



2018

FALL FELLOWS

PRELIMINARY PROGRAM

The Cosmopolitan of Las Vegas
December 7-11, 2018
www.scai.org/fellows

Preparing the Future of Interventional Cardiology

Adult Interventional Cardiology Fellows Course



John C. Messenger, MD, FSCAI
Program Chair
Aurora, CO



Sahil A. Parikh, MD, FSCAI
Program Co-Chair
New York, NY



Herbert D. Aronow, MD, MPH, FSCAI
Program Co-Chair
Providence, RI

Congenital Heart Disease Interventional Cardiology Fellows Course



Evan M. Zahn, MD, FSCAI
Program Chair
Los Angeles, CA



Jamil A. AboulHosn, MD, FSCAI
Program Co-Chair
Los Angeles, CA



V. Vivian Dimas, MD, FSCAI
Program Co-Chair
Dallas, TX

Advanced Structural Heart Disease Interventional Cardiology Fellows Course



John M. Lasala, MD, PhD, MSCAI
Track Co-Director
St. Louis, MO



Chad Kliger, MD, FSCAI
Track Co-Director
New York, NY

Invited Faculty

J. Dawn Abbott, MD, FSCAI
Providence, RI

Jamil A. AboulHosn, MD, FSCAI
Encino, CA

Zahid C. Amin, MD, MSCAI
Augusta, GA

Aimee K. Armstrong, MD, FSCAI
Columbus, OH

Herbert D. Aronow, MD, MPH, FSCAI
Providence, RI

Darren P. Berman, MD, FSCAI
Columbus, OH

Cathleen Biga, RN, MSN
Woodridge, IL

Emmanouil S. Brilakis, MD, PhD, FSCAI
Minneapolis, MN

John D. Carroll, MD, MSCAI
Aurora, CO

Victor R. Cotton, MD, JD
Hershey, PA

David A. Cox, MD, MSCAI
Mountain Brook, AL

V. Vivian Dimas, MD, FSCAI
Dallas, TX

Douglas E. Drachman, MD, FSCAI
Boston, MA

Danny Dvir, MD
Seattle, WA

Ted E. Feldman, MD, MSCAI
Evanston, IL

Craig Fleishman, MD
Orlando, FL

Ruchira Garg, MD
Los Angeles, CA

Matthew J. Gillespie, MD, FSCAI
Philadelphia, PA

Beau M. Hawkins, MD, FSCAI
Oklahoma City, OK

Timothy D. Henry, MD, MSCAI
Los Angeles, CA

Ziyad M. Hijazi, MD, MSCAI
Doha, Qatar

Eric Horlick, MD, FSCAI
Toronto, Canada

Navin K. Kapur, MD, FSCAI
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Clifford J. Kavinsky, MD, PhD, MSCAI
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William W. O'Neill, MD, MSCAI
Detroit, MI

Puja B. Parikh, MD, MPH, FSCAI
Stony Brook, NY

Sahil A. Parikh, MD, FSCAI
New York, NY

Matthew J. Price, MD, FSCAI
La Jolla, CA

Sunil V. Rao, MD, FSCAI
Durham, NC

Rahul Sakhuja, MD, MPP, MSc, FSCAI
Lexington, MA

Jacqueline Saw, MD, FSCAI
Vancouver, Canada

Arnold H. Seto, MD, FSCAI
Long Beach, CA

Binita Shah, MD, FSCAI
New York, NY

Pinak Bipin Shah, MD, FSCAI
Boston, MA

Shabana Shahanavaz, MBBS, FSCAI
St. Louis, MO

Paul Sorajja, MD, FSCAI
Minneapolis, MN

Molly Szerlip, MD, FSCAI
Plano, TX

Jennifer A. Tremmel, MD, MS, FSCAI
Stanford, CA

Stephen W. Waldo, MD
Denver, CO

Frederick G. Welt, MD, FSCAI
Salt Lake City, UT

Dominik Wiktor, MD
Denver, CO

Robert W. Yeh, MD, MSc, MBA, FSCAI
Boston, MA

Evan Zahn, MD, FSCAI
Los Angeles, CA



Course Overview

The SCAI 2018 Fall Fellows Courses will provide a dynamic and engaging 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 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

1. Select the fundamental equipment for the typical cardiac cath lab, including guidewires, guide catheters, stents, and balloons.
2. Describe the clinical trials data related to PCI in the left main and in multivessel disease and apply these insights to real-world clinical scenarios.
3. Integrate appropriate use criteria with day-to-day practice, particularly for PCI therapy utilization.
4. Integrate the use of various imaging modalities including IVUS, OCT, and FFR.
5. Describe the mechanics of support devices, including the rationale for device selection, prophylactic, and bailout support.
6. Analyze case selection for surgical compared to transcatheter aortic and mitral valve repair and replacement.
7. Describe the benefits and risks of radial versus femoral access and assess the management of complications.
8. Apply techniques for complex coronary intervention including atherectomy, bifurcation stenting, and chronic total occlusions as well as case presentations.
9. Recognize the indications for intervention in acute coronary syndrome (ACS).
10. Apply appropriate adjunctive pharmacotherapy for coronary intervention, including anti-thrombin and anti-platelet strategies.
11. Define approaches to preventing complications, as well as methods for getting out of trouble when complications do occur.

