

Continuing Medical Education



Perelman
School of Medicine
UNIVERSITY OF PENNSYLVANIA

**Department of Surgery, Division of Cardiovascular Surgery
at the University of Pennsylvania
presents**

2ND NORTH AMERICAN Aortic Valve Repair Symposium

A C M E - C E R T I F I E D C O U R S E



Friday-Saturday, September 9-10, 2016

**Sofitel Philadelphia
120 South 17th Street
Philadelphia, PA 19103**

In Conjunction With



**UNIVERSITY OF OTTAWA
HEART INSTITUTE
INSTITUT DE CARDIOLOGIE
DE L'UNIVERSITÉ D'OTTAWA**

Endorsed by:



**The Society
of Thoracic
Surgeons**

**Course Director:
Joseph E. Bavaria, MD**

**Co-Directors:
Munir Boodhwani, MD, MMSc
Prashanth Vallabhajosyula, MD, MS
John Augoustides, MD**

www.avrepairsymposium.org



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A CME-certified Course

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PROGRAM OVERVIEW & TARGET AUDIENCE

The purpose of this activity is to provide in-depth analysis and procedural understanding of both bicuspid and 3-cusp aortic valve repair and valve sparing aortic root surgery. Additionally, this symposium will provide technical and conceptual pearls related to aortic valve repair. Faculty presentations will constitute deep-dive sessions addressing valvular and aortic root pathology in the context of aortic valve preservation, with discussion panels focusing on the technical nuances and detailed differences in aortic valve repair and valve sparing aortic root techniques. Live-on-tape sessions will be complemented with comprehensive didactic coverage of the clinical, technical, and imaging tools required to develop a successful aortic valve repair program. This symposium is especially designed for cardiovascular surgeons, cardiologists, cardiac anesthesiologists, residents and fellows with an interest in aortic valve repair.

Learning Objectives

Upon completion of the activity, the participant should be able to:

- Apply learned techniques toward repairing diseased bicuspid and 3-cusp aortic valves
- Describe the functional anatomy of the aortic valve complex
- Employ the echocardiographic approach to aortic valve repair as a guide to surgical decision-making
- Explain the principles and advantages of native aortic valve repair for both bicuspid and 3-cusp valves
- Review the essential technical details for optimal surgical repair of the native aortic valve
- Discuss the impact that geometric aortic valve differences have on valve repair outcomes and reconstructive strategies
- Review both medical and surgical guideline-directed therapies for Aortic Valve Insufficiency (A.I.)

Hosting Department

The *2nd North American Aortic Valve Repair Symposium* is hosted by the Department of Surgery, Division of Cardiovascular Surgery at the University of Pennsylvania.

Accreditation

The Perelman School of Medicine at the University of Pennsylvania is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Designation of Credit

The Perelman School of Medicine at the University of Pennsylvania designates this live activity for a maximum of 13.0 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Amount of Credit Available By Day:

Friday8.75 *AMA PRA Category 1 Credits™*

Saturday4.5 *AMA PRA Category 1 Credits™*

Certificates and Transcripts: After the symposium has concluded, all participants will receive a follow-up email with instructions and a link. Once participants submit the request for credit, the earned credits will be available for viewing on a transcript and certificates will be available for printing at www.penncmeeonline.com. Please note that the individual certificate will not be mailed.

Disclosures

Perelman School of Medicine at the University of Pennsylvania Office of Continuing Medical Education, adheres to the *ACCME Standards for Commercial Support*. Faculty disclosure information will be made available in the conference materials and syllabi. Faculty members are also expected to disclose to participants any discussions of off-label and/or investigational uses of pharmaceutical products within their presentations.

Registration Fees

The registration fees for the *2nd North American Aortic Valve Repair Symposium* are the following: \$850 for Physicians and Industry; \$700 for Physicians who are members of the Society of Thoracic Surgeons (STS); \$300 for Healthcare Professionals, Residents and Fellows.

The registration fee includes attendance to the symposium, a course booklet, link to view the presentations online, continental breakfast, mid-morning and afternoon breaks on both days. All attendees will also receive a complimentary flash drive. On Friday, lunch will also be included. Lunch is not included on Saturday. You may register online for the course by visiting www.penncmeeonline.com and click on CME Activities then Live Events.



