley, MD MBA; Robert Nampiaparampil, MD; Jennie Ngai, MD

**B109:** Bridging to Transplant: Anesthetic Management of a Left Ventricular Assist Device Implantation Without Cardiopulmonary Bypass

Matthew Waldron, MD, Chicago, IL; Rima Griauszde, MD, Chicago, IL; University of Florida; Northwestern University

**B110:** Combined Adrenal Pheochromocytoma Resection and Off-Pump CABG

Bradley Coker, MD, Birmingham, AL; Benjamin Tuck, MD, Mountain Brook, AL; James Sparrow, MD, Birmingham, AL; Brad Hymel, MD, Baton Rouge, LA; Fellow; Attending

**B111:** Isolated Right-Sided Endocarditis and Severe Septic Emboli

Christopher Der, MD; Diba Daneshrad, MD; Antonio Conte, MD MBA; Lorraine Lubin, MD

**B112:** Transcatheter Aortic Valve Replacement Complication: Uncertainties of Primary Valve Deployment

Nawar Al-Rawas, MD, Gainesville, FL; Kent Berg, MD MBA, Gainesville, FL; Gregory Janelle, MD FASE, Gainesville, FL; Robert Timmerman, MD, Gainesville, FL; University of Florida

**B113:** 57-Year-Old, 150-kg Female With Rheumatic Valve Disease and Tracheal Stenosis for Robotic Mitral Valve Replacement

Justin Tawil, MD, Pittsburgh, PA

**B114:** Inadvertent Right Atrial Perforation During Pulmonary Artery Catheter Insertion in a Patient With Indwelling Pacemaker Wires

Cory Robertson, MD; Pushpa Koyyalamudi, MD; Seth Baker, MD

**B115:** Cardiac Tamponade Presenting as a Posterior Effusion Secondary to Right Ventricular Perforation During TAVR and Pacemaker Placement

John Berry; Feroze Mahmood, MD, Sharon, MA; Beth Israel Deaconess Medical Center

**B116:** Perioperative Management of a Hysterectomy Patient With a Difficult Airway and a Previous Fontan Procedure

Michelle Gorgone, MD, Dorchester, MA; Joseph Weidman, MD, Boston, MA; Massachusetts General Hospital

**B117:** An Unusual Case of Main Pulmonary Artery Stenosis

Ellen Richter, MD, Atlanta, GA; Mark Caridi-Scheible, MD, Atlanta, GA; Emory University Hospital

**B118:** Hypermetabolic Syndrome Masked by Cardiopulmonary Bypass in a Man With Idiopathic Cardiomyopathy

Christopher Press, MD, Palo Alto, CA; Jimmy Wong; Stanford University Medical Center

# Resident/Fellow Complex Case Presentations

## Complex Case Poster Presentations II

**Saturday, April 11, 5–6 pm** (continued)

**B119:** Complications of the Mitral Clip

Aaron Wolfe, MD; Ravi Vivekanand Joshi, MD, Dallas, TX; Norman Huang, DO, Carrollton, TX; University of Texas Southwestern

**B120:** Atrioventricular Groove Tear During Mitral Valve Repair: A Case Report

Gerald Rosen, MD, Miami Beach, FL; Jonathan Lin, MD, Miami, FL; MSMC; Mount Sinai Medical Center

**B61:** Acute Supravalvular Aortic Stenosis After Type A Aortic Dissection Repair

Phebe Ko, MD, Boston, MA; Jeffrey Swanson, MD, Cambridge, MA; Charles Nyman, MB BCh, Waban, MA; Stanton Sherman, MD FASE, Boston, MA; Michael D'Ambra, MD, Cambridge, MA; Brigham and Women's Hospital

**B62:** Isolated Pulmonary Native Valve Infectious Endocarditis (PNVIE)—A Rare Event With a Rare Organism

Huan Wang, MD, Brookline, MA; Nelson Thaeemert, MD, Boston, MA; Brigham and Women's Hospital

**B63:** Experience of Recall of Intraoperative Awareness After Cardiac Surgery

Hye Joo Yun; Ji-Yeon Sim

**B64:** Acquired Gerbode Defect in a Patient Following Mitral Valve Replacement

Nathan Lee, MD, Albuquerque, NM; Lev Deriy, MD, Albuquerque, NM; Neal Gerstein, MD FASE, Albuquerque, NM; Kirsten Tolstrup, MD FACC FASE, Albuquerque, NM; University of New Mexico School of Medicine

**B65:** A Case of Severe Biventricular Failure and Cardiac Arrest Secondary to Acute Eosinophilic Necrotizing Myocarditis Rescued on Venoarteriovenous ECMO

Nicholas Yeldo, MD, West Bloomfield, MI

**B66:** Pain Control and Sedation in a Patient on Extracorporeal Membrane Oxygenation: An (In)Consistent Challenge

Marilyn Michelow, MD; David Silver, MD; Lauren Cornella, MD

**B67:** Perioperative Considerations of Transient Severe Mitral and Tricuspid Regurgitation Secondary to Dysrhythmia and Pacemaker Augmented Dyssynchrony

Pankaj Jain, MD, Cleveland, OH; Jennifer Hargrave, DO, Cleveland, OH; Cleveland Clinic Foundation

**B68:** Explant of Aortic Endo-Graft, Case Report and Anesthetic Considerations

Alexandru Gottlieb, MD, Cleveland, OH; R. Pol; J Alvares, MD; Cleveland Clinic; Fellow

**B69:** Massive Pulmonary Embolism During Bilateral Lung Transplantation Diagnosed With Transesophageal Echocardiography

Leah Gross, MD; Stephen Bird, San Antonio, TX; UTHSCS; SAUSHEC

**B70:** Aortic Root Replacement With Concurrent Glioma

Daniel Broderick, MD, Atlanta, GA; Sofia Fischer, MD, Atlanta, GA; Emory University School of Medicine

**B71:** Successful Repair of Traumatic Retrohepatic Vena Cava Injury by Using Cardiopulmonary Bypass

Michael McClain, DO, Lexington, KY; Oksana Klimkina, MD, Lexington, KY; University of Kentucky

**B72:** Intramural Esophageal Hematoma After Transesophageal Echocardiography for Percutaneous Mitral Valve Repair With MitraClip

Matthew McConnell, MD, Cleveland Heights, OH; Jennifer Hargrave, DO, Cleveland, OH; Cleveland Clinic

**B73:** Unicuspid Aortic Valve With a Right Aortic Arch and a Persistent Left Superior Vena Cava Requiring an Aortic Valve Replacement and Ascending Aortic Aneurysm Repair

Cesar Padilla, MD, Los Angeles, CA; Harish Ram, MD, Los Angeles, CA; Manxu Zhao, MD, Los Angeles, CA; Resident; Cardiac Anesthesiology Fellow; Anesthesia Attending

**B74:** An Unexpected Finding After Unsuccessful Percutaneous Tricuspid Valve Replacement

Marc Gutierrez, MD, Nashville, TN; Mias Pretorius, MBCHB MSCI, Nashville, TN; Vanderbilt University Medical Center

**B75:** Migrating Aortic Valve Placed via Trans Apical Approach

Matt Maxwell, MD MPH, Iowa City, IA; Srinivasan Rajagopal, MD, Iowa City, IA; University of Iowa Hospital

**B76:** Intracardiac Mass of Candida Albicans Following Total Parental Nutrition Use in a Medically Complicated Patient

Joann Bolton, MD, Atlantic Beach, FL; Archer Martin, MD, Jacksonville, FL; Mayo Clinic Florida

**B77:** Repeated Cardioplegic Arrest of Donor Allograft During Orthotopic Heart Transplant

Natalia Martinez Acero, Harrisburg, PA; Erina Ng, MD, Baltimore, MD; Theodore Cios, MD MPH, Hershey, PA; Behzad Soleimani, MD, Hershey, PA; Dmitri Guvakov, MD, Hershey, PA; Penn State University Hershey Med Center