12. Recognize the indications and describe the techniques for elective, urgent and emergent lower extremity arterial revascularization.
13. Describe the evidence base supporting and techniques employed for carotid revascularization in asymptomatic and symptomatic patients.
14. Explain the rationale and procedural techniques for treating aortic, renal artery and mesenteric artery disease.
15. Describe the clinical indications and procedural techniques for performing left atrial appendage occlusion, ASD/PFO and paravalvular leak closure.

Congenital Heart Disease Interventional Cardiology Fellows Course

1. 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 improve safety.
3. Explain the complete hemodynamic assessment of congenital cardiac defects, including left-to-right shunt and right-to-left shunt lesions.
4. Explain what hemodynamics are critical for Pre-Glenn and Pre-Fontan procedures.
5. Recognize the various diseases that present in adults with congenital heart disease (CHD) and their management.

6. Discuss 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. ASD's with both the Amplatzer and Cardioform 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. Describe the procedures that are often needed in the setting of HLHS.
11. Explain the role of ECMO and other ventricular support devices in the cath lab.

Learning Objectives

(continued)

Advanced Structural Heart Disease Interventional Cardiology Fellows Course

1. Achieve a comprehensive understanding of intracardiac ultrasound with the ability to manipulate the ICE catheter to achieve standard views and identify normal and abnormal intracardiac anatomy.
2. Review concept and applications of fusion imaging (CTA-fluoro, TEE-fluoro, and CTA-TEE-fluoro) along with interactive case-based simulation.
3. Recognize necessary imaging (Echo/ICE/CT/Fusion) of atrial septal structures and different morpho-spatial pathologic variants.
4. Employ the interventional skills for percutaneous transseptal puncture using appropriate transseptal sheaths, wires, needles, and other access devices such as radiofrequency ablation.
5. Achieve the following goals pertinent to transcatheter therapy for patent foramen ovale closure, atrial septal defect closure, left atrial appendage occlusion, transcatheter aortic valve replacement, transcatheter mitral valve repair, and valve-in-valve therapy:
 - a. Utilize anatomical dissections, using animal, cadaveric, and 3-D models, important intracardiac and extracardiac structures
 - b. Choose the imaging (Echo/ICE/CT/Fusion) required for pre-procedural planning and intra-procedural guidance
 - c. Review the interventional equipment and technical skills/steps required while performing case-based simulation in a multitude of scenarios
 - d. Discuss complications utilizing case-based simulation and device-anatomy correlation
6. Review steps and perform post-processing CTA analysis for TAVR.
7. Discuss novel techniques associated with TAVR: valve fracturing, BASILICA, and coronary protection.

Scholarship Information

Scholarship

To attend the SCAI 2018 Fall Fellows Courses taking place at The Cosmopolitan of Las Vegas (3708 S. Las Vegas Boulevard, Las Vegas, NV 89109) on December 7-11, 2018, interventional Fellows-in-Training must receive a Fall Fellows Scholarship. The Fall Fellows Scholarship includes:

- Complimentary tuition for the course
- Complimentary hotel accommodations at The Cosmopolitan of Las Vegas (Adult & Congenital Course: four nights, Friday-Tuesday, Advanced Course: two nights, Friday-Sunday)
- Attendees coming from the U.S. or Canada are eligible to be reimbursed for coach airfare to/from Las Vegas up to \$500 (restrictions do apply).

Eligibility

Adult Interventional Course (December 7-11):

- You are currently in an ACGME accredited interventional cardiology fellowship program in the U.S. or Canada and have not previously attended the SCAI Fall Fellows Course.

Congenital Interventional Course (December 7-11):

- You are in the third or fourth year of a pediatric cardiology fellowship in the U.S. or an international program, interested in cardiac catheterization, and have not previously attended the SCAI Fall Fellows Course. Preference is given to fellows training in the U.S.

Advanced Structural Course (December 7-9)

- You are currently in a structural fellowship program in the U.S. and Canada or have been accepted into one for the 2019-20 academic year. Please note, preference will be given to those currently in a structural fellowship. (You may have previously attended the SCAI Fall Fellows Course.)

For questions regarding registration, please contact Rosie Haller-Kaplan at rhkaplan@scai.org.

International Attendees

Please note that international slots for the adult and structural courses have already been filled. Each year SCAI sets aside a specific number of scholarships for its adult interventional course for attendees outside of the U.S. and Canada. These scholarships are distributed amongst SCAI's international societal partners who determine how fellows are selected. Interested in hosting a SCAI Fellows Course in your country or region? Please contact Eric Grammer at egrammer@scai.org.

