



Preliminary Program



Fall Fellows 2017 Courses

LAS VEGAS • DEC. 8-12, 2017

PREPARING THE FUTURE OF INTERVENTIONAL CARDIOLOGY



The Society for Cardiovascular
Angiography and Interventions
Foundation

www.scai.org/fellows



Program Chairs

Adult Interventional Cardiology Fellows Course



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Program Chair
Boston, MA



John C. Messenger, M.D., FSCAI
Program Co-Chair
Aurora, CO



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Congenital/Structural Heart Disease Interventional Cardiology Course



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Evan M. Zahn, M.D., FSCAI
Program Co-Chair
Los Angeles, CA



Jamil Aboulhosn, M.D., FSCAI
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Invited Faculty *SCAI Fellowship (FSCAI) applicant

J. Dawn Abbott, M.D., FSCAI
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David A. Cox, M.D., MSCAI
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Douglas E. Drachman, M.D., FSCAI
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Ted Feldman, M.D., MSCAI
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Craig E. Fleishman, M.D.
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Pinake Bipin Shah, M.D., FSCAI
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Michael Valentine, M.D., FSCAI
Lynchburg, VA

Frederick G. Welt, M.D., FSCAI
Salt Lake City, UT

Robert W. Yeh, M.D., M.Sc., MBA, FSCAI
Boston, MA

Evan M. Zahn, M.D., FSCAI
Los Angeles, CA

Course Overview

The SCAI 2017 Fall Fellows Courses will provide an engaging, informal, and relaxing environment in which attendees can interact with internationally recognized faculty. Attendees of the course will gain an in-depth knowledge of indications, techniques, and expected outcomes for interventional cardiac, carotid, and endovascular procedures. The program will present a variety of practical case-based content as well as material of immediate value to attendees as they plan their post-fellowship practices.

Learning Objectives

At the conclusion of this activity, participants will be able to demonstrate the ability to:

Adult Interventional Cardiology Fellows Course

Understand the fundamentals of interventional equipment selection; guidewires, guide catheters, stents and balloons utilized in day-to-day interventional practice, utilizing case presentation and didactic format.

1. Know the clinical trials data related to PCI in the left main and in multi-vessel disease, and apply these insights to real world clinical scenarios.
2. Integrate appropriate use criteria with day-to-day practice, particularly for PCI therapy utilization.
3. Integrate the use of various imaging modalities, including IVUS, OCT, and FFR.
4. Understand the mechanics of support devices, including the rationale for device selection, prophylactic and bailout support.
5. Analyze case selection for surgical compared to transcatheter aortic valve replacement.
6. Understand the benefits and risks of radial versus femoral access, and assess the management of complications.
7. Apply techniques for complex coronary intervention including rotational atherectomy, bifurcation stenting, and chronic total occlusions, including case presentations.
8. Recognize the indications for intervention in acute coronary syndromes.
9. Apply appropriate utilization of adjunctive pharmacotherapy for coronary intervention, including anti-thrombin and anti-platelet strategies.
10. Discuss ethical issues involved in selecting or turning down patients for complex coronary and structural heart disease interventions. Understand some tools that are useful in speaking to patient families under difficult situations.
11. Define approaches to preventing complications, including case presentations highlighting methods for getting out of trouble when complications do occur.

Congenital/Structural Heart Disease Interventional Cardiology Fellows Course

1. Know how to stock the cardiac cath lab with appropriate equipment and tools so that a procedure can be performed effectively.
2. Apply the proper radiation protection measures for patients and operators in the cath lab, as well as how to improve safety.
3. Understand the complete hemodynamic assessment of congenital cardiac defects, including left to right shunt and right to left shunt lesions.
4. Understand what hemodynamics are critical for Pre-Glenn and Pre-Fontan procedures.
5. Recognize the various diseases that present in adults with congenital heart disease and their management.
6. Recognize the various aspects of angiographic assessment of congenital cardiac defects and the best angiographic projections for each defect.
7. Integrate new advanced imaging used during interventional cardiac procedures.
8. Recognize the essential echocardiographic assessments, device selection, procedural requirements, and pitfalls for the most common congenital procedures including:
 - a. ADS's with both the Amplatz and Helix devices
 - b. PDA's with both devices and coils
 - c. Transcatheter VSD closure
 - d. Balloon aortic valvuloplasty
 - e. Balloon pulmonary valvuloplasty
 - f. Transcatheter replacement of the pulmonary valve
 - g. Coil embolization of AV malformations and collaterals
 - h. Interventions for aortic coarctation and pulmonary artery stenosis
9. Discuss available fetal cardiac procedures.
10. Understand the procedures that are often needed in the setting of HLHS.
11. Understand the role of ECMO and other ventricular support devices in the cath lab.

Scholarship Information

Scholarship

In order to attend the SCAI 2017 Fall Fellows Courses taking place at **The Cosmopolitan of Las Vegas** (3708 S. Las Vegas Boulevard, Las Vegas, NV 89109) on December 8–12, 2017, interventional Fellows-in-Training must receive a Fall Fellows Scholarship. The Fall Fellows Scholarship includes:

- Complimentary course tuition
- Airfare up to \$500 (from the U.S. and Canada)
- Complimentary hotel stay (up to four nights)

Eligibility

- You are currently in an ACGME accredited interventional cardiology fellowship program or equivalent level of training in an international program*
 - You have completed an ACGME accredited year of interventional cardiology fellowship and are now training in structural, peripheral, or CHIP, and have not previously attended the SCAI Fall Fellows Course
 - You are in the third or fourth year of a pediatric cardiology fellowship in the U.S. or an international program and interested in cardiac catheterization
- * If you are a fellow from outside the U.S. or Canada, please contact Eric Grammer at egrammer@scai.org.