**B78:** Left Ventricular Outflow Tract to Left Atrium Fistula Due to Aortic Homograft Endocarditis

Thuan Ho, MD; Tan Trinh, MD, Galveston, TX; Erin Sreshta, MD, Galveston, TX; University of Texas Medical Branch

**B79:** TEE-Guided Arterial Cannulation in Chronic Aortic Arch Dissection

Natasha Malackany; Shiva Sale, MD, Beachwood, OH; Cleveland Clinic

**B80:** Ascending Aortic Thrombus in a Nonaneurysmal Minimally Atherosclerotic Aorta

Dustin Dayton; Tara Humphrey, DO

**B81:** Acute Mitral Regurgitation Caused by Papillary Muscle Rupture After Acute Myocardial Infarction

Sarah Cardillo, MD; Patrick Odonkor, MD, Laurel, MD; U of Maryland School of Medicine

**B82:** Pulmonary Edema After Radiofrequency Ablation—Not All Ablation Catheters Are Equal!

Dirk Varelmann, MD DESA EDIC, Boston, MA; Frank Inglese, BS, Boston, MA; John Fox, MD, Hanover, MA; Brigham and Women's Hospital

# Resident/Fellow Complex Case Presentations

**B83:** Risk to Life and Limb: Prosthetic Valve Endocarditis With Subsequent Brachial Artery Thrombus

Gregory Kim, New York, NY; Paul Shekane, MD, New York, NY; June Rim, MD, New York, NY; Peter Neuburger, MD, New York, NY; Jennie Ngai, MD, New York, NY; New York University Medical Center

**B84:** Right-to-Left Shunting Across a Patent Foramen Ovale Causes Hypoxia in a Patient With Aortic Root Compression of the Right Atrium

Carly Guthrie, MD, Boston, MA; Charles Nyman, MB BCh, Waban, MA; Brigham and Women's Hospital

**B85:** Right Ventricular Assist Device Utilization After Post Infarct Ventricular Septal Rupture Repair

Marco Del Castillo; Antonio Chiricolo, MD

**B86:** Pulmonary Vein Thrombosis Following Single-Lung Transplantation

Danielle McCall, MD, University of Louisville, Louisville, KY

**B87:** Percutaneous Extraction of a High-Risk AICD Lead With Large Vegetations: A Procedural Conundrum

Amanda Kleiman, MD; Gautam Sreeram, MD

**B88:** "Run Of My Life": Anomalous Course of Left Main Coronary Artery in a Young Female Marathon Runner.

Poovendran Saththasivam, Philadelphia, PA; Michael Green, DO, Moorestown, NJ; Naomi Smukler, MD; Hahnemann/Drexel University

**B89:** Drain or No Drain? The Safety of CSF Drain Placement in an Emergent Type A Aortic Dissection Repair With TEVAR

Brystol Henderson, MD, Charleston, SC; James Abernathy, MD MPH, Charleston, SC; Eric Nelson, DO, Charleston, SC; Medical University of South Carolina

**B90:** A Case of Orthotopic Liver Transplant in a Patient With Brugada Syndrome

Kimberly Nicol, DO, Birmingham, MI; Santiago Uribe-Marquez, MD; Michael Isley, MD; Lebron Cooper, MD; Henry Ford Hospital, Detroit, MI

**B91:** Management of Iatrogenic Right Ventricle Free Wall Perforation During Epicardial VT Ablation: Percutaneous Repair With an Amplatzer Closure Device

Natalie Hamilton, MD, Denver, CO; Matthew Zipse, MD, Denver, CO; John Messenger, MD, Aurora, CO; John Carroll, MD, Aurora, CO; William Sauer, MD, Aurora, CO; Ashok Babu; Tamas Seres, MD, Aurora, CO; University of Colorado

**B92:** Tricuspid Valve Rupture During AngioVac Suction Pulmonary Embolectomy

Omar Satter, MD, Los Angeles, CA; Lorraine Lubin, MD, Playa Del Ray, CA; Cedars-Sinai Medical Center

**B93:** Transesophageal Echocardiography Guides Surgical Intervention in a Patient With Platypnea Orthodeoxia Syndrome Undergoing Valve-Sparing Aortic Root Replacement

Adrian Ionescu, MD, Boston, MA; Michael Andrawes, MD, Boston, MA; Massachusetts General Hospital-Harvard Medical School

**B94:** The Use of Transesophageal Echocardiographic Transducer for Continuous Fetal Monitoring in Pregnant Patients Undergoing Cardiac Surgery.

Atsushi Egawa, Shimotsuke-Shi, Tochigi, Japan; Kenji Yoshitani, MD, Suita Osaka, Osaka, Japan; Yoshihiko Ohnishi, MD, Suita Osaka, Osaka, Japan; National Cerebral and Cardiovascular Ctr

**B95:** Anesthetic Management of Combined Heart-Liver Transplantation for Familial Amyloidosis

Matthew Barker, MD; Pingle Reddy, MD FASE

**B96:** An Unusual Case of a Large Intracardiac Tumor Extending Into the Left Ventricular Outflow Tract

Daniel Wyler, MD, New York, NY; Isaac Yoshii, MD, New York, NY; Cindy Wang, MD, New York, NY; Resident; Attending

**B97:** Right Ventricular Outflow Tract Mass Removal in a Parturient

Andrea Girnius, MD, Cincinnati, OH; Matthew Wallace, MD, Cincinnati, OH; University of Cincinnati

**B98:** Rapid Ventricular Pacing as a Rescue Option During Port Access Cardiac Surgery After Unsuccessful Aortic Endoclamp

Michael Fabbro; Ronak Shah, MD, Philadelphia, PA; Prashanth Vallabhajosyula, MD MS, Philadelphia, PA; W. Clark Hargrove, MD, Philadelphia, PA; Prakash Patel, MD, Newtown, PA; University of Pennsylvania

**B99:** Acute on Chronic Arch Dissection in a Patient With Turner Syndrome, Marfan Syndrome and Prior AVR/Aortic Root Repair

John McNeil, MD, Baltimore, MD; Ana Parsee, MD, Baltimore, MD; Kenton Zehr, MD, Baltimore, MD; Dan Berkowitz, MD, Baltimore, MD; Johns Hopkins Hospital

**B241:** Anesthetic Considerations in a Case of Combined On-Pump Aortocoronary Bypass With Mitral Valve Annuloplasty and Retrosternal Thyroidectomy

David Lin, MD; Ramesh M. Singa, MD MHS; Soma Shanker



# Resident/Fellow Complex Case Presentations

## Complex Case Poster Presentations III

Sunday, April 12, 10-11 am

### Room: Marquis Foyer & Salons 12-14

**B179:** The Role of Transesophageal Echo in the Staged Repair of an Aortopulmonary Fistula From a Large Ascending Aortic Pseudoaneurysm

*Daniel Winter, MD, University Heights, OH; Andrej Alfircic, MD, Richfield, OH; Cleveland Clinic*

**B121:** RFA With Esophageal Thermal Injury and Perforation and Cerebrovascular Accident

*Shea Stoops, DO; Robert Devine, MD, Lenexa, KS; University of Kansas Medical Center*

**B122:** Endocarditic TAVR Sapien Valve Excision With Open Redo Sternotomy Sapien Valve Procedure

*Eric Kaderbek, MD, Texas Heart Institute, Niceville, FL*

**B123:** Diagnosis and Treatment of Left Ventricular Assist Device Extrinsic Outflow Graft Obstruction

*Campbell Williams, MD, Northwestern Memorial Hospital, Chicago, IL*

**B124:** Intraoperative Discovery of a False Positive Chronic Type A Dissection as Diagnosed by EKG-Gated Computed Tomography and Transesophageal Echocardiography

*Michael Majewski, MD, Hanover Park, IL*

**B125:** Thoracoabdominal Aortic Aneurysm Repair in a Patient With a Previously Corrected Aortic Arch Interruption

*Meena Bhatia, MD, Houston, TX*

**B126:** Massively Increased Pulmonary Dead Space Post Cardiopulmonary Bypass (CPB): An Uncommon Occurrence?

*Pingping Song, MD, Brookline, MA; George Topulos, MD, Boston, MA; John Fox, MD, Hanover, MA; Brigham and Women's Hospital*