Commercial Support

SCAI 2018 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 7

2:00-8:00 p.m. SATELLITES

8:00-9:30 p.m. SCAI WOMEN IN INNOVATIONS (WIN) DESSERT RECEPTION
(for female interventionalists)

Saturday, December 8

7:15-8:15 a.m. SATELLITE BREAKFAST

8:25-8:30 a.m. WELCOME

8:30-10:00 a.m.	GEARING UP: TOOLS, STRATEGIES, AND DRUGS FOR OPTIMAL INTERVENTION	Moderators: Herbert D. Aronow, MD, MPH, FSCAI and John C. Messenger, MD, FSCAI
8:30-8:50 a.m.	Guides and Wires	Robert W. Yeh, MD, MSc, MBA, FSCAI
8:50-9:05 a.m.	Balloons and Stents	J. Dawn Abbott, MD, FSCAI
9:05-9:15 a.m.	Oops, I Didn't Quite See That: Strategies for Flawless Angiography	Binita Shah, MD, FSCAI
9:15-9:30 a.m.	Fellows Case: Anticoagulation Management	TBD
9:30-9:45 a.m.	Optimal Antiplatelet Therapy Before, During, and After PCI	Matthew J. Price, MD, FSCAI
9:45-10:00 a.m.	Intraprocedural Antithrombin Therapy in PCI	Sunil V. Rao, MD, FSCAI
10:00-10:30 a.m.	BREAK/VISIT EXHIBITS	

All faculty are subject to change.

Saturday, December 8 (continued)

10:30 a.m.-noon		WHEN THE GOING GETS TOUGH: STEP-BY-STEP APPROACH FOR THE CHALLENGES OF VASCULAR ACCESS	Moderators: Douglas E. Drachman, MD, FSCAI and Sunil V. Rao, MD, FSCAI
10:30-10:42 a.m.	Tips and Tricks for Radial Access		Sunil V. Rao, MD, FSCAI
10:42-10:54 a.m.	Radial Access Complications		Jennifer A. Tremmel, MD, MS, FSCAI
10:54-11:06 a.m.	Large-Sheath Access and Closure		Ehtisham Mahmud, MD, FSCAI
11:06-11:18 a.m.	How I Do It: Ultrasound Access Wrist, Groin, and Neck		Arnold H. Seto, MD, FSCAI
11:18-11:30 a.m.	Femoral Access Disasters		Douglas E. Drachman, MD, FSCAI
11:30-11:45 a.m.	My Most Challenging Transradial Cases		Jennifer A. Tremmel, MD, MS, FSCAI
11:45 a.m.-noon	Fellows Case: Complication or Complex Access		TBD
12:15-1:15 p.m. SATELLITE LUNCH			
1:30-4:00 p.m.			
Group 1	Group 2	EXHIBIT HALL TOUR	
1:30-2:45 p.m.	2:45-4:00 p.m.	Abbott—Robert W. Yeh, MD, MSc, MBA, FSCAI; Abiomed—Morton J. Kern, MD, MSCAI; B. Braun Medical—TBD; Boston Scientific—Emmanouil S. Brilakis, MD, PhD, FSCAI; Cardiovascular Systems, Inc.—John C. Messenger, MD, FSCAI; Cook Medical—TBD; Cordis, A Cardinal Health Company—J. Dawn Abbott, MD, FSCAI; Edwards Lifesciences—Rahul Sakhuja, MD, MPP, MSc, FSCAI; Getinge—TBD; Medtronic—David A. Cox, MD, MSCAI; TandemLife—Arnold H. Seto, MD, FSCAI; W.L. Gore & Associates—Matthew J. Price, MD, FSCAI	
Group 1	Group 2	WHAT WOULD YOU DO? CASE REVIEWS WITH THE EXPERTS!	
2:45-4:00 p.m.	1:30-2:45 p.m.	Review Case as a Group Moderators: Douglas E. Drachman, MD, FSCAI and Sahil A. Parikh, MD, FSCAI Small Group Leaders: Herbert D. Aronow, MD, MPH, FSCAI; Ehtisham Mahmud, MD, FSCAI; James M. McCabe, MD, FSCAI; Puja B. Parikh, MD, MPH, FSCAI; Jaqueline Saw, MD, FSCAI; Binita Shah, MD, FSCAI; Jennifer A. Tremmel, MD, MS, FSCAI; Frederick G. Welt, MD, FSCAI; Dominik Wiktor, MD	
4:00-4:30 p.m. BREAK/VISIT EXHIBITS			

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Saturday, December 8 (continued)