How to Register

If you are registering with a credit card, please register online at www.pennmeonline.com, then clicking on CME Activities/Live Events. To pay by check, complete the registration form and mail it in with your check. We cannot accept faxed or mailed registration forms with credit card information. Please see the top of the registration form for mailing information. All registrations will be confirmed in writing if your registration form and fee are received by August 26, 2016.

Cancellation and Refund Policy

In order to process refunds for course withdrawals, cancellations must be received in writing by August 26, 2016 (subject to a service charge of 10% of the registration fee but not less than \$15.00). No refunds will be issued after August 26, 2016. The University reserves the right to cancel or postpone any course due to unforeseen circumstances. In the event of cancellation or postponement, the University will refund registration fees but is not responsible for related costs or expenses to participants, including cancellation fees assessed by hotels, airlines, and travel agencies.

Meeting Location

The *2nd North American Aortic Valve Repair Symposium* will be held Friday-Saturday, September 9-10, 2016 at the Sofitel Philadelphia, 120 South 17th Street, Philadelphia, PA 19103. For more information on Sofitel Philadelphia, please visit their website at: <http://www.sofitel-philadelphia.com/en> or to reach them directly, please call 215-569-8300.

The Sofitel Philadelphia is offering a special group rate (single or double-occupancy) of \$205.00 per night. These rates do not include the 15.5% sales and occupancy tax. The special room rate is only available until Thursday, August 18, 2016 or until the block has filled (whichever comes first). Rates are subject to availability once the room block has filled. Please call the Sofitel Philadelphia directly at 215-569-8300 and identify yourself as a participant of the “*University of Pennsylvania 2nd AVRS 2016*” in order to receive the discounted overnight room rate. Please visit <http://tinyurl.com/h38q3gc> in order to make your reservations online.

Parking: The Sofitel Philadelphia offers valet-only parking. The daily parking rate is \$36. For guests staying overnight Monday-Thursday, the rate is \$50.24 and guests staying overnight Friday-Saturday, the rate is \$45.33. The symposium will not validate or discount any parking expenses.



COURSE DIRECTOR

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KEYNOTE SPEAKER

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HONORARY SPEAKERS

Gebrine El Khoury, MD
*Professor of Surgery
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Saint-Luc (UCL)
Bruxelles, Belgium*

Emmanuel Lansac, MD, PhD
*Cardiac Surgeon
Department of Cardiac Pathology
Institut Mutualiste Montsouris
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GUEST SPEAKERS

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Surgical Director, Transcatheter
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AORTIC FELLOWS

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AGENDA

DAY 1 – Friday, September 9, 2016

6:45 AM – 7:30 AM Registration/Breakfast

7:30 AM – 7:45 AM Welcoming Remarks
Joseph E. Bavaria, MD
Munir Boodhwani, MD, MMSc, FRCSC

MORNING SESSION 1

BASIC CONCEPTS IN AORTIC VALVE PRESERVATION AND REPAIR

Moderators: Joseph E. Bavaria, MD and
Munir Boodhwani, MD, MMSc, FRCSC

7:45 AM – 8:00 AM Intraoperative Echocardiographic Analysis
of Aortic Valve and Root
John G. Augoustides, MD, FASE, FAHA

8:00 AM – 8:15 AM Aortic Valve Anatomy and Function
Karen M. Kim, MD

8:15 AM – 8:30 AM Review of ACC/AHA Guidelines for Management
of Aortic Insufficiency: Pitfalls and Nuances
Robert O. Bonow, MD

8:30 AM – 8:45 AM Surgical Indications for Root and Ascending
Aortic Disease: Reconciling the American,
Canadian, and European Guidelines
Lars Svensson, MD, PhD

8:45 AM – 9:05 AM Valve Sparing Root Replacement:
Reimplantation Technique - Step by Step
Munir Boodhwani, MD, MMSc, FRCSC

9:05 AM – 9:25 AM Valve Sparing Root Replacement: Remodeling
Technique and External Ring Annuloplasty
Emmanuel Lansac, MD, PhD

9:25 AM – 10:00 AM Panel Discussion

10:00 AM – 10:30 AM Break

MORNING SESSION 2

SURGICAL APPROACH TO AORTIC INSUFFICIENCY

Moderators: Joseph E. Bavaria, MD and Joseph S. Coselli, MD

10:30 AM – 10:50 AM Structural Mechanisms of Aortic Insufficiency
and Surgical Approach to Aortic Valve Repair
Munir Boodhwani, MD, MMSc, FRCSC
Benjamin Sohmer MD, MEd, FRCPC