**B127:** Inhaled Nitric Oxide Use After Right Coronary Artery Occlusion During Transcatheter Aortic Valve Replacement

*Jonathan Zoller, MD, Kansas City, MO; Peter Hild, MD, Kansas City, KS; Kansas University - Kansas City; Kansas University Medical Center*

**B128:** Propofol Sedation During Iliofemoral Thrombectomy on Veno-Venous Bypass Pump

*Ramesh Singa, MD MHS, West Orange, NJ; George Tewfik, MD, Bloomfield, NJ; Saint Barnabas Medical Center*

**B129:** Unrecognized Systolic Anterior Motion of the Mitral Valve Mistaken for Pulmonary Embolism

*Shea Stoops, DO; Stephen Tarver, MD, Overland Park, KS; University of Kansas Medical Center*

**B130:** A Rare Case of Dopamine Secreting Mediastinal Paraganglioma Presenting With Coronary Steal

*Jamahal Luxford, MBBS, Boston, MA; Lauren Cornella, MD, Boston, MA; Brigham and Women's Hospital*

**B131:** A Course Uncharted in the Land of EP: Navigating VT Ablation in a Patient With a Heartmate II Ventricular Assist Device

*Eva Litvak; Lauren Cornella, MD, Boston, MA; Agnieszka Trzcinka, MD, Brookline, MA; Brigham & Women's Hospital*

**B132:** Anesthetic Management of Left Atrial Perforation by Central Venous Catheter in a Hemodialysis Patient Requiring Open-Heart Surgery

*Kevin Wong, DO, Danville, PA; Barry Marks, DO, Danville, PA; Joseph Stemm, MD, Danville, PA; Susan Trocciola, MD, Danville, PA; Geisinger Medical Center*

**B133:** Change in Management Plan of Thoracic Endovascular Aortic Repair Following Intraoperative Identification of a Cardiac Mass by Transesophageal Echocardiography

*Mauricio Daher; A. Gomes, MD PhD, Ottawa, ON, Canada; Marie-Jo Plamondon, MDCM FRCPC, Ottawa, ON, Canada; The Ottawa Hospital; University of Ottawa*

**B134:** Aorto-Mitral Curtain Fistula Following Aortic Valve Replacement

*Wendy Haft, MD; Sudhakar Yennam, MD*

**B135:** Challenges of Valve-in-Valve Transcatheter Aortic Valve Implantation Under Local Anesthesia

*Nishita Patel; Adair Locke, MD, Winston-Salem, NC; Department of Anesthesia*

**B136:** Anesthetic Care of a Patient With Caval Leiomyosarcoma Requiring Ex-Vivo Liver Resection and Reconstruction of the Right Atrium and Inferior Vena Cava

*Wendy Haft, MD; Theresa Gelzinis, MD*

**B137:** Acute Mitral Valve Annuloplasty Ring Dehiscence With Subsequent Failed Mitral Replacement Valve and Profound Vasoplegia Post-Cardiopulmonary Bypass

*Stacy Krueth, Los Angeles, CA; Ali Khoynzhad, MD PhD, Los Angeles, CA; Reza Arsanjani, MD, Los Angeles, CA; Robert Siegel, MD; Daniel Sullivan; Antonio Conte, MD MBA, Los Angeles, CA; Cedars-Sinai Medical Center; Cedars-Sinai Medical Center*

**B138:** Percutaneous Balloon Occlusion of HeartWare Outflow Cannula After Complete Drive Wire Transection

*Matthew McFarling, MD FRCPC, Woodstock, ON, Canada; Benjamin Sohmer, MD, Ottawa, ON, Canada; Alexander Dick, MD, Ottawa, ON; Ottawa Heart Institute*

**B140:** Incidental Finding of a Ventricular Septal Defect After Surgical Aortic Valve Replacement in a Patient Presenting for Mitral Valve Clip

*Lauren Frizzell, MD, Los Angeles, CA; Lorraine Lubin, MD, Playa Del Ray, CA; Antonio Conte, MD MBA, Los Angeles, CA; Saibal Kar, MD; Rebecca Aron, MD, Los Angeles, CA; Cedars-Sinai Medical Center*

**B141:** Incidental Anomalous Hepatic Venous Drainage in a Transfemoral Aortic Valve Replacement (TAVR) Patient

*Stacy Krueth, Los Angeles, CA; Raj Makkar, MD; Reza Arsanjani, MD, Los Angeles, CA; Antonio Conte, MD MBA, Los Angeles, CA; Rebecca Aron, MD, Los Angeles, CA; Cedars-Sinai Medical Center*



# Resident/Fellow Complex Case Presentations

**B142:** Perioperative Cardiac Arrest: How to Manage and for How Long?

Michael Kaczmariski, Miami, FL; Yiliam Rodriguez, MD, Miami, FL; Jackson Memorial Hospital; Jackson Memorial Hospital/ University of Miami Health

**B143:** Refractory Bleeding After Ventricular Assist Device Implantation: Is There a Role for Prothrombin Complex Concentrate?

Megan Krajewski, MD, Durham, NC; Ian Welsby, MBBS FRCA, Durham, NC; Duke University

**B144:** Vitamin B12 Administration in the Treatment of Vasoplegic Syndrome Resistant to Methylene Blue in a Patient for Aortic Valve Replacement

Patrick Wolfgang, Richmond, VA; Pingle Reddy, MD FASE, Glen Allen, VA; Vigneshwar Kasirajan, MBBS, Richmond, VA; David Farr, MD, Chesterfield, VA; VCUHS

**B145:** Ventricular Embolization of a Transcatheter Heart Valve During Transapical Transcatheter Aortic Valve Implantation With Successful Transapical Explantation

Richard Beddingfield, MD, Minneapolis, MN; Emil Missov, MD PHD, Minneapolis, MN; Mojca Remskar Konia, MD PhD, Minneapolis, MN; University of Minnesota

**B146:** Amniotic Fluid Embolism: A Potential Role of Metoclopramide, Atropine, Ketorolac, and Ondansetron?

Brian Kelly, Boston, MA; Jeffrey Lyvers, MD, Boston, MA; Joshua Quick, MD, Cambridge, MA; Philip Krapchev, MD, Cambridge, MA; Carlo Pancaro, MD, Boston, MA; Danielle Roncari, MD MPH, Brookline, MA; Kenneth Warner, MD, Needham, MA; Shohreh Modanlou, MD, Boston, MA; Adel Ghuloom, MD, Andover, MA; Robert Knapp, DO JD, Duxbury, MA; Frederick Cobey, MD MPH FASE, Cambridge, MA; Tufts Medical Center

**B147:** An Unusual Cause of Acute Hemodynamic Instability During Transcatheter Aortic Valve Replacement (TAVR) Using CoreValve Evolut R via Direct Aortic Access

John Berry; Adam Lerner, MD, Georgetown, MA; Beth Israel Deaconess Medical Center

**B148:** Extraction of Abdominal Aortic Stent and Axial-Femoral Bypass for Loeys-Dietz Syndrome After Total Aortic Replacement

Kyoko Furumoto, MD, Suita-City, Osaka, Japan; Kenji Yoshitani, MD, Suita, Osaka, Osaka, Japan; Yoshihiko Ohnishi, MD, Suita Osaka, Osaka; National Cerebral and Cardiovascular Ctr

**B149:** Mitral Transapical Transcatheter Valve-In-Valve Implantation in an Elderly Patient With Dysfunctional Bioprosthetic Mitral Valve

Elbert Chang, DO, Pasadena, CA

**B150:** Rapid Resolution of Peripartum Cardiomyopathy With a Minimally Invasive Ventricular Assist Device After Cesarean Delivery

Cesar Padilla, MD, Los Angeles, CA; Donald Park, MD, Los Angeles, CA; Resident; Teaching Attending