4:30-5:45p.m.	CATH LAB DISASTERS: WHAT TO DO WHEN CASES GO BAD	Moderators: John C. Messenger, MD, FSCAI and Sahil A. Parikh, MD, FSCAI
4:30-4:40 p.m.	Perforations: Old Faithful	Robert W. Yeh, MD, MSc, MBA, FSCAI
4:40-4:50 p.m.	Abrupt Closure: Honey, I Shut Down the Artery	Puja B. Parikh, MD, MPH, FSCAI
4:50-5:00 p.m.	Massive Thrombus: Clot Happens	Rahul Sakhuja, MD, MPP, MSc, FSCAI
5:00-5:15 p.m.	Rapid-Fire Case Review With Panel Discussion	Moderator: Herbert D. Aronow, MD, MPH, FSCAI
5:15-5:25 p.m.	Peripheral Skills to Bail Yourself Out of Trouble	Sahil A. Parikh, MD, FSCAI
5:25-5:35 p.m.	Great Case, Too Bad He's on Dialysis: Managing Contrast	Binita Shah, MD, FSCAI
5:35-5:45 p.m.	Device Entrapment: I Think I'm Stuck	James M. McCabe, MD, FSCAI
5:45-6:45 p.m.	WELCOME RECEPTION (includes Cases Over Cocktails)	Case Presenters: Herbert D. Aronow, MD, MPH, FSCAI; John C. Messenger, MD, FSCAI; Sahil A. Parikh, MD, FSCAI
7:00-8:30 p.m.	SATELLITE DINNER: KEYNOTE SPEAKER	

Sunday, December 9

7:15-8:15 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: Emmanouil S. Brilakis, MD, PhD, FSCAI and Frederick G. Welt, MD, FSCAI
8:30-8:45 a.m.	Multivessel Disease: PCI, Surgery, and Role of the Heart Team	Douglas E. Drachman, MD, FSCAI
8:45-9:00 a.m.	Left Main Disease: My Technical Algorithm	James M. McCabe, MD, FSCAI
9:00-9:15 a.m.	CTO Techniques: Learning, Mastering, and Knowing When to Say When	Emmanouil S. Brilakis, MD, PhD, FSCAI
9:15-9:30 a.m.	Bifurcations 101: Nomenclature and Step-by-Step Techniques	J. Dawn Abbott, MD, FSCAI
9:20-9:35 a.m.	Fellows Case: In-Stent Restenosis	TBD
9:35-9:47 a.m.	Vein Graft Intervention: Love It, Hate It, What to Do When You've Got No Flow	Puja B. Parikh, MD, MPH, FSCAI

Sunday, December 9 (continued)

10:00–10:30 a.m.	BREAK/VISIT EXHIBITS	
10:30–noon	THE ROCK OF GIBRALTAR: TECHNIQUES TO DEAL WITH CALCIFICATION, NONDILATABLE LESIONS, AND TORTUOSITY	Moderators: John C. Messenger, MD, FSCAI and Sahil A. Parikh, MD, FSCAI
10:30–10:40 a.m.	Ain't No Paucity of Tortuosity! How I Deal With Tortuous Lesions	Emmanouil S. Brilakis, MD, PhD, FSCAI
10:40–10:55 a.m.	Heavy-Duty Calcium: How to Spot It, How to Modify It	Rahul Sakhuja, MD, MPP, MSc
10:55–11:15 a.m.	Fellows Case: Calcification, Nondilatable Lesions, and Tortuosity	TBD
11:15–11:25 a.m.	Panel Discussion	Panelists
11:25–11:35 a.m.	Tricky Lesions Require Intravascular Imaging: IVUS and OCT	Arnold H. Seto, MD, FSCAI
11:35–11:50 a.m.	Decision Making in MVD: Role of iFR and FFR	Morton J. Kern, MD, MSCAI
11:50–noon	Discussion	
12:15–1:15 p.m.	CONCURRENT SATELLITE LUNCH 1 AND 2	
1:30–3:00 p.m.	BEST OF CATH LAB BOOT CAMP	Moderators: Herbert D. Aronow, MD, MPH, FSCAI; and John C. Messenger, MD, FSCAI Panelists: Cathleen Biga, RN, MSN; Timothy D. Henry, MD, MSCAI; Morton J. Kern, MD, MSCAI; Roxana Mehran, MD, MSCAI
1:30–1:50 p.m.	AUC for PCI—Getting It Right	John C. Messenger, MD, FSCAI
1:50–2:10 p.m.	Operator Risks: Cancer, Cataract, Reproductive, Orthopedic, and Cardiovascular	Roxana Mehran, MD, MSCAI
2:10–2:30 p.m.	The Nonclinical Competencies: Critical Pearls to Survive Your Transition to the Real World	Cathleen Biga, RN, MSN
2:30–3:00 p.m.	Panel Discussion	Panelists
3:00–3:30 p.m.	BREAK/VISIT EXHIBITS	

All faculty are subject to change.