10:50 AM – 11:05 AM Annular Stabilization Techniques in the
Context of Aortic Valve Repair
Prashanth Vallabhajosyula, MD, MS

11:05 AM – 11:45 AM Aortic Valve Assessment and Repair –
Case Based Presentations
(Echo and Surgery; Ottawa/Penn Faculty)
Munir Boodhwani, MD, MMSc, FRCSC, Emmanuel
Lansac, MD, PhD, Bradley Leshnowar, MD, FACS,
Maria Rodriguez, MD, Benjamin Sohmer MD,
MEd, FRCPC

11:45 AM – 11:50 AM Introduction to Keynote Speaker
Hans-Hinrich Sievers, MD
Joseph E. Bavaria, MD

11:50 AM – 12:15 PM **KEYNOTE LECTURE**
An Individualized Approach to the
Ascending Aorta in Bicuspid Aortic Valve Disease
Hans-Hinrich Sievers, MD

12:15 PM – 12:40 PM Panel Discussion

12:40 PM – 1:00 PM Pick-up Lunch

1:00 PM – 2:00 PM Working Lunch with Case Presentations by
University of Pennsylvania Aortic Fellows

- Complex BAV Repair with External Aortic Ring:
Triangular Leaflet Resection with Primary Closure
and Extensive Decalcification
Christine Herman, MD

- Valve Sparing Root Reimplantation of a Unicuspid
Valve Variant: 180°/180° Geometric Orientation
Ibrahim Sultan, MD

- Valve Sparing Root Reimplantation of Type I BAV:
150°/210° Geometric Orientation
George Arnaoutakis, MD

- Complex BAV Leaflet Repair with Valve Sparing
Root Reimplantation:
180°/180° Geometric Orientation
Prashanth Vallabhajosyula, MD, MS

- Tricuspid Aortic Valve Repair with Valve Sparing
Root Reimplantation
George Arnaoutakis, MD

2:00 PM – 2:10 PM Break

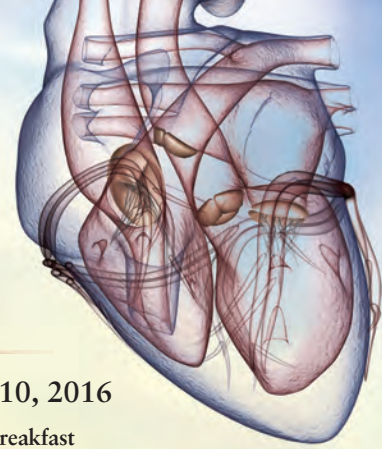
AFTERNOON SESSION 1

BICUSPID AORTIC VALVE REPAIR – DEEP DIVE

Moderators: Munir Boodhwani, MD, MMSc, FRCSC
and Emmanuel Lansac, MD, PhD

2:10 PM – 2:25 PM Geometric Orientation of the Aortic Neoroot
in Type I Bicuspid Aortic Valve Sparing
Root Reimplantation
Joseph E. Bavaria, MD

2:25 PM – 2:40 PM Bicuspid Aortic Valve Repair in the Setting of
Severe Aortic Insufficiency:
Live-in-box Presentation
Edward Chen, MD



- 2:40 PM – 2:55 PM **Bicuspid Aortic Valve Repair With External Subannular Ring – Surgical Approach and Echocardiographic Evaluation**
Joseph E. Bavaria, MD
Bonnie Milas, MD
- 2:55 PM – 3:15 PM **Radical Bicuspid Aortic Valve Repair – Type I to Type 0 conversion: Live-in-box Presentation and Outcomes**
Thomas Gleason, MD
- 3:15 PM – 3:30 PM **Sievers Type I Right-left Conjoint Cusp Bicuspid Aortic Valve Repair: Step-by-step Approach**
Gebrine El Khoury, MD
- 3:30 PM – 3:55 PM **Panel Discussion**
- 3:55 PM – 4:25 PM **Break**