Commercial Support

SCAI 2017 Fall Fellows Courses is being funded in part by educational grants from various commercial organizations. A complete list of commercial supporters and contributors will be published in the final program.



Friday, December 8

2:00–8:00 p.m. SATELLITE

Saturday, December 9

6:45–8:00 a.m. SATELLITE BREAKFAST

8:05–8:30 a.m. WELCOME

8:05–8:15 a.m. Course Introduction *Douglas E. Drachman, M.D., FSCAI*

8:15–8:25 a.m. Presidential Address *Kirk N. Garratt, M.D., M.Sc., FSCAI*

8:25–8:30 a.m. SCAI Annual Meeting Preview *Ehtisham Mahmud, M.D., FSCAI*

8:30–10:00 a.m. **GEARING UP: TOOLS, STRATEGIES, AND DRUGS FOR OPTIMAL INTERVENTION** *Moderators: Douglas E. Drachman, M.D., FSCAI, Sahil A. Parikh, M.D., FSCAI*

8:30–8:40 a.m. Guides and Wires *Robert W. Yeh, M.D., M.Sc., MBA, FSCAI*

8:40–8:50 a.m. Balloons and Stents *Sahil A. Parikh, M.D., FSCAI*

8:50–9:00 a.m. Oops, I Didn't Quite See That: Strategies for Flawless Angiography *J. Dawn Abbott, M.D., FSCAI*

9:00–9:12 a.m. Live Long and Prosper: How to Mitigate Occupational Hazards *Ehtisham Mahmud, M.D., FSCAI*

9:12–9:24 a.m. Optimal Duration of DAPT *Robert W. Yeh, M.D., M.Sc., MBA, FSCAI*

9:24–9:36 a.m. Managing Chronic Anti-Coagulation *Kirk N. Garratt, M.D., M.Sc., FSCAI*

9:36–9:48 a.m. Antithrombin Therapy for PCI *Frederick G. Welt, M.D., FSCAI*

Saturday, December 9 (continued)

9:48–10:00 a.m. Fellows Case: Fundamental Oversight (I Wish I Had Chosen a Different Guide/Different Wire/Different Strategy) *TBD*

10:00–10:30 a.m. VISIT EXHIBITS

10:30 a.m.–noon **WHEN THE GOING GETS TOUGH: STEP-BY-STEP APPROACH FOR THE CHALLENGES OF VASCULAR ACCESS** Moderators: *Douglas E. Drachman, M.D., FSCAI and Sunil V. Rao, M.D., FSCAI*

10:30–10:42 a.m. Tips and Tricks for Radial Access *Sunil V. Rao, M.D., FSCAI*

10:42–10:54 a.m. My Most Challenging Transradial Cases *Jennifer A. Tremmel, M.D., M.S., FSCAI*

10:54–11:06 a.m. Radial Access Complications *Mauricio G. Cohen, M.D., FSCAI*

11:06–11:18 a.m. Large Sheath Access and Closure *Rahul Sakhuja, M.D., M.P.P., M.Sc., FSCAI*

11:18–11:30 a.m. Ultrasound Access: Wrist, Groin, and Neck—How I Do It *Arnold H. Seto, M.D., FSCAI*

11:30–11:45 a.m. Femoral Access Disasters *Douglas E. Drachman, M.D., FSCAI*

11:45 a.m.–noon Fellows Case: Challenging Access *TBD*

12:15–1:15 p.m. SATELLITE LUNCH

1:30–3:30 p.m.

Group A Group B EXHIBIT HALL TOUR

1:30–2:30 p.m. 2:30–3:30 p.m. Abbott, Abiomed, Boston Scientific, Cardiovascular Systems, Inc., Chiesi USA, Cook Medical, Edwards Lifesciences, Getinge, Medtronic *J. Dawn Abbott, M.D., FSCAI, Emmanouil S. Brilakis, M.D., Ph.D., FSCAI, Mauricio G. Cohen, M.D., FSCAI, Kirk N. Garratt, M.D., M.Sc., FSCAI, Morton J. Kern, M.D., MSCAI, Andrew J. Klein, M.D., FSCAI, Rahul Sakhuja, M.D., M.P.P., M.Sc., FSCAI, and Jennifer A. Tremmel, M.D., M.S., FSCAI*

Group A Group B WHAT WOULD YOU DO? CASE REVIEWS WITH THE EXPERTS!