Sunday, December 9 (continued)

3:30-5:00 p.m.	STEMI, SHOCK, AND HEMODYNAMIC SUPPORT: BETTER DO SOMETHING FAST	Moderators: <i>Timothy D. Henry, MD, MSCAI and Navin K. Kapur, MD, FSCAI</i>
3:30-3:45 p.m.	Optimal STEMI Care in 2018	<i>Timothy D. Henry, MD, MSCAI</i>
3:45-3:55 p.m.	Hemodynamics of Shock	<i>Morton J. Kern, MD, MSCAI</i>
3:55-4:15 p.m.	Best Tool for the Job: IABP, ECMO, or PVAD	<i>Navin K. Kapur, MD, FSCAI</i>
4:15-4:30 p.m.	PCI in Shock: Multivessel vs. Culprit Lesion	<i>Frederick G Welt, MD, FSCAI</i>
4:30-4:50 p.m.	Fellows Case: STEMI, Shock, and Hemodynamic Support	<i>TBD</i>
4:50-5:00 p.m.	Panel Discussion	<i>Panelists</i>
5:00-6:00 p.m.	INTERVENTIONAL JEOPARDY	<i>Morton J. Kern, MD, MSCAI</i>
6:15-7:45 p.m.	SATELLITE DINNER	

Monday, December 10

7:15-8:15 a.m.	SATELLITE BREAKFAST	
8:30-10:00 a.m.	STRUCTURAL HEART DISEASE AND INTERVENTION—PART I	Moderators: <i>John D. Carroll, MD, MSCAI and Ted E. Feldman, MD, MSCAI</i>
8:30-8:42 a.m.	Transseptal 101: Getting Where You Need to Safely	<i>Ted E. Feldman, MD, MSCAI</i>
8:42-8:54 a.m.	PFO Closure: Finally Ready for Prime Time	<i>John D. Carroll, MD, MSCAI</i>
8:54-9:06 a.m.	LAAO: Closing the Door for Stroke?	<i>Molly Szerlip, MD, FSCAI</i>
9:06-9:14 a.m.	Panel Discussion	<i>Panelists</i>
9:14-9:29 a.m.	Fellows Case: Revascularization After TAVR	<i>TBD</i>
9:29-9:41 a.m.	TAVR: Which Device for Which Patient?	<i>Pinak Bipin Shah, MD, FSCAI</i>
9:41-9:53 a.m.	TAVR: Managing Complications	<i>Frederick G. Welt, MD, FSCAI</i>
9:53-10:00 a.m.	Panel Discussion: Training Needs for SHD Interventions	<i>Panelists</i>
10:00-10:40 a.m.	BREAK/VISIT EXHIBITS	
10:45-11:20 a.m.	YOU'VE GRADUATED FROM FELLOWSHIP WHAT NOW?	<i>David A. Cox, MD, MSCAI</i>
10:45-10:57 a.m.	Getting Engaged With SCAI: Opportunities Abound!	<i>David A. Cox, MD, MSCAI</i>
10:57-11:17 a.m.	Free Legal Advice: Your First Contract	<i>Victor R. Cotton, MD, JD</i>
11:17-11:20 a.m.	Discussion	

All faculty are subject to change.

Monday, December 10 *(continued)*

11:20-noon	EARLY CAREER ADVICE AND TRANSITIONS IN PRACTICE	Moderator: Herbert D. Aronow, MD, FSCAI Panelists: Beau M. Hawkins, MD, FSCAI; Andrew J. Klein, MD, FSCAI; Puja B. Parikh, MD, MPH, FSCAI; Binita Shah, MD, FSCAI; Molly Szerlip, MD, FSCAI
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! (ADULT GROUP)	Panelists: John D. Carroll, MD, MSCAI; Ted E. Feldman, MD, MSCAI; John M. Lasala, MD, PhD, MSCAI; John C. Messenger, MD, FSCAI; Puja B. Parikh, MD, MPH, FSCAI; Pinak Bipin Shah, MD, FSCAI; Molly Szerlip, MD, FSCAI
3:30-4:45 p.m.	COMPLEX PERIPHERAL VASCULAR INTERVENTIONS (CPVI)–PART I	Moderators: Herbert D. Aronow, MD, MPH, FSCAI and Sahil A. Parikh, MD, FSCAI
3:30-3:40 p.m.	Alternative Access	Herbert D. Aronow, MD, MPH, FSCAI
3:40-3:50 p.m.	Aortoiliac Disease	Andrew J. Klein, MD, FSCAI
3:50-4:00 p.m.	Femoropopliteal Disease	Sahil A. Parikh, MD, FSCAI
4:00-4:15 p.m.	Fellows Case: Complex Peripheral Vascular Intervention	TBD
4:15-4:25 p.m.	CLI Basics	Stephen Waldo, MD
4:25-4:35p.m.	ALI: What Tricks Do You Need?	Beau M. Hawkins, MD, FSCAI
4:35-4:45 p.m.	Discussion	
5:00-6:30 p.m.	SATELLITE DINNER	

All faculty are subject to change.