AFTERNOON SESSION 2

OUTCOMES AND ALTERNATIVES TO AORTIC VALVE REPAIR

Moderators: Joseph E. Bavaria, MD and Joseph S. Coselli, MD

- 4:25 PM – 4:40 PM **Valve Sparing Versus Composite Replacement in Marfan Syndrome**
Joseph S. Coselli, MD
- 4:40 PM – 4:55 PM **Midterm Outcomes With BAV Repair With Valve Sparing Root Reimplantation Versus Bentall Root Replacement for Aortic Insufficiency With Root Aneurysm**
Prashanth Vallabhajosyula, MD, MS
- 4:55 PM – 5:10 PM **Bentall Procedure in 2016: Valve and Conduit Choice, Techniques, Tips, and Tricks**
Alberto Pochettino, MD
- 5:10 PM – 5:25 PM **The Ross Procedure: When and How?**
Hans-Hinrich Sievers, MD
- 5:25 PM – 5:40 PM **Transcatheter Aortic Valve Replacement – TAVR – for Complex Aortic Valvular Conditions**
Wilson Y. Szeto, MD

DAY 2 – Saturday, September 10, 2016

7:00 AM – 7:45 AM **Registration/Breakfast**

7:45 AM – 8:00 AM **Opening Remarks**
Joseph E. Bavaria, MD

MORNING SESSION 1

ADVANCED CONCEPTS IN AORTIC VALVE REPAIR

Moderators: Edward P. Chen, MD and Wilson Y. Szeto, MD

8:00 AM – 8:15 AM **Three-dimensional Echocardiography for Aortic Valve Anatomy**
Benjamin Sohmer MD, MEd, FRCPC

8:15 AM – 8:30 AM **Trileaflet Aortic Valves with Root Dilatation and Severe AI: Live-in-box**
Munir Boodhwani, MD, MMSc, FRCSC
Joseph E. Bavaria, MD

8:30 AM – 8:45 AM **Aortic Valve Sparing Surgery in Emergent Situations Live-in-box Presentation and Outcomes Analysis**
Himanshu Patel, MD

8:45 AM – 8:50 AM **Introduction to Honorary Speaker:**
Gebrine El Khoury, MD
Joseph E. Bavaria, MD

8:50 AM – 9:20 PM **HONORARY LECTURE**
Managing the AV Annulus: Experience Over Two Decades
Gebrine El Khoury, MD

9:20 AM – 9:35 AM **When NOT to do Aortic Valve Repair**
Joseph E. Bavaria, MD

9:35 AM – 9:50 AM **Aortic Annuloplasty, Effective Height and Geometric Height to Standardize Cusp Repair**
Emmanuel Lansac, MD, PhD

9:50 AM – 10:15 AM **Panel Discussion**

10:15 AM – 10:45 AM **Break**

10:45 AM – 10:55 AM **Unicuspid Aortic Valve Repair: Live-in-box**
Munir Boodhwani, MD, MMSc, FRCSC

10:55 AM – 11:50 AM **Cased-based Presentation of Aortic Valve Repair Failures: Echocardiographic and Surgical Evaluation**
John Augoustides, MD, FASE, FAHA, Munir Boodhwani, MD, MMSc, FRCSC, Emmanuel Lansac, MD, PhD, Benjamin Sohmer, MD, MEd, FRCPC, Prashanth Vallabhajosyula, MD, MS

11:50 AM – 12:05 PM **Managing Cusp Restriction and Calcification**
Gebrine El Khoury, MD

12:05 PM – 12:50 PM **Panel Discussion and Closing Remarks**

Services for the Disabled If special arrangements are required for an individual with a disability to attend this meeting, please contact the Office of Continuing Medical Education no later than August 26, 2016 at 215-898-8005.

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Questions? Contact us at:

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Medical Specialty

Affiliation (Hospital, Office, or Company)

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State

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Phone

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Registration Fee (pre-payment is required to be officially registered)

- \$850.00 for Physicians and Industry
- \$700.00 for Physicians who are members of the Society of Thoracic Surgeons (STS)
- \$300.00 Healthcare Professionals, Residents and Fellows

Payment Method

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- If you are paying by check, you may mail your completed registration form and check made payable to **The Trustees of the University of Pennsylvania/CME** to:
Conference Coordinator, Perelman School of Medicine at the University of Pennsylvania, Office of Continuing Medical Education
150 Anatomy/Chemistry Building, 3620 Hamilton Walk
Philadelphia, PA 19104-6061
- Do not include any credit card information on the registration form or email any credit card information

Please Note: Walk-in registrants must bring payment to the program.
Seating may be limited for walk-in registrants.

Continuing Medical Education



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