**B151:** Stent Placement for Aortic Recoarctation in a Pediatric Patient via Direct Cannulation of the Ascending Aorta

Cesar Padilla, MD, Los Angeles, CA; Robert Wong, MD, Alhambra, CA; Lorraine Lubin, MD, Playa Del Ray, CA; Adeline Kim, BS, Los Angeles, CA; Resident; Teaching Attending; Rotating Medical Student

**B152:** Perioperative Management of Pericardial Angiosarcoma

Eric Ursprung, MD, Brookline, MA; Philip Chan, BS, Boston, MA; Shahzad Shaefi, MD, Boston, MA; Tufts Medical Center; Beth Israel Deaconess Medical Center

**B153:** Intraoperative Aortic Dissection Following Cardiac Revascularization

Benjamin Judd, MD; Emily Teeter, MD; Brett Sheridan, MD

**B154:** Anomalous Coronary Artery Distribution Evaluated With Intraoperative Transesophageal Echocardiography

Nawar Al-Rawas, MD; Robert Timmerman, MD, Gainesville, FL; Gregory Janelle, MD FASE, Gainesville, FL; University of Florida

**B155:** Intraoperative Transesophageal Echocardiography to Monitor Dynamic Pulmonary Artery Physiology During Noncardiac Surgery

Michael Plakke, MD, Durham, NC; Cory Maxwell, Durham, NC; Eugene Moretti, MD, Durham, NC; Brandi Bottiger, MD, Durham, NC; Duke University Health System

**B156:** Tumorous Cystic Structure of the Foramen Ovale Resembling a Right Atrial Myxoma

Olubode Ogunwole, MD, San Antonio, TX; Justin Wilson, MD, Helotes, TX; Andrea Carpenter, MD PhD, San Antonio, TX; University of Texas Health Science Center San Antonio

**B157:** Post-Sternotomy Sternal Wire Fracture With Migration of the Wire Through the Right Heart

Jason Haus, MD, Ypsilanti, MI; Jennifer Vance, MD, Ann Arbor, MI; University of Michigan

**B158:** Hypotension in an LVAD Patient During Cardiopulmonary Bypass

Kendall Leonard, DO, Richmond, VA; Pingle Reddy, MD FASE, Glen Allen, VA; Stephanie Marcy, DO MBA, Richmond, VA; VCU Medical Center

**B159:** A Case of Right Ventricular Perforation by Temporary Pacemaker Lead and Cardiac Tamponade During Transfemoral Transcatheter Aortic Valve Implantation

Carter Peatross, MD, Rochester, MN

**B160:** Bivalirudin Used in Patient With History of Heparin-Induced Thrombocytopenia (HIT) With Previous Coronary Artery Bypass Graft (CABG)

Michelle Dacosta, MD; Saket Singh, MD, Pittsburgh, PA; Allegheny Health Network

**B161:** Mitral Valve Replacement in a Patient With Sickle Cell Disease/B+ Thalassemia: The Use of Perioperative Exchange Transfusion

Farhan Farooqui, MD, Schaumburg, IL; Mark Chaney, MD, Riverside, IL; University of Chicago Medicine

**B162:** Diagnosis of Hypovolemia Using Focused Bedside Transthoracic Echocardiogram in Three Kidney Transplant Recipients Presenting With Hemodynamic Instability in the Post-Anesthesia Care Unit

Colin Boettcher, BA, Eden Prairie, MN; Megan Lanigan, MD, Minneapolis, MN; Ioanna Apostolidou, MD, Minneapolis, MN; University of Minnesota

# Resident/Fellow Complex Case Presentations

## Complex Case Poster Presentations III

Sunday, April 12, 10–11 am (continued)

**B163:** Anesthetic Management of Traumatic Right Ventricular Rupture

Sajan Farrah, MD, Baltimore, MD; Zahra Malik, MD, Fairfax, VA; Shahab Khademi, DO, Baltimore, MD; Nhue Do, MD, Baltimore, MD; Kenton Zehr, MD, Baltimore, MD; Wei Dong Gao, PhD MD, Baltimore, MD; Johns Hopkins Hospital

**B164:** Undiagnosed Systolic Anterior Motion and Left Ventricular Outflow Tract Obstruction With Bioprosthetic Valve During Minimally Invasive Mitral Valve Surgery  
Kosta Turchaninov, MD PhD, Omaha, NE; Ron Rawlings, MD, Lincoln, NE; Robert Oakes, MD, Lincoln, NE; University of Nebraska Medical Center; Bryan Medical Center

**B165:** Non-Cardiogenic Pulmonary Edema Post-Cardiopulmonary Bypass

Michael Humsj; Molly Fitzpatrick, MD

**B166:** Systemic Ventricular Assist Device Implantation 43 Years After Atrial Switch Operation for Transposition of the Great Arteries

Sreekanth Cheruku, MD, Durham, NC; Alina Nicoara, MD, Durham, NC; Madhav Swaminathan, MD FASE, Durham, NC; Carmelo Milano, MD, Durham, NC; Kamrouz Ghadimi, MD, Durham, NC; Duke University Medical Center

**B167:** Bilateral Lung Transplant for Cystic Fibrosis With Superior Vena Cava Syndrome

Matthew McConnell, MD, Cleveland Heights, OH; Erik Kraenzler, MD, Cleveland, OH; Cleveland Clinic

**B168:** Management of Heparin Anticoagulation in the Setting of Antiphospholipid Syndrome in Patients Undergoing CABG

Leigh McGuffin, RN BSN, Boston, MA; Joshua Quick, MD, Cambridge, MA; Ian Welsby, MBBS FRCA, Durham, NC; Andreas Klein, MD, Boston, MA; Kenneth Warner, MD, Needham, MA; Stefan Ianchulev, MD, Marblehead, MA; Hassan Rastegar, MD, Boston, MA; Monika Pilichowska, MD PhD, Boston, MA; Perry Dekkers, BS CCP LP, Boston, MA; Frederick Cobey, MD MPH FASE, Cambridge, MA; Tufts Medical Center; Duke University Medical Center

**B169:** Inferior Vena Cava Obstruction Caused by a Malpositioned Septal Occluder Device

Daniel Cormican, MD, Cleveland Heights, OH; Donn Marciniak, MD, Broadview Heights, OH; Cleveland Clinic Foundation

**B171:** Invasive Intracardiac Leiomyomatosis Extraction, Necessitating Tricuspid Valve Replacement

Sachin Mehta, MD, Charlottesville, VA; Allison Bechtel, MD, Crozet, VA; Julie Huffmyer, MD, Charlottesville, VA; University of Virginia

**B173:** Total Artificial Heart Implantation for Familial Amyloidotic Polyneuropathy (FAP) as a Bridge to Combined Heart and Liver Transplant (CHLT)

Andrew Scharf, MD, Richmond, VA; Pingle Reddy, MD FASE, Glen Allen, VA; Virginia Commonwealth University Medical Center; Virginia Commonwealth Medical Center

**B174:** Technique for Safe Placement of a Transesophageal Echocardiogram Probe in a Patient With Zenker's Diverticulum Undergoing Mitral and Tricuspid Valve Repair

Brian Gebhardt, MD, Worcester, MA; Rana Badr, MD, North Grafton, MA; University of Massachusetts Medical School

**B175:** Aortic Root Enlargement Techniques: Remember the Mitral Valve!

Dionne Peacher, MD, Boston, MA; Douglas Shook, MD FASE, Newton, MA; John Fox, MD, Hanover, MA; Brigham and Women's Hospital

**B176:** Delayed Intraoperative Hypotension and ST Elevation MI After AVR in a Patient With an Unspecified Clotting Disorder and Secundum ASD

Lauren Hampton, MD; Kelly Ural, MD

**B177:** Left Ventricular Assist Device in Refractory Ventricular Tachycardia From Ischemic Cardiomyopathy

Saad Kamal, MD, Naperville, IL; Jenny Kwak, MD; Michael Haske, MD; Pierre LeVan, MD; Loyola University Medical Center, Maywood, IL