Tuesday, December 11

7:15-8:15 a.m. SATELLITE BREAKFAST		
8:30-10:00 a.m.	STRUCTURAL HEART DISEASE AND INTERVENTION—PART II	Moderators: <i>John M. Lasala, MD, PhD, MSCAI and John C. Messenger, MD, FSCAI</i>
8:30-8:40 a.m.	SHD Complications: How to Rescue Your Patient	<i>Pinak Bipin Shah, MD, FSCAI</i>
8:40-8:50 a.m.	Getting Started With MitraClip: What You Need to Know	<i>Ted E. Feldman, MD, MSCAI</i>
8:50-9:00 a.m.	Percutaneous Mitral Valve: The Next Frontier	<i>John D. Carroll, MD, MSCAI</i>
9:00-9:20 a.m.	Fellow's Case: Structural Intervention	<i>John M. Lasala, MD, PhD, MSCAI and John C. Messenger, MD, FSCAI</i>
9:20-9:30 a.m.	Emerging Indications for Percutaneous Valve Therapy	<i>Molly Szerlip, MD, FSCAI</i>
9:30-9:40 a.m.	Plugging the Hole: Occluders and Plugs 101	<i>John M. Lasala, MD, PhD, MSCAI</i>
9:40-10:00 a.m.	Discussion	
10:00-11:00 a.m.	COMPLEX PERIPHERAL VASCULAR INTERVENTIONS (CPVI),—PART II	Moderators: <i>Andrew J. Klein, MD, FSCAI and Beau M. Hawkins, MD, FSCAI</i>
10:00-10:12 a.m.	Carotid Stenosis	<i>Herbert D. Aronow, MD, MPH, FSCAI</i>
10:12-10:24 a.m.	Noninvasive and Invasive Training Requirements	<i>Beau M. Hawkins, MD, FSCAI</i>
10:24-10:36 a.m.	Pulmonary Embolism	<i>Andrew J. Klein, MD, FSCAI</i>
10:36-10:48 a.m.	EVAR/TVAR	<i>Stephen Waldo, MD</i>
10:48-11:00 a.m.	Discussion/Wrap-Up	

All faculty are subject to change.

Friday, December 7

2:00-8:00 p.m. SATELLITES

8:00-9:30 p.m. SCAI WOMEN IN INNOVATIONS (WIN) DESSERT RECEPTION
(for female interventionalists)

Saturday, December 8

7:15-8:15 a.m. SATELLITE BREAKFAST

8:30-10:00 a.m. INTRODUCTION TO A CAREER IN CONGENITAL INTERVENTIONS: CATH LAB, EQUIPMENT, ACCESS, AND CAREER ADVICE **Moderators:** *Jamil A. AboulHosn, MD, FSCAI and Evan Zahn, MD, FSCAI*

8:30-8:40 a.m. Welcome: Course Overview and Introductions *Evan Zahn, MD, FSCAI*

8:40-8:55 a.m. Setting Your Congenital Cath Lab for Success: Tools of the Trade *Daniel S. Levi, MD, FSCAI*

8:55-9:10 a.m. Obtaining Vascular Access: Basics, Complex, Tips, and Tricks *Ziyad M. Hijazi, MD, MSCAI*

9:10-9:25 a.m. Managing Vascular Access: Closure Techniques and Complications *V. Vivian Dimas, MD, FSCAI*

9:25-9:30 a.m. Discussion

9:30-10:00 a.m. Small-Group Sessions/Career Building: Setting Up Your Team, Networking, Working in Various Practice Settings, and Participating in the Congenital Community *All Faculty*

10:00-10:30 a.m. BREAK/VISIT EXHIBITS

10:30-11:50 a.m. CONGENITAL CATHETERIZATION 101: THE BASICS **Moderators:** *Aimee K. Armstrong, MD, FSCAI and Darren P. Berman, MD, FSCAI*

10:30-10:45 a.m. Interactive Case Presentation: Hemodynamics Count *Daniel S. Levi, MD, FSCAI*

10:45-11:00 a.m. Basic Hemodynamic Assessment: Waveforms, Shunt Calculations and Cardiac Output Assessment, and PHTN *V. Vivian Dimas, MD, FSCAI*

11:00-11:15 a.m. 10 Catheter Moves That Make Me Better *Aimee K. Armstrong, MD, FSCAI*

11:15-11:30 a.m. 10 Tips for Great Angiography *Clifford J. Kavinsky, MD, PhD, MSCAI*

11:30-11:40 a.m. Provocative Testing in the Cath Lab: Is It Worth It? *Jamil A. AboulHosn, MD, FSCAI*

11:40-11:50 a.m. Case Presentation: Angiography Counts *Shabana Shahanavaz, MBBS, FSCAI*

All faculty are subject to change.