2:30–2:40 p.m. 1:30–1:40 p.m. Review Case as a Group *Panel*

2:40–3:00 p.m. 1:40–2:00 p.m. Breakouts *David A. Cox, M.D., MSCAI, Douglas E. Drachman, M.D., FSCAI, Ehtisham Mahmud, M.D., FSCAI, James M. McCabe, M.D., FSCAI, Sahil A. Parikh, M.D., FSCAI, Sunil V. Rao, M.D., FSCAI, and Robert W. Yeh, M.D., M.Sc., MBA, FSCAI*

3–3:20 p.m. 2:00–2:20 p.m. Discussion *Panel*



2017 FALL FELLOWS COURSES

December 8–12, 2017 • Las Vegas

ADULT COURSE PROGRAM

Saturday, December 9 (continued)

3:30–4:00 p.m.	VISIT EXHIBITS	
4:00–5:30 p.m.	CATH LAB DISASTERS: WHAT TO DO WHEN CASES GO BAD	Moderators: <i>David A. Cox, M.D., MSCAI and Sahil A. Parikh, M.D., FSCAI</i>
4:00–4:10 p.m.	Perforations: Old Faithful	<i>Emmanouil S. Brilakis, M.D., Ph.D., FSCAI</i>
4:10–4:20 p.m.	Abrupt Closure: Honey, I Shut Down the Artery	<i>David A. Cox, M.D., MSCAI</i>
4:20–4:30 p.m.	Massive Thrombus: Clot Happens	<i>James M. McCabe, M.D., FSCAI</i>
4:30–4:45 p.m.	Rapid Fire Case Review With Panel Discussion	Moderator: <i>Sahil A. Parikh, M.D., FSCAI</i>
4:45–4:55 p.m.	Peripheral Skills to Bail Yourself Out of Trouble	<i>Sahil A. Parikh, M.D., FSCAI</i>
4:55–5:05 p.m.	Great Case, Too Bad He's on Dialysis: Managing Contrast	<i>Morton J. Kern, M.D., MSCAI</i>
5:05–5:15 p.m.	I Think I'm Stuck—Device Entrapment	<i>Andrew J. Klein, M.D., FSCAI</i>
5:15–5:30 p.m.	Discussion	
5:30–6:30 p.m.	WELCOME RECEPTION	
6:30–8:00 p.m.	KEYNOTE: THE HISTORY OF CORONARY INTERVENTION WITH RICHARD SCHATZ, M.D. (Dinner provided) Supported by: ZOLL	

Sunday, December 10

6:45–8:00 a.m.	SATELLITE BREAKFAST	
8:15–10:00 a.m.	UNIQUE LESIONS AND UNIQUE SKILLS: HOW TO TREAT LEFT MAIN, MULTI-VESSEL DISEASE, BIFURCATIONS, AND CTOS	Moderators: <i>James M. McCabe, M.D., FSCAI and Robert W. Yeh, M.D., M.Sc., MBA, FSCAI</i>
8:15–8:30 a.m.	Left Main Disease: My Technical Algorithm	<i>Emmanouil S. Brilakis, M.D., Ph.D., FSCAI</i>
8:30–8:50 a.m.	Bifurcations 101: Nomenclature and Step-by-Step Techniques	<i>Frederick G. Welt, M.D., FSCAI</i>
8:50–9:05 a.m.	Multi-Vessel Disease: PCI, Surgery, Role of the Heart Team?	<i>Mauricio G. Cohen, M.D., FSCAI</i>
9:05–9:20 a.m.	Fellows Case: Complex PCI, Left Main, Bifurcation, or Vein Graft	TBD
9:20–9:35 a.m.	CTO Techniques: Learning, Mastering, and Knowing When to Say "When"	<i>Robert W. Yeh, M.D., M.Sc., MBA, FSCAI</i>
9:35–9:47 a.m.	Vein Graft Intervention: Love It, Hate It, Got to Do It!	<i>David A. Cox, M.D., MSCAI</i>
9:47–10:00 a.m.	No Reflow in NSTEMI: When You Least Expect It, Expect It!	<i>Ehtisham Mahmud, M.D., FSCAI</i>
10:00–10:30 a.m.	VISIT EXHIBITS	

Preparing the **FUTURE** of Interventional Cardiology

Sunday, December 10 (continued)