**B178:** Real-Time 2D and 3D TEE Guidance of Transcatheter Prosthetic Mitral Valve Paravalvular Leak Closure

Benjamin Carroll, MD; Lorraine Lubin, MD; Saibal Kar, MD; Florian Rader, MD; Rebecca Aron, MD

**B18:** TEE for Intraoperative Management of a Patient With Saddle Embolus and Systolic Anterior Motion of the Mitral Valve During Surgical Embolectomy

Lauren Hampton, MD; Logan Kosarek

**B242:** A 36 Year-Old Man With Uncorrected Tetralogy of Fallot, Biventricular Dysfunction, and a Large Pericardial Effusion

Sharon McCartney, MD; Edmund Jooste, MBCHB; Kelly Machovec, MD MPH

# Resident/Fellow Complex Case Presentations

## Complex Case Poster Presentations IV

Sunday, April 12, 5–6 pm

### Room: Marquis Foyer & Salons 12–14

**B180:** Giant Pseudoaneurysm After Composite Root Replacement Causing Acute Myocardial Ischemia and Multiple Valvular Abnormalities

Yvonne Lai, MD, Boston, MA; Yafen Liang, MD, Boston, MA; Massachusetts General Hospital

**B181:** The Successful Use of Protamine With Confirmed Fish Allergy for CABG: Clinical Pearls and Perils

Silpa Goriparthi, MD, Philadelphia, PA; Jordan Goldhammer, MD, Philadelphia, PA; Tara Kennedy, MD, Philadelphia, PA; Thomas Jefferson University Hospital; Sidney Kimmel Medical College

**B182:** Intraoperative Management of Occult Hemorrhage Aided by Echocardiography

Michael Benggon, MD, San Diego, CA; Joel Kaplan, MD, Encinitas, CA; Dalia Banks, MD FASE, Rancho Santa Fe, CA; UCSD

**B183:** Case Report: TEE in the Diagnosis of Intraoperative Tumor Embolus

Emily McQuaid-Hanson; Maung Hlaing, MD, Denver, CO; University of Colorado

**B184:** Intraoperative Transesophageal Echocardiographic Diagnosis of the Abnormal Jet to the Left Atrial Appendage: A Case Report

Yasuko Nagasaka, MD PhD, Brookline, MA; Scott Streckenbach, MD; Massachusetts General Hospital, Harvard Medical School

**B185:** Intraoperative Diagnosis of an Intracardiac Tumor

Andrew Sosa; Emil Bogdanov, MD; Nikolaos Skubas, MD DSC FASE

**B186:** The Successful Use of Bivalirudin Anticoagulation Therapy for Double-Lung Transplantation With Arteriovenous Extracorporeal Membrane Oxygenation in a Patient With Heparin-Induced Thrombocytopenia Type II

Shira Black, DO, Beachwood, OH; Jennifer Hargrave, DO, Cleveland, OH; Cleveland Clinic

**B187:** Repair of a Type A Dissection in a Patient With Severe Left Ventricular Dysfunction as a Bridge to a Left Ventricular Assist Device

Uttam Shastri, MD, University of Alabama Birmingham, Hoover, AL

**B188:** Anesthesia for Left Atrial Retrocardiac Paraganglioma Resection

Matthew D'Haenens, MD, Pearland, TX; John Cooper, MD, Houston, TX; Texas Heart Institute at CHI St. Luke's Health-Baylor; Texas Heart Institute at CHI St. Luke's

**B189:** Perioperative Management of a Patient With Cold Urticaria for a Pulmonary Thromboendarterectomy Under Deep Hypothermia Circulatory Arrest

Joshua Dilley, MD, Boston, MA; Michael Fitzsimons, MD, Boston, MA; Gus Vlahakes, MD, Boston, MA; Robert Makar, MD PhD, Milton, MA; Cameron Wright, MD, Boston, MA; Elizabeth VanCott, MD, Boston, MA; Mandakolathur Murali, MD, Burlington, MA; Massachusetts General Hospital

**B190:** Radiofrequency Scanning for Retained Surgical Instruments Can Cause Epicardial Pacemaker Dysfunction During Cardiac Surgery

Michael Plakke, MD, Durham, NC; Sean Daley, MD, Durham, NC; Yasmin Maisonave, MD, San Juan, PRI; Duke University Medical Center

**B191:** Large Pulmonary Artery Angiosarcoma Requiring Right Pulmonary Artery Resection and Right Pneumonectomy

Andrea Reidy, MD, Pittsburgh, PA; Ricardo Cardenas, MD, Sewickley, PA; Allegheny Health Network

**B192:** Use of Intraoperative ECMO for Intolerance to One-Lung Ventilation

Yvonne Lai, MD, Massachusetts General Hospital, Boston, MA

**B193:** Thoracoabdominal Aortic Aneurysm Repair in a Patient With Leary-Dietz Syndrome

Tarun Subrahmanian, MD, Rochester, NY; Korrin Scott, MD, Atlanta, GA; Emory University

**B194:** Lung Reperfusion Injury Following One-Lung Ventilation for Mini-AVR

Jay Sanford, DO, Richmond, VA; Vishal Yajnik, MD MS, Richmond, VA; David Farr, MD, Chesterfield, VA; Pingle Reddy, MD FASE, Glen Allen, VA; Vigneshwar Kasirajan, MBBS, Richmond, VA; CA-2 Resident, Virginia Commonwealth University Health System; Virginia Commonwealth University Health System; Cardiothoracic Anesthesiology Fellow, Virginia Commonwealth University Health System; Virginia Commonwealth University Health

**B195:** Anaesthesia Management for "Anomalous Origin of Left Coronary Artery From Pulmonary Artery" Repair

Kapil Gupta, MD, Delhi, Delhi, India

**B196:** Provocable Dynamic Outflow Tract Obstruction in a Patient With Hypertrophic Obstructive Cardiomyopathy

Chinwe Nwosu, MD, Baltimore, MD; Patrick Odonkor, MD, Laurel, MD; Resident; Assistant Professor

**B197:** Perioperative Management of a Patient With Aorto-Esophageal Fistula

Ashley Gabrielsen, DO, Worcester, MA; James Scott, Worcester, MA; Theofilos Matheos, MD; University of Massachusetts Medical Center

**B198:** Rotational Thromboelastometry (ROTEM™) to Evaluate Post-Cardiopulmonary Bypass Coagulopathy in a Patient With Hemophilia A

Lingesh Sivanesan, MD; Adam Lichtman, MD, Brooklyn, NY; Weill Cornell Medical Center

**B199:** Failed Wean From CPB After Bentall Procedure

Benjamin Ellis, MD, Iowa City, IA; Srinivasan Rajagopal, MD, Iowa City, IA; University of Iowa

**B200:** Undiagnosed Pheochromocytoma Presenting as Cardiac Shock: A Case Report

Rachel Sloan; Johannes Dorfling, MBChB, Lexington, KY; Johannes Steyn, MD, Versailles, KY; University of Kentucky

# Resident/Fellow Complex Case Presentations

## Complex Case Poster Presentations IV

**Sunday, April 12, 5–6 pm** (continued)

**B201:** Rescue TEE Diagnosis of Acute Pulmonary Embolism Prompting Pulmonary Embolectomy  
*Michelle Dacosta, MD; Christopher Troianos, MD, Pittsburgh, PA; Ricardo Cardenas, MD, Sewickley, PA; Allegheny Health Network*

**B202:** Management of Acute Biventricular Failure During Transcaval TAVR  
*Jonah Patel, MD; Ratna Vadlamudi, MD*

**B203:** Do We Really Need a Tricuspid Valve?  
*Michael Sharghi, MD, Cleveland, OH; Andra Duncan, MD, Cleveland, OH; Cleveland Clinic Foundation*

**B204:** Left Atrial Appendage Laceration During Percutaneous Left Atrial Appendage Suture Ligation Using the LARIAT Device  
*Mina Oftadeh, DO, Chicago, IL; Pierre LeVan, MD, Maywood, IL; Jenny Kwak, MD, Maywood, IL; Loyola University Medical Center*