2018 Fall Fellows Courses

LAS VEGAS • DECEMBER 7-11, 2018

CONGENITAL AND STRUCTURAL PROGRAM

Saturday, December 8 *(continued)*

11:50 a.m.- 12:20 p.m.	LUNCH	
12:20-1:30 p.m.	EXHIBIT HALL TOUR	
	Abbott, B. Braun Medical, Baylis Medical, Edwards Lifesciences, Medtronic, PFM Medical, W.L. Gore & Associates	Aimee K. Armstrong, MD, FSCAI; Darren P. Berman, MD, FSCAI; Ziyad M. Hijazi, MD, MSCAI; Eric Horlick, MD, FSCAI; Daniel S. Levi, MD, FSCAI; Shabana Shahanavaz, MBBS, FSCAI; Evan Zahn, MD, FSCAI
1:40-3:30 p.m.	INTERVENTIONS ON THE ATRIAL SEPTUM	Moderators: Ruchira Garg, MD and Shabana Shahanavaz, MBBS, FSCAI
1:40-1:55 p.m.	Assessing and Understanding the Atrial Septum: Anatomy, ICE, and TEE	Ruchira Garg, MD
1:55-2:15 p.m.	Basic ASD Closure Case Presentation: How Would You Do It?	Damien Kenny, MD, FSCAI
2:15-2:30 p.m.	Currently Available ASD and PFO Devices: Advantages, Disadvantages, and How to Decide What to Use	Aimee K. Armstrong, MD, FSCAI
2:30-2:50 p.m.	My Best Tricks for Closing Challenging ASD's: Case Demonstrations	Shabana Shahanavaz, MBBS, FSCAI
2:50-3:05 p.m.	Five Ways I Open the Atrial Septum	Ziyad M. Hijazi, MD, MSCAI
3:05-3:20 p.m.	Complications and Other Unwanted Outcomes of Atrial Septal Interventions	Matthew J. Gillespie, MD, FSCAI
3:20-3:30 p.m.	Fellows Case: Complex ASD Closure	TBD
3:30-4:00 p.m.	BREAK/VISIT EXHIBITS	

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Saturday, December 8 *(continued)*

4:00–5:30 p.m.	VENTRICULAR SEPTUM DEFECTS (VSDS): IMAGING AND DEVICE CLOSURE	Moderators: Ziyad M. Hijazi, MD, MSCAI and Clifford J. Kavinsky, MD, PhD, MSCAI
4:00–4:15 p.m.	Assessing and Understanding the Ventricular Septum: Anatomy, Echo, and Angiography	Ruchira Garg, MD
4:15–4:30 p.m.	Basic Muscular VSD Closure Case Presentation: How Would You Do It?	Aimee K. Armstrong, MD, FSCAI
4:30–4:45 p.m.	Currently Available VSD Devices: Advantages, Disadvantages, and How to Decide What to Use	Clifford J. Kavinsky, MD, PhD, MSCAI
4:45–5:05 p.m.	Techniques of Percutaneous VSD Closure: Muscular, Perimembranous, and Post-Infarct	Ziyad M. Hijazi, MD, MSCAI
5:05–5:20 p.m.	Case Presentation: Decision-Making in VSD Closure	Matthew J. Gillespie, MD, FSCAI
5:20–5:30 p.m.	Complications and Other Unwanted Outcomes of VSD Closure	Damien Kenny, MD, FSCAI
5:25–5:30 p.m.	Discussion	
5:30–5:35 p.m.	PRESIDENTIAL WELCOME ADDRESS (DAVID A. COX, MD, MSCAI, PRESIDENT 2018–2019)	
5:45–6:45 p.m.	WELCOME RECEPTION (includes Cases Over Cocktails)	
7:00–8:30 p.m.	SATELLITE DINNER: KEYNOTE SPEAKER	

All faculty are subject to change.



Sunday, December 9

7:15-8:15 a.m.	SATELLITE BREAKFAST	
8:30-10:00 a.m.	EMBOLIZATION THERAPY: AORTOPULMONARY COLLATERAL (APC), CORONARY FISTULAS, ARTERIOVENOUS MALFORMATION (AVMS), AND PATENT DUCTUS ARTERIOSIS (PDAS)	Moderators: <i>Matthew J. Gillespie, MD, FSCAI and Daniel S. Levi, MD, FSCAI</i>
8:30-8:45 a.m.	Case Presentation: PDA Closure Is Easy, Right Until It Isn't	<i>Daniel S. Levi, MD, FSCAI</i>
8:45-9:00 a.m.	Case Presentation: PDA Closure in the Very Small Infant	<i>Evan Zahn, MD, FSCAI</i>
9:00-9:15 a.m.	APCs and Coronary Artery Fistulas	<i>Gareth J. Morgan, MBBS, BaO, MPhil, FSCAI</i>
9:15-9:30 a.m.	PAVMs and Venovenous Collaterals	<i>Matthew J. Gillespie, MD, FSCAI</i>
9:30-9:45 a.m.	Complications of Vascular Occlusion: How to Avoid Them	<i>Jamil A. AboulHosn, MD, FSCAI</i>
9:45-10:00 a.m.	Fellows Case: Complex Vascular Occlusion	
10:00-10:30 a.m.	BREAK/VISIT EXHIBITS	
10:30-11:45 a.m.	QUALITY IMPROVEMENT: COMPLICATIONS, RETRIEVALS AND SAFETY	Moderators: <i>Aimee K. Armstrong, MD, FSCAI and V. Vivian Dimas, MD, FSCAI</i>
10:30-10:45 a.m.	Case Presentation: Death in the Cath Lab, Worst Fear Realized	<i>V. Vivian Dimas, MD, FSCAI</i>
10:45-11:00 a.m.	Diagnosing and Dealing With Potentially Lethal Complications	<i>Aimee K. Armstrong, MD, FSCAI</i>
11:00-11:15 a.m.	Getting Stuff Back: Retrieval Tips and Tricks	<i>Jamil A. AboulHosn, MD, FSCAI</i>
11:15-11:30 a.m.	Pericardiocentesis: Indications and Techniques in Pediatric and Adult Patients	<i>Damien Kenny, MD, FSCAI</i>
11:30-11:45 a.m.	Registries, Risk Calculators, and Adjusted Risk Models	<i>Gareth J. Morgan, MBBS, BaO, MPhil, FSCAI</i>
Noon-1:15 p.m.	SATELLITE LUNCH	