10:30–noon	THE ROCK OF GIBRALTAR: TECHNIQUES TO DEAL WITH CALCIFICATION, NON-DILATABLE LESIONS, AND TORTUOSITY	Moderators: <i>Douglas E. Drachman, M.D., FSCAI and John C. Messenger, M.D., FSCAI</i>
10:30–10:40 a.m.	Ain't No Paucity of Tortuosity! How I Deal With Tortuous Lesions	<i>Emmanouil S. Brilakis, M.D., Ph.D., FSCAI</i>
10:40–10:50 a.m.	The Non-Dilatable Lesion: I Wish I Hadn't Stented That!	<i>Arnold H. Seto, M.D., FSCAI</i>
10:50–11 a.m.	Heavy Duty Calcium: How to Spot It, What to Do About It	<i>Andrew J. Klein, M.D., FSCAI</i>
11:00–11:15 a.m.	Fellows Case: Plaque Modification	<i>TBD</i>
11:15–11:25 a.m.	Panel Discussion	<i>Panelists</i>
11:25–11:35 a.m.	Tricky Lesions Require Intravascular Imaging: IVUS and OCT	<i>Manesh R. Patel, M.D., FSCAI</i>
11:35–11:50 a.m.	Decision Making in MVD: Role of iFR and FFR	<i>Morton J. Kern, M.D., MSCAI</i>
11:50–noon	Discussion	
12:15–1:15 p.m. CONCURRENT SATELLITE LUNCH 1		
12:15–1:15 p.m. CONCURRENT SATELLITE LUNCH 2		
1:30–3:00 p.m.	YOUR SURVIVAL GUIDE TO HEALTH CARE ECONOMICS: APPROPRIATE USE CRITERIA (AUC), MEDICAL GROUP MANAGEMENT ASSOCIATION (MGMA), AND MACRA	Moderators: <i>John C. Messenger, M.D., FSCAI and Manesh R. Patel, M.D., FSCAI</i>
1:30–1:50 p.m.	AUC for PCI—Getting It Right	<i>Manesh R. Patel, M.D., FSCAI</i>
1:50–2:10 p.m.	MGMA—Leveraging Data to Help With Your First Job	<i>TBD</i>
2:10–2:30 p.m.	The Non-Clinical Competencies: Critical Pearls to Survive Your Transition to the Real World	<i>Michael Valentine, M.D., FSCAI</i>
2:30–3:00 p.m.	Panel Discussion	
3:00–3:30 p.m. VISIT EXHIBITS		
3:30–5:00 p.m.	BETTER DO SOMETHING FAST!...STEMI, SHOCK, AND HEMODYNAMIC SUPPORT	Moderators: <i>Timothy D. Henry, M.D., MSCAI and Frederick G. Welt, M.D., FSCAI</i>
3:30–3:45 p.m.	Optimal STEMI Care in 2017	<i>Timothy D. Henry, M.D., MSCAI</i>
3:45–3:55 p.m.	Hemodynamics of Shock?	<i>Morton J. Kern, M.D., MSCAI</i>
3:55–4:15 p.m.	Best Tool for the Job: IABP, ECMO, PVAD	<i>James M. McCabe, M.D., FSCAI</i>
4:15–4:30 p.m.	PCI in Shock: Multi-Vessel vs. Culprit Lesion	<i>Frederick G. Welt, M.D., FSCAI</i>
4:30–4:45 p.m.	Fellows Case: Mechanical Circulatory Support	<i>TBD</i>
4:45–5:00 p.m.	Panel Discussion	<i>Speakers</i>
5:15–6:15 p.m.	JEOPARDY	<i>Morton J. Kern, M.D., MSCAI</i>
6:30–8:00 p.m.	SATELLITE DINNER	



Monday, December 11

6:45–8:00 a.m.	SATELLITE BREAKFAST	
8:15–10:00 a.m.	STRUCTURAL HEART DISEASE AND INTERVENTION PART I	Moderators: <i>John D. Carroll, M.D., MSCAI and Ted Feldman, M.D., MSCAI</i>
8:15–8:27 a.m.	Transseptal 101: Getting Where You Need to Safely	<i>Ted Feldman, M.D., MSCAI</i>
8:27–8:39 a.m.	PFO Closure: Finally Ready for Prime Time!	<i>John D. Carroll, M.D., MSCAI</i>
8:39–8:51 a.m.	LAAO: Closing the Door for Stroke?	<i>Samir R. Kapadia, M.D., FSCAI</i>
8:51–9:03 a.m.	Fellows Case: TAVR	<i>TBD</i>
9:03–9:15 a.m.	Panel Discussion	<i>Panel</i>
9:15–9:27 a.m.	TAVR vs. SAVR: How I Approach It	<i>Isaac George, M.D.</i>
9:27–9:39 a.m.	TAVR: Which Device for Which Patient?	<i>Molly Szerlip, M.D., FSCAI</i>
9:39–9:51 a.m.	TAVR: Managing Complications	<i>Frederick G. Welt, M.D., FSCAI</i>
9:51–10:00 a.m.	Panel Discussion: Training Needs for SHD Interventions	<i>Panel</i>
10:00–10:30 a.m.	VISIT EXHIBITS	
10:30–11:15 a.m.	YOU'VE GRADUATED FROM FELLOWSHIP WHAT NOW? CRITICAL ADVICE TO BUILD YOUR PRACTICE	
10:30–11:05 a.m.	Difficult Conversation	<i>Michael Valentine, M.D., FSCAI</i>
11:05–11:15 a.m.	Career Advice	<i>David A. Cox, M.D., FSCAI</i>
11:15–noon	PANEL—EARLY CAREER ADVICE AND TRANSITIONS IN PRACTICE	Moderator: <i>Herbert D. Aronow, M.D., FSCAI</i> Panelists: <i>Ehrin J. Armstrong, M.D., M.A.S., FSCAI, Andrew J. Klein, M.D., FSCAI, Arnold H. Seto, M.D., FSCAI, Pinake Bipin Shah, M.D., FSCAI, and Molly Szerlip, M.D., FSCAI</i>
12:15–1:15 p.m.	SATELLITE LUNCH	
1:30–3:30 p.m.	HANDS-ON HEART DISSECTION MASTER CLASS: PUTTING IT ALL TOGETHER BY CUTTING IT APART!	Panelists: <i>John D. Carroll, M.D., MSCAI, Ted Feldman, M.D., MSCAI, Isaac George, M.D., Samir R. Kapadia, M.D., FSCAI, John M. Lasala, M.D., Ph.D., MSCAI, John C. Messenger, M.D., FSCAI, Pinak Bipin Shah, M.D., FSCAI, and Molly Szerlip, M.D., FSCAI</i>
3:30–4:00 p.m.	VISIT EXHIBITS	

Monday, December 11 (continued)