**B205:** Management of LVAD Pump Thrombosis With Intravenous Thrombolytics  
*Beth Webber, DO; Yiliam Rodriguez-Blanco, MD, Miami, FL; University of Miami*

**B206:** Hypoxia Due to Right Ventricular Outflow Tract Obstruction and a Patent Foramen Ovale in Hypereosinophilic (Loeffler's) Endocarditis: Clinical Implications and Echocardiographic Findings  
*Genevieve Lalonde, MD, Winnipeg, MB, Canada; Hilary Grocott, MD, Winnipeg, MB, Canada; University of Manitoba*

**B207:** Cardiovascular Collapse Associated With IVC Filter Migration and Saddle Embolization  
*Mark Smith, MD, Rochester, MN; C. Thomas Wass, MD, Rochester, MN; Norman Torres, MD, Rochester, MN; Juan Pulido, MD, Rochester, MN; Kent Rehfeldt, MD, Rochester, MN; Mayo Clinic*

**B208:** Intraoperative Right Heart Failure Followed by Left Ventricular Apical Ballooning During Orthotopic Liver Transplantation  
*Ross Hanson, MD, Denver, CO; Barbara Wilkey, MD, Denver, CO; Megan Anderson, MD, Denver, CO; University of Colorado Hospital*

**B209:** Intraabdominal Bleeding Following Reoperation for Mitral Valve Replacement  
*Matthew Benshoff, MD, New York, NY; Nikolaos Skubas, MD DSC FASE, New York, NY; Meghann Fitzgerald, MD, New York, NY; NYP/Weill Cornell Medical College*

**B210:** An Ischemic Limb: Intraoperative Debunking of a Preoperative Diagnosis  
*Drew Rodgers, MD, Cleveland, OH; Andra Duncan, MD, Cleveland, OH; Cleveland Clinic*

**B211:** Everything AND the Kitchen Sink: Mechanical Support Devices in the Failing Heart  
*Heather Reed, MD, Gainesville, FL; William Smith, MD, Gainesville, FL; University of Florida*

**B212:** Mind the Gap: Multifaceted Airway Management in Acquired Tracheoesophageal Fistula Repair  
*Gregory Mickus, MD, Neptune Beach, FL; Archer Martin, MD, Jacksonville, FL; Mayo Clinic Florida*

**B213:** Aortic Root Abscess With Extension to Mitral and Tricuspid Valves Status—Post Bioprosthetic Aortic Valve Replacement With Development of Gerbode Ventricular Septal Defect  
*Harish Ram, MD, Los Angeles, CA; Deena Perotti, MD, Los Angeles, CA; Danny Ramzy, MD PhD, Los Angeles, CA; Lorraine Lubin, MD, Playa Del Ray, CA; Antonio Hernandez Conte, MD MBA, Los Angeles, CA; Cedars-Sinai Medical Center*

**B214:** Challenging CoreValve Positioning and Deployment During Transcatheter Aortic Valve Replacement  
*Isaac Wu, MD; Jeremy Poppers, MD PhD*

**B215:** Increased Mitral Gradients After Transcatheter Aortic Valve Replacement With a Self-Expanding Prosthesis  
*Sy-Yeu Chern, MD, Philadelphia, PA; Prakash Patel, MD, Newtown, PA; Jiri Horak, MD, Broomall, PA; Hospital of the University of Pennsylvania; Hospital of the University of Pennsylvania*

**B216:** Cardiac Anesthetic Management for a Patient With Parkinson's Disease and a Deep Brain Stimulator: Solutions to a Complex Care Problem  
*Adam Weinstein, Brookline, MA; Lauren Cornella, MD, Boston, MA; Brigham and Women's Hospital*

**B218:** Fatal Massive Intracardiac Thrombosis: Unexpected Complication During Repair of Complex Aortic Dissection With Pseudoaneurysm  
*Jayakar Guruswamy, MD, Troy, MI; Cory Koenig, Clawson, MI; Paul Polyak, MD, Rochester, MI; Lebron Cooper, MD, Detroit, MI; Henry Ford Hospital*

**B219:** TEVAR and Cerebellar Herniation  
*Michael Foley, MD, Boston, MA; Marc Schermerhorn, MD, Boston, MA; Mark Wyers, MD, Boston, MA; Allen Hamdan, MD; Lars Stangenberg, MD PhD, Boston, MA; Ruma Bose, MD, Chestnut Hill, MA; Balachundhar Subramaniam, MD MPH, Lexington, MA; Beth Israel Deaconess Medical Center (BIDMC), Boston, MA; BIDMC*

**B220:** Acquired Mitral Dysfunction and Systolic Anterior Motion During Coronary Artery Bypass Grafting Necessitating Mitral Valve Replacement  
*Alexander Kuo, MD, Boston, MA; Meerim Cindy Kim, MD, Boston, MA; Jason Qu, MD, Charlestown, MA; Massachusetts General Hospital*



# Resident/Fellow Complex Case Presentations

**B221:** Transesophageal Echo-Guided Percutaneous Mitral Valve-In-Valve Implantation via a Transseptal-Apical Approach  
*Harish Ram, MD, Los Angeles, CA; Ying Zeng, MD, Los Angeles, CA; Saibal Kar, MD; Lorraine Lubin, MD, Playa Del Ray, CA; Antonio Conte, MD MBA, Los Angeles, CA; Rebecca Aron, MD, Los Angeles, CA; Cedars-Sinai Medical Center*

**B222:** Anesthetic Considerations for Beating Heart Robotic TECAB in Patients With a Symptomatic Anomalous Origin of the Right Coronary Artery  
*Shyamal Asher; Mohammed Minhaj, MD MBA*

**B223:** Robotic Mitral Valve Repair During Hypothermic Cardiopulmonary Bypass With Right Ventricular Pacing-Induced Ventricular Fibrillation Arrest  
*Andrew Hollatz, MD, Chicago, IL; Mark Chaney, MD, Riverside, IL; The University of Chicago*

**B224:** The Utility of Transesophageal Echocardiography During Coronary Artery Fistula Ligation  
*Michael Finamore, DO, Beachwood, OH; Donn Marciniak, MD, Broadview Heights, OH; Cleveland Clinic Foundation*

**B225:** Myxoma Originating From the Posterior Mitral Valve Leaflet  
*Aaron Lim, MD, Henrico, VA; Spencer Liebman, MD (Fellow), Richmond, VA; Pingle Reddy, MD FASE, Glen Allen, VA; Daniel Tang, MD, Richmond, VA; Virginia Commonwealth University Health System*

**B226:** Emergency Left and Right Ventricular Circulatory Support During Transcatheter Aortic Valve Replacement  
*Esther Garazi, MD, Miami, FL; Caroline Buric, BS, Miami, FL; Lilibeth Fermin, MD; Alan Heldman; Fellow; Medical Student*

**B227:** Diagnostic and Treatment Strategies of an Atrioventricular Disruption During Mitral Valve Replacement  
*Anthony Tricinella, DO, Dallas, TX; Ravi Vivekanand Joshi, MD, Dallas, TX; University of Texas Southwestern*

**B228:** Increased Mitral Regurgitation Following Bentall Procedure: A Unique Clinical Scenario  
*Hanjo Ko, MD, Boston, MA; Prem Shekar, MD, Boston, MA; Lauren Cornella, MD, Boston, MA; Brigham and Women's Hospital*

**B229:** Pulmonary Embolectomy in a Patient With Impending Paradoxical Embolization  
*Sandeep Khanna, MD; Anand Mehta, MD, Cleveland, OH; Cleveland Clinic Foundation*

**B230:** Case Report: Transcatheter Aortic Valve Replacement in a Patient With Ventricular Tachycardia Storm Using the Transaortic Approach With Elective Extracorporeal Life Support  
*Julee Dalton, MD, San Francisco, CA; Linda Lau, MD; Wilson Cui, MD PhD, San Francisco, CA; Resident Physician; Attending Physician*

**B231:** Transesophageal Echocardiography in Managing Anaphylaxis Complicated by Systolic Anterior Motion of the Mitral Valve  
*Fiore Toscano, MD, Syosset, NY; Christopher Tanaka, MD, New York, NY; Jill Arthur, MD, Bronx, NY; Montefiore Medical Center*

**B232:** Case Report of Intraoperative Embolism: A Critical Event During Left Atrial Mass Resection  
*John Hui, MD, Bronx, NY; Andrey Apinis, MD, Montclair, NJ; Jonathan Leff, MD; Montefiore Medical Center/Albert Einstein College of Medicine; Montefiore Medical Center*

**B233:** Acute Stress-Induced Cardiomyopathy Associated With Cardiogenic Shock, Treated With the Impella Left Ventricular Assist Device and Venous-Arterial Extra Corporeal Membrane Oxygenation  
*Kari Obma, MD, Denver, CO; Tamas Seres, MD, Aurora, CO; University of Colorado*

**B234:** Airway Management of a Patient With a Large Laryngeal Mass Presenting for Endobronchial Ultrasound-Guided Transbronchial Biopsies  
*Isaac Yoshii, MD; Angela Selzer, MD, New York, NY; Weill Cornell Medical College and NYPH*

**B235:** Laparoscopic Hysterectomy in a Patient With Severe Pulmonary Hypertension  
*Theodore Cios, MD MPH, Hershey, PA; Srikantha Rao, MD MS, Hershey, PA; Penn State Milton S. Hershey Medical Ctr*

**B236:** Left Ventricular Assist Device Placement Complicated by Right Ventricular Failure Requiring Right Ventricular Assist Device Placement  
*Michael Mathis, MD, University of Michigan Health System, Ann Arbor, MI*

**B237:** A Ruptured Sinus of Valsalva Aneurysm Into the Left Ventricular Outflow Tract Contributing to Left Heart Failure  
*Cliff Cutchins, MD; Brian Gelfand, MD FACS*

**B238:** Management of Massive Arterial Air Embolism During Left Heart Bypass for Thoracoabdominal Aortic Aneurysm Repair  
*Tom Griffiths, MD BM; Timothy Maus, MD, La Jolla, CA; Dalia Banks, MD FASE, Rancho Santa Fe, CA; Supervising Faculty; Program Director*

**B243:** Implantation of the C-Pulse Assist Device: A Review of a Novel Device for End-Stage Heart Failure  
*Andrea Westman, MD, Nashville, TN; Jeremy Bennett, MD, Mt. Juliet, TN; Vanderbilt University Medical Center*

**B43:** Aortic Regurgitation and Left Ventricular Assist Device Placement in a Patient With Previous Aortic Valve Bioprosthesis  
*Ryan Mahaffey, MD, Palo Alto, CA; Nicholas Anast, MD, Mountain View, CA; Lindsay Raleigh, MD, San Francisco, CA; Richard Ha, MD, Stanford, CA; Albert Cheung, MD, Stanford, CA; Stanford, School of Medicine*



## Sponsors

SCA thanks the following organizations for providing support to the 37th SCA Annual Meeting & Workshops/15th ICCVA.

### Platinum



COVIDIEN

### Silver



The  
Medicines  
Company

### Bronze



# Exhibit Schedule

## Sunday, April 12

### Exhibits Open

|                           |               |
|---------------------------|---------------|
| Lunch with Exhibitors     | 12:30–7 pm    |
| Coffee with Exhibitors    | 12:30–1:30 pm |
| Reception in Exhibit Hall | 3:30–4 pm     |
|                           | 6–7 pm        |

## Monday, April 13

### Exhibits Open

|                           |               |
|---------------------------|---------------|
| Breakfast with Exhibitors | 7 am–4 pm     |
| Coffee with Exhibitors    | 7–8 am        |
| Lunch with Exhibitors     | 10–10:30 am   |
| Coffee with Exhibitors    | 12:30–1:30 pm |
|                           | 3:30–4 pm     |

## Tuesday, April 14

### Exhibits Open

|                           |               |
|---------------------------|---------------|
| Breakfast with Exhibitors | 7 am–1:30 pm  |
| Coffee with Exhibitors    | 7–8 am        |
| Dessert with Exhibitors   | 10–10:30 am   |
|                           | 12:30–1:30 pm |

# Exhibitors

|                                      |  |                                      |
|--------------------------------------|--|--------------------------------------|
| 3M Health Care                       | Haemonetics®                             | Ornim, Inc.                          |
| AcelRx Pharmaceuticals, Inc.         | HeartWorks by Inventive Medical Ltd.     | PharMEDium Services, LLC             |
| American Anesthesiology              | Helena Laboratories                      | Preferred Physicians Medical         |
| American Society of Echocardiography | HemCon Medical Technologies              | rEVO Biologics                       |
| <i>Anesthesiology News</i>           | Hitachi Aloka Medical                    | SafeOp Surgical                      |
| Augustine Temperature Management     | KARL STORZ Endoscopy-America Inc.        | Sheridan Healthcare                  |
| Biomed Simulation, Inc.              | Kit Check                                | Siemens                              |
| Elsevier USA                         | MAQUET                                   | TEM Systems, Inc.                    |
| EmCare                               | Mennen Medical Corp                      | The American Board of Anesthesiology |
| ETView Ltd                           | Mindray                                  | Wolters Kluwer                       |
| GE Healthcare                        | National Board of Echocardiography, Inc. |                                      |

# Commercial Support

SCA would like to thank the following organizations for providing support:

|                      |                                      |                   |
|----------------------|--------------------------------------|-------------------|
| Accriva              | Haemonetics®                         | Sorin Group       |
| BioMed Simulation    | HeartWorks by Inventive Medical Ltd. | St. Jude Medical  |
| CAE                  | Helena Laboratories                  | Susquehanna Micro |
| CASMED               | Integra                              | Teleflex          |
| Cook Medical         | MAQUET                               | TEM Systems       |
| Covidien             | Medtronic                            | Terumo            |
| DiaPharma Group      | Nonin                                | Thoratec          |
| Edwards Lifesciences | Philips HealthCare                   | WL Gore           |
| GE Healthcare        | Siemens                              |                   |

# SCA Committee Meeting Schedule

| Committee                                | Date               | Time           | Room           |
|--|--------------------|----------------|----------------|
| Atrial Fib Working Group                 | Monday, April 13   | 9–10 am        | Scarlett       |
| Blood Conservation Working Group         | Sunday, April 12   | 3–4 pm         | Scarlett       |
| Cerebral Protection Working Group        | Monday, April 13   | 4–5 pm         | Silver Linden  |
| ACTA Fellowship Certification Task Force | Monday, April 13   | 8–9:30 am      | Dogwood        |
| Clinical Practice Improvement            | Sunday, April 12   | 8–9:30 am      | Magnolia       |
| Continuing Medical Education (CME)       | Sunday, April 12   | Noon–1:30 pm   | Cherry Blossom |
| Committee Chairs                         | Monday, April 13   | 3–4 pm         | Dogwood        |
| Echo Week                                | Monday, April 13   | 10 am–Noon     | Cherry Blossom |
| Economic/Governmental Affairs            | Monday, April 13   | 8–9:30 am      | Magnolia       |
| Ethics                                   | Sunday, April 12   | 8–9 am         | Dogwood        |
| Executive                                | Monday, April 13   | 1:30–2:30 pm   | Cherry Blossom |
| Fellowship Program Directors             | Sunday, April 12   | 8–9:30 am      | Liberty IJK    |
| Guidelines & Standards                   | Sunday, April 12   | 4–5 pm         | Tulip          |
| International                            | Sunday, April 12   | Noon–1:30 pm   | Magnolia       |
| Member Engagement                        | Monday, April 13   | 11 am–12:30 pm | Magnolia       |
| Newsletter                               | Sunday, April 12   | 4–5:30 pm      | Cherry Blossom |
| Nominating                               | Monday, April 13   | 4–5 pm         | Magnolia       |
| Quality & Safety Leadership              | Sunday, April 12   | Noon–1:30 pm   | Dogwood        |
| Research                                 | Saturday, April 11 | Noon–5 pm      | Magnolia       |
| SCA/STS Database                         | Sunday, April 12   | 4–5:30 pm      | Dogwood        |
| Scientific Program                       | Friday, April 10   | 5:30–8:30 pm   | Chinatown      |
|  | Tuesday, April 14  | 12–1:30 pm     | Scarlett       |
| Thoracic Anesthesia Symposium (TAS)      | Saturday, April 11 | 1–3 pm         | Cherry Blossom |
| Website Redesign Task Force              | Sunday, April 12   | 4–5:30 pm      | Magnolia       |

## Interested in participating in SCA by serving on a committee?

Please complete the Committee Appointment Request Form in the annual meeting online syllabus.