4:00–5:30 p.m.	COMPLEX PERIPHERAL VASCULAR INTERVENTION	<i>Moderators: Sahil A. Parikh, M.D., FSCAI and Kenneth Rosenfield, M.D., MHCDS, MSCAI</i>
4:00–4:10 p.m.	PAD 101: Noninvasive and Invasive Training Requirements	<i>Sahil A. Parikh, M.D., FSCAI</i>
4:10–4:20 p.m.	Aortoiliac Disease	<i>Andrew J. Klein, M.D., FSCAI</i>
4:20–4:30 p.m.	Femoropopliteal Disease	<i>Mehdi Shishehbor, D.O., M.P.H., Ph.D., FSCAI</i>
4:30–4:45 p.m.	Fellows Case: Complex Lower Extremity Intervention	<i>TBD</i>
4:45–4:55 p.m.	CLI Basics	<i>Ehrin J. Armstrong, M.D., M.A.S., FSCAI</i>
4:55–5:05 p.m.	Carotid Stenosis	<i>Herbert D. Aronow, M.D., FSCAI</i>
5:05–5:15 p.m.	Pulmonary Embolism	<i>Kenneth Rosenfield, M.D., MHCDS, MSCAI</i>
5:15–5:30 p.m.	Discussion	
5:30–7:15 p.m. SATELLITE DINNER		

Tuesday, December 12

6:45–8:15 a.m. BREAKFAST		
8:30–10:00 a.m.	STRUCTURAL HEART DISEASE AND INTERVENTION PART II	<i>Moderators: John M. Lasala, M.D., Ph.D., MSCAI and John C. Messenger, M.D., FSCAI</i>
8:30–8:40 a.m.	Holes and Leaks: Primer on Occluders and Plugs	<i>John M. Lasala, M.D., Ph.D., MSCAI</i>
8:40–8:50 a.m.	Tips and Tricks: Mitral Valvuloplasty and MitraClip	<i>Ted Feldman, M.D., MSCAI</i>
8:50–9:00 a.m.	Percutaneous Mitral Valve: Replace or Repair?	<i>John D. Carroll, M.D., MSCAI</i>
9:00–9:15 a.m.	Fellows Case: Mitral Valve Therapy	<i>TBD</i>
9:15–9:25 a.m.	Emerging Indications for Percutaneous Valve Therapy	<i>Molly Szerlip, M.D., FSCAI</i>
9:25–9:35 a.m.	Getting You and Your Patient Out of Trouble	<i>Pinak Bipin Shah, M.D., FSCAI</i>
9:35–9:45 a.m.	Discussion	<i>Panel</i>
10:00–10:15 a.m. BREAK		
10:15–11:15 a.m. MY MOST INSTRUCTIVE CASES OF THE YEAR (CORONARY, PERIPHERAL, STRUCTURAL)		
10:15–10:30 a.m.	Coronary	<i>Douglas E. Drachman, M.D., FSCAI</i>
10:30–10:45 a.m.	Peripheral	<i>Sahil A. Parikh, M.D., FSCAI</i>
10:45–11:00 a.m.	Structural	<i>John C. Messenger, M.D., FSCAI</i>
11:00–11:15 a.m. CLOSING		



Saturday, December 9

6:45–8:00 a.m. SATELLITE BREAKFAST		
8:00–10:00 a.m.	INTRODUCTION TO A CAREER IN CONGENITAL INTERVENTIONS: CATH LAB, EQUIPMENT, ACCESS, AND CAREER ADVICE	Moderators: <i>Damien Kenny M.D., FSCAI and Evan M. Zahn, M.D., FSCAI</i>
8:00–8:10 a.m.	Welcome: Course Overview and Introductions	<i>Damien Kenny, M.D., FSCAI</i>
8:10–8:25 a.m.	Contemporary Landscape of Congenital Interventions	<i>Jamil Aboulhosn, M.D., FSCAI</i>
8:25–8:40 a.m.	Ten Tips for Building a Successful Career in Congenital Catheterization	<i>Darren P. Berman, M.D., FSCAI</i>
8:40–8:55 a.m.	How to Build a Cath Lab Team	<i>Evan M. Zahn, M.D., FSCAI</i>
8:55–9:10 a.m.	Stock and Inventory Systems for Your Cath Lab	<i>Daniel S. Levi, M.D., FSCAI</i>
9:10–9:25 a.m.	Vascular Access and Vascular Closure Devices	<i>Ziyad M. Hijazi, M.D., M.P.H., MSCAI</i>
9:25–9:35 a.m.	Case Presentation: What Would You Do?	<i>Damien Kenny, M.D., FSCAI</i>
9:35–9:50 a.m.	Discussion	<i>All Faculty</i>
9:50–10:00 a.m.	Presidential Address	<i>Kirk N. Garratt, M.D., M.Sc., FSCAI</i>
10:00–10:30 a.m. VISIT EXHIBITS		
10:30 a.m.–12:05 p.m.	DIAGNOSTIC CATHETERIZATION IN CHD	Moderators: <i>V. Vivian Dimas, M.D., FSCAI and Daniel S. Levi, M.D., FSCAI</i>
10:30–10:45 a.m.	Basic Hemodynamic Assessment: Waveforms, Shunt Calculations and Cardiac Output Assessment	<i>V. Vivian Dimas, M.D., FSCAI</i>
10:45–11:00 a.m.	Advanced Hemodynamic Assessment: Case-Based Examples of Pulmonary Hypertension and Decision Making	<i>Darren P. Berman, M.D., FSCAI</i>
11:00–11:15 a.m.	10 Tips for Great Angiography	<i>Thomas K. Jones, M.D., FSCAI</i>
11:15–11:30 a.m.	Provocative Testing in the Cath Lab: Is It Worth It?	<i>Jamil Aboulhosn, M.D., FSCAI</i>
11:30–11:45 a.m.	Diagnostic/Angiographic Interactive Case Presentation	<i>Matthew J. Gillespie, M.D., FSCAI</i>
11:45–11:55 a.m.	Diagnostic Case: What Would You Do?	<i>Daniel S. Levi, M.D., FSCAI</i>
11:55 a.m.–12:05 p.m.	Discussion	
12:15–1:30 p.m. SATELLITE LUNCH		

Saturday, December 9 (continued)

1:40–3:30 p.m.	INTERVENTIONS ON THE ATRIAL SEPTAL DEFECT (ASD)	Moderators: <i>Matthew J. Gillespie, M.D., FSCAI, Ziyad M. Hijazi, M.D., M.P.H., MSCAI</i>
1:40–1:55 p.m.	Imaging Assessment of the ASD: Examples of Challenging Anatomy	<i>Craig E. Fleishman, M.D.</i>
1:55–2:15 p.m.	Debate: The Rematch—ASD Closure Using the Amplatzer Device Is Superior to the Gore Device	Pro — <i>V. Vivian Dimas, M.D., FSCAI</i> Con — <i>Matthew J. Gillespie, M.D., FSCAI</i>
2:15–2:30 p.m.	Closure of PFOs and ASDs Using OUS Devices	<i>Ziyad M. Hijazi, M.D., M.P.H., MSCAI</i>
2:30–2:45 p.m.	Opening the Atrial Septum: From Septostomy to Treatment of Heart Failure	<i>V. Vivian Dimas, M.D., FSCAI</i>
2:45–3:00 p.m.	Techniques for Closing Difficult ASDs	<i>Gareth J. Morgan, MBBS, Ba.O., M.Phil., FSCAI</i>
3:00–3:20 p.m.	ASDs: Cases I Would Have Done Differently	<i>Evan M. Zahn, M.D., FSCAI</i>
3:20–3:30 p.m.	Discussion	<i>All Faculty</i>
3:30–4:00 p.m.	VISIT EXHIBITS	
4:00–5:30 p.m.	VENTRICULAR SEPTUM DEFECTS (VSDS): IMAGING AND DEVICE CLOSURE	Moderators: <i>Darren P. Berman, M.D., FSCAI and Damien Kenny, M.D., FSCAI</i>
4:00–4:15 p.m.	Imaging Evaluation of the VS	<i>Craig E. Fleishman, M.D.</i>
4:15–4:30 p.m.	Transcatheter Closure of Muscular and Perimembranous VSD	<i>Ziyad M. Hijazi, M.D., M.P.H., MSCAI</i>
4:30–4:45 p.m.	Retrograde VSD Closure	<i>Damien Kenny, M.D., FSCAI</i>
4:45–5:00 p.m.	Periventricular Closure of Muscular VSD	<i>Thomas K. Jones, M.D., FSCAI</i>
5:00–5:15 p.m.	Interactive Case Presentation: Decision Making in VSD Closure	<i>Darren P. Berman, M.D., FSCAI</i>
5:15–5:25 p.m.	VSD Case: What I Would Have Done Differently	<i>Gareth J. Morgan, MBBS, Ba.O., M.Phil., FSCAI</i>
5:25–5:30 p.m.	Discussion	
5:30–6:30 p.m.	WELCOME RECEPTION	
6:30–8:00 p.m.	SATELLITE DINNER	



Sunday, December 10

6:45–8:00 a.m.	SATELLITE BREAKFAST	
8:00–9:30 a.m.	EMBOLIZATION THERAPY: AORTOPULMONARY COLLATERAL (APC), CORONARY FISTULAS, ARTERIOVENOUS MALFORMATION (AVMS), AND PATENT DUCTUS ARTERIOSUS (PDAS)	Moderators: <i>Daniel S. Levi, M.D., FSCAI</i> and <i>Matthew J. Gillespie, M.D., FSCAI</i>
8:00–8:15 a.m.	APCs and Coronary Artery Fistulas	<i>Gareth J. Morgan, MBBS, Ba.O., M.Phil., FSCAI</i>
8:15–8:30 a.m.	PAVMs and Venovenous Collaterals	<i>Matthew J. Gillespie, M.D., FSCAI</i>
8:30–8:45 a.m.	Do’s and Don’t’s of PDA Closure	<i>Daniel S. Levi, M.D., FSCAI</i>
8:45–9:00 a.m.	PDA Stenting: Which Cases to Start With	<i>Matthew J. Gillespie, M.D., FSCAI</i>
9:00–9:15 a.m.	PDA Closure in the Very Small Infant: Interactive Case Presentation	<i>Evan M. Zahn, M.D., FSCAI</i>
9:15–9:30 a.m.	Discussion	
9:30–11:15 a.m.	QUALITY IMPROVEMENT: COMPLICATIONS, RETRIEVALS AND SAFETY	Moderators: <i>Darren P. Berman, M.D., FSCAI</i> and <i>V. Vivian Dimas, M.D., FSCAI</i>
9:30–9:45 a.m.	Radiation Safety in the Cath Lab	<i>V. Vivian Dimas, M.D., FSCAI</i>
9:45–10:00 a.m.	Retrieval: Tips and Tricks	<i>Jamil Aboulhosen, M.D., FSCAI</i>
10:00–10:15 a.m.	Registries, Risk Calculators, and Adjusted Risk Models	<i>Gareth J. Morgan, MBBS, Ba.O., M.Phil., FSCAI</i>
10:15–10:30 a.m.	Vascular Complications and Management	<i>Eric Horlick, M.D., FSCAI</i>
10:30–10:45 a.m.	Pericardiocentesis: Indications and Techniques in Pediatric and Adult Patients	<i>Damien Kenny, M.D., FSCAI</i>
10:45–11:00 a.m.	Interactive Case Presentation of Retrieval Technique	<i>V. Vivian Dimas, M.D., FSCAI</i>
11:00–11:15 a.m.	Discussion	<i>All Faculty</i>
11:15 a.m.–12:45 p.m.	BREAK AND EXHIBIT HALL TOUR	
12:45–1:30 p.m.	LUNCH	