# Save the Date

SCA 38th Annual Meeting & Workshops



April 2-6, 2016

Manchester Grand Hyatt San Diego

CASMED

SCA BOOTH

221



**FORE-SIGHT**  
Absolute Tissue Oximetry **ELITE®**

CASMED 800.227.4414 | [www.casmed.com](http://www.casmed.com)

*The Most Accurate  
Insight into Cerebral  
Oxygenation*



STOP THINKING ABOUT WHERE TO GO,  
AND START THINKING ABOUT  
**JOINING US.**

Shannon Smith  
Recruiting Manager  
(direct) 214.687.0691  
[SSmith@northstaranesthesia.com](mailto:SSmith@northstaranesthesia.com)

[northstaranesthesia.com](http://northstaranesthesia.com)

 **NorthStar®**  
ANESTHESIA  
A Better Way to Operate.



**Anesthesiologist!**

Concerned about your patient's  
Cerebral Blood Flow?



Take the guesswork out of your care:  
[www.ornim.com](http://www.ornim.com)





Visit [www.thrombate.com](http://www.thrombate.com)  
to learn more

 **Thrombate III**<sup>®</sup>  
*antithrombin III (human)*

© 2015 Grifols All rights reserved. February 2015 US/TH/0215/0006

Grifols Therapeutics Inc.  
8368 US 70 West, Clayton NC 27520 – USA Tel. (919) 553 5011  
[www.grifols.com](http://www.grifols.com)

**GRIFOLS**

## The Root of Brain Function Monitoring

A more complete picture starts with more complete data



Please visit  
Masimo at  
Booth #204

SedLine<sup>®</sup> brain function monitoring for the Root<sup>®</sup> patient monitoring platform helps clinicians improve anesthetic management by enabling more individualized titration.

[www.masimo.com](http://www.masimo.com)

© 2015 Masimo. All rights reserved.  
Caution: Federal law restricts this device to sale by or on the order of a physician.

 **Masimo**<sup>®</sup>



NBE, Inc.  
1500 Sunday Drive, Suite 102  
Raleigh, NC 27607  
Phone: (919) 861-5582  
Email: [info@echoboards.org](mailto:info@echoboards.org)

The National Board of Echocardiography announces  
the 2015 administration of the

# Advanced PTEeXAM and ReAPTE

*Examination of Special Competence in Advanced Perioperative Transesophageal  
Echocardiography and Recertification Examination*

**Examination Date: Friday, July 13, 2015**

**Deadlines to Submit Applications:**

Early Registration..... Monday, March 16, 2015  
Late Registration ..... Monday, March 17, 2015 thru Monday, June 1, 2015

The NBE is pleased to offer a computer-based format multiple-choice examination through Prometric Testing Centers. Computer-based testing allows candidates to take his or her examination in a convenient testing center saving time and money. For additional information about the computer-based format and for an examination application, please visit our website at [www.echoboards.org](http://www.echoboards.org).

(Diplomates and Testamurs who passed the Advanced PTEeXAM in 1998-2006 are eligible to take the 2015 ReAPTE examination.)

**You can make  
a difference.**

Reduce post-surgical complications by

**32%**<sup>1</sup>

in your moderate to  
high-risk patients.

■ **Start here. Start now.**

**Visit Booth #102/104**  
[Edwards.com/ESR](http://Edwards.com/ESR)

<sup>1</sup>Grocott et al. Perioperative increase in global blood flow to explicit defined goals and outcomes after surgery: a Cochrane systematic review. *Br J Anaesth* 2013

Edwards, Edwards Lifesciences and the stylized E logo are trademarks of Edwards Lifesciences Corporation.  
© 2014 Edwards Lifesciences Corporation.  
All rights reserved. AR11707

**Edwards Lifesciences**  
[edwards.com](http://edwards.com)  
Irvine, California 92614 USA



**Optimizing**  
the cardiovascular patient  
**Experience.**

 **QUEST** Medical, Inc.

**Visit us in Booth 307  
at SCA to learn more**

**MPS®2**  
Myocardial  
Protection System

**RetroGuard®**  
Arterial Safety Valve

**9520**  
**Q2® MultiPort®**  
Manifold

**800.627.0226**  
[www.questmedical.com](http://www.questmedical.com)



© 2015 Quest Medical, Inc. MPS, RetroGuard, Q2 and MultiPort are registered trademarks of Quest Medical, Inc. 2015-02



# Advanced Clinical Utility. Unprecedented Ease of Use.

**Now  
Available!**



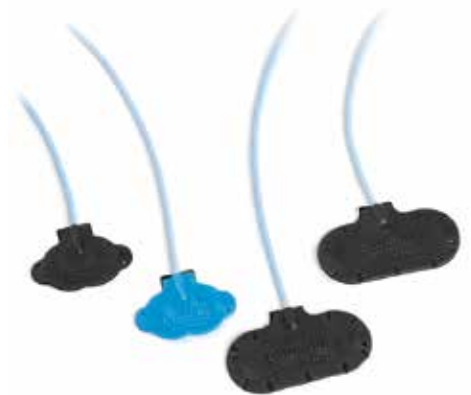
## Introducing the SenSmart™ Model X-100 Universal Oximetry System

**VERSATILITY AT YOUR FINGERTIPS.** Experience state-of-the art accuracy with unprecedented ease of use in regional and pulse oximetry monitoring. Only Nonin Medical's compact SenSmart Oximetry System offers all that, plus patented dual-light emitting and detecting sensors that effectively remove surface tissue artifacts.



### THE SENSMART ADVANTAGES:

- Sensors designed for pediatric to adult patients
- Smaller signal processors adapt to any ICU or OR environment
- Sensor-lock eliminates disconnections
- Exclusive six channel monitoring (rSO<sub>2</sub> and now SpO<sub>2</sub>) for enhanced clinical utility
- Intuitive user interface with navigation buttons and color-coded display to ease operation
- Increased data storage for convenient access to information



Contact Nonin Medical for a free evaluation at  
**SenSmart.com** or visit **SCA Booth #317**

**TERUMO**

**NONIN**  
Leaders in *Noninvasive* Medical Monitoring

SenSmart™ is a registered trademark of Nonin Medical. ©2015 Nonin Medical, Inc. M-1615  
Manufactured by Nonin Medical, Inc. in Plymouth, MN. Distributed in the USA by Terumo Cardiovascular Group, Ann Arbor, MI.





# INVOS™ 5100C Cerebral/Somatic Oximeter

## [ The Clinical Standard<sup>1</sup> ]

**INVOS™ Cerebral/Somatic Oximetry has set the standard in regional oximetry.** Highly sensitive and responsive, the INVOS™ system is the trusted, clinical standard for regional oximetry. The INVOS system offers clinicians actionable measurements to help reduce adverse events, and improve patient care and outcomes.

We encourage you to visit [Covidien.com/RMS](https://www.covidien.com/RMS) for more information on the full portfolio of respiratory and patient monitoring products.

1. Covidien, INVOS™ Cerebral/Somatic Oximetry Clinical Evidence Bibliography—Cardiac Surgery, 13-PM-0290\_STL, 2013.

COVIDIEN, COVIDIEN with logo, Covidien logo and *positive results for life* are U.S. and internationally registered trademarks of Covidien AG. Other brands are trademarks of a Covidien company. ©2014, 2015 Covidien. 14-PM-0022



**COVIDIEN**

*positive results for life™*