Sunday, December 10 *(continued)*

1:30–3:30 p.m.	PULMONARY VALVE INTERVENTIONS	Moderators: Ziyad M. Hijazi, M.PH., M.D., MSCAI and Thomas K. Jones, M.D., FSCAI
1:30–1:45 p.m.	Imaging Assessment of the Pulmonary Valve in Stenosis/Atresia and Regurgitation	Craig E. Fleishman, M.D.
1:45–2:00 p.m.	Balloon Valvuloplasty/RF Perforation for Patients With Critical PS and/or Pulmonary Atresia With Intact Ventricular Septum (PA/IVS)	Daniel S. Levi, M.D., FSCAI
2:00–2:15 p.m.	My Approach: Pulmonary Valve Implantation With the Edwards Sapien Valve	Jamil Aboulhosen, M.D., FSCAI
2:15–2:30 p.m.	My Approach: Pulmonary Valve Implantation Medtronic Melody Valve	Darren P. Berman, M.D., FSCAI
2:30–2:45 p.m.	Options for Native Outflow Tract Transcatheter Pulmonary Valve Replacement	Evan M. Zahn, M.D., FSCAI
2:45–3:00 p.m.	Transcatheter Pulmonary Valve Implantation: Interactive Case Presentation	Thomas K. Jones, M.D., FSCAI
3:00–3:15 p.m.	Case Presentation: Venus Valve	Ziyad M. Hijazi, M.D., M.PH. MSCAI
3:15–3:30 p.m.	Discussion	All Faculty
3:30–4:00 p.m.	VISIT EXHIBITS	
4:00–5:30 p.m.	IMAGING: CROSS SECTIONAL, TEE, AND ICE IN THE CONGENITAL CATH LAB	Craig E. Fleishman, M.D. and Evan M. Zahn, M.D., FSCAI
4:00–4:15 p.m.	Debate: TEE Imaging and Why It Is Better Than ICE in the Congenital Cath Lab	Craig E. Fleishman, M.D.
4:15–4:30 p.m.	Debate: ICE for Imaging and Why It Is Preferred for Congenital Interventions	Ziyad M. Hijazi, M.D., M.PH., MSCAI
4:30–4:45 p.m.	Advanced Multi-planar Imaging in the Cath Lab	Evan M. Zahn, M.D., FSCAI
4:45–5:00 p.m.	How and Why to Image the Coronaries in CHD	Eric Horlick, M.D., FSCAI
5:00–5:15 p.m.	Interactive Case Presentation: Using Echo to Guide Newer Interventions in the Cath Lab	Gareth J. Morgan, MBBS, Ba.O., M.Phil., FSCAI
5:15–5:30 p.m.	Discussion	
6:30–8:00 p.m.	SATELLITE DINNER	



Monday, December 11

6:45–8:00 a.m.	SATELLITE BREAKFAST	
8:00–10:00 a.m.	ANGIOPLASTY: CONVENTIONAL AND CUTTING BALLOONS—INDICATIONS, PREPARATIONS, TECHNIQUES, AND OUTCOMES	Moderators: <i>Damien Kenny, M.D., FSCAI and Evan M. Zahn, M.D., FSCAI</i>
8:00–8:15 a.m.	Ten Tips for Successful Pulmonary Artery (PA) Interventions	<i>Gareth J. Morgan, MBBS, Ba.O., M.Phil., FSCAI</i>
8:15–8:30 a.m.	Angioplasty: Conventional and Cutting Balloons, Indications, Preparations, Techniques, and Outcomes	<i>Evan M. Zahn, M.D., FSCAI</i>
8:30–8:45 a.m.	Stent Implantation for PPS: Indications, Types of Stents, Technique of Deployment, Complications, and Outcomes	<i>V. Vivian Dimas, M.D., FSCAI</i>
8:45–9:00 a.m.	Interventions on the Distal MPA and Proximal Branch PA's	<i>Ziyad M. Hijazi, M.D., M.P.H., MSCAI</i>
9:00–9:15 a.m.	PA Intervention: Interactive Case Presentation	<i>Jamil Abouhosen, M.D., FSCAI</i>
9:15–9:30 a.m.	RVOT Stenting in Infants With Tetralogy of Fallot	<i>Damien Kenny, M.D., FSCAI</i>
9:30–9:45 a.m.	Hybrid PA Stent Case: What Would You Do?	<i>Darren P. Berman, M.D., FSCAI</i>
9:45–10:00 a.m.	Discussion	<i>All Faculty</i>
10:00–10:30 a.m.	VISIT EXHIBITS	
10:30 a.m.–12:10 p.m.	INTERVENTIONS FOR AORTIC VALVE AND AORTIC COARCTATION	Moderators: <i>Craig E. Fleishman, M.D. and Daniel S. Levi, M.D., FSCAI</i>
10:30–10:45 a.m.	Imaging Assessment of Aortic Stenosis /Aortic Regurgitation	<i>Craig E. Fleishman, M.D.</i>
10:45–11:00 a.m.	Balloon Aortic Valvuloplasty in Infants and Children: Indications, Techniques, and Outcomes	<i>Daniel S. Levi, M.D., FSCAI</i>
11:00–11:15 a.m.	Alternative Access Options for Interventions Around the Aorta	<i>Damien Kenny, M.D., FSCAI</i>
11:15–11:30 a.m.	Coarctation Stenting in Adults	<i>Eric Horlick, M.D., FSCAI</i>
11:30–11:45 a.m.	Coarctation Stenting and Angioplasty in Infants and Children: Indications, Guidelines, Techniques, and Outcomes	<i>Daniel S. Levi, M.D., FSCAI</i>
11:45–noon	Aortic Intervention: Interactive Case Presentation	<i>Eric Horlick, M.D., FSCAI</i>
Noon–12:10 p.m.	Discussion	<i>All Faculty</i>
12:20–1:35 p.m.	SATELLITE LUNCH	
1:45–3:30 p.m.	HYBRID INTERVENTIONS: HYPOPLASTIC LEFT HEART SYNDROME (HLHS), ATRIAL SEPTOSTOMY, AND MORE	Moderators: <i>Darren P. Berman, M.D., FSCAI and Craig E. Fleishman, M.D.</i>
1:45–2:00 p.m.	Echo Assessment of HLHS	<i>Craig E. Fleishman, M.D.</i>
2:00–2:15 p.m.	Ten Tips on How to Develop a Successful Hybrid Culture in Your Center	<i>Thomas K. Jones, M.D., FSCAI</i>
2:15–2:30 p.m.	Hybrid Management of HLHS: Indications, Techniques, and Outcomes	<i>Darren P. Berman, M.D., FSCAI</i>
2:30–2:45 p.m.	Hybrid Procedures: Alternate Approaches to Stenting and Transcatheter Valve Placement	<i>Damien Kenny, M.D., FSCAI</i>
2:45–3:00 p.m.	Interventions Outside the Heart	<i>Matthew J. Gillespie M.D., FSCAI</i>

Monday, December 11 *(continued)*

3:00–3:15 p.m.	Case Presentation: What Would You Do?	<i>Thomas K. Jones, M.D., FSCAI</i>
3:15–3:30 p.m.	Discussion	<i>All Faculty</i>
3:30–4:00 p.m. VISIT EXHIBITS		
4:00–5:30 p.m. THE ADULT WITH CHD		
4:00–4:15 p.m.	Ten Reasons Your 60-Year-Old Is Not a 6-Year-Old	<i>V. Vivian Dimas, M.D., FSCAI and Eric Horlick, M.D., FSCAI</i>
4:15–4:30 p.m.	Catheterization of Adults With Single Ventricles	<i>Eric Horlick, M.D., FSCAI</i>
4:30–4:45 p.m.	Interventions in Adults With PAH	<i>Jamil Aboulhosen, M.D., FSCAI</i>
4:45–5:00 p.m.	Catheterization of Adults After TGA Repair	<i>Darren P. Berman, M.D., FSCAI</i>
5:00–5:15 p.m.	Adult Case: Atrioventricular (AV) Valve	<i>Eric Horlick, M.D., FSCAI</i>
5:15–5:30 p.m.	Discussion	<i>Jamil Aboulhosen, M.D., FSCAI</i>
5:30–6:30 p.m. FELLOWS CASE PRESENTATIONS: PART I		
5:30–5:40 p.m.	Case 1	<i>TBD</i>
5:40–5:50 p.m.	Case 2	<i>TBD</i>
5:50–6:00 p.m.	Case 3	<i>TBD</i>
6:00–6:10 p.m.	Case 4	<i>TBD</i>
6:10–6:20 p.m.	Case 5	<i>TBD</i>
6:20–6:30 p.m.	Discussion	<i>TBD</i>
6:30–7:30 p.m.	JEOPARDY	<i>Moderators: Jamil Aboulhosen, M.D., FSCAI and Daniel S. Levi, M.D., FSCAI</i>

Tuesday, December 12

7:00–8:15 a.m. BREAKFAST SATELLITE		
8:30–10:00 a.m. HANDS-ON HEART DISSECTION MASTER CLASS: PUTTING IT ALL TOGETHER BY CUTTING IT APART!		
10:00–10:15 a.m. BREAK		
10:15–11:15 a.m. FELLOWS CASE PRESENTATIONS: PART II		
10:15–10:25 a.m.	Case 1	<i>Daniel S. Levi, M.D., FSCAI and Damien Kenny, M.D., FSCAI</i>
10:25–10:35 a.m.	Case 2	<i>TBD</i>
10:35–10:45 a.m.	Case 3	<i>TBD</i>
10:45–10:55 a.m.	Case 4	<i>TBD</i>
10:55–11:05 a.m.	Case 5	<i>TBD</i>
11:05–11:15 a.m.	Closing	<i>TBD</i>