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Sunday, December 9 (continued)

1:30-3:00 p.m.	PULMONARY VALVE INTERVENTIONS	Moderators: Shabana Shahanavaz, MBBS, FSCAI and Evan Zahn, MD, FSCAI
1:30-1:45 p.m.	Imaging Assessment of the Pulmonary Valve in Stenosis/Atresia and Regurgitation: Features for a Successful Intervention	Craig E. Fleishman, MD
1:45-2:00 p.m.	RF Perforation: Tips and Tricks	Daniel S. Levi, MD, FSCAI
2:00-2:15 p.m.	Case Presentation: RF Perforation	Damien Kenny, MD, FSCAI
2:15-2:30 p.m.	Current On-Label TPV: Options, Key Decision-Making Points, and Avoiding Disaster	Shabana Shahanavaz, MBBS, FSCAI
2:30-2:45 p.m.	Options for Native Outflow Tract Transcatheter Pulmonary Valve Replacement: Sizing and Anatomic Considerations	Evan Zahn, MD, FSCAI
2:45-3:00 p.m.	Interactive Case Presentation: Complications in Transcatheter Pulmonary Valve Implantation	Gareth J. Morgan, MBBS, BaO, MPhil, FSCAI
3:00-3:30 p.m.	BREAK/VISIT EXHIBITS	
3:30-5:00 p.m.	ADVANCED IMAGING IN THE CATH LAB	Moderators: Craig E. Fleishman, MD and Evan M. Zahn, MD, FSCAI
3:30-3:45 p.m.	Advantages of Imaging Modalities: TEE vs ICE; 2-D vs. 3-D in Selected Interventions, ASD Closure, Valve Placement, and Transseptal Puncture	Craig E. Fleishman, MD
3:45-4:00 p.m.	IVUS: Not Just for Coronaries	V. Vivian Dimas, MD, FSCAI
4:00-4:15 p.m.	Coronary Angiography in the Congenital Catheterization Laboratory: How to Assess and When to Intervene	Eric Horlick, MD, FSCAI
4:15-4:30 p.m.	Echo-Guided Catheterization Case Presentation: When and Why	Gareth J. Morgan, MBBS, BaO, MPhil, FSCAI
4:30-4:45 p.m.	Three-Dimensional Rotational Angiography (3DRA): When, Why, and How?	Darren P. Berman, MD, FSCAI
4:45-5:00 p.m.	Discussion	
6:30-8:00 p.m.	SATELLITE DINNER	

All faculty are subject to change.



Monday, December 10

7:15-8:15 a.m.	SATELLITE BREAKFAST	
8:30-10:00 a.m.	NONVALVULAR INTERVENTIONS ON THE PULMONARY ARTERIES	Moderators: Damien Kenny, MD, FSCAI and Matthew J. Gillespie, MD, FSCAI
8:30-8:45 a.m.	10 Tips for Successful PA Intervention	Aimee K. Armstrong, MD, FSCAI
8:45-9:00 a.m.	Case Presentation: Distal Branch PA Intervention	Jamil A. AboulHosn, MD, FSCAI
9:00-9:15 a.m.	Managing PA Complications	V. Vivian Dimas, MD, FSCAI
9:15-9:30 a.m.	Case Presentation: PA Complication	Matthew J. Gillespie, MD, FSCAI
9:30-9:45 a.m.	Case Presentation: Palliative RVOT Stenting in Infants With Tetralogy of Fallot	Shabana Shahanavaz, MBBS, FSCAI
9:45-10:00 a.m.	Fellows Case: The Hardest PA Intervention Ever	
10:00-10:40 a.m.	BREAK/VISIT EXHIBITS	
10:45 a.m.-noon	INTERVENTIONS FOR AORTIC VALVE AND AORTIC COARCTATION	Moderators: Eric Horlick, MD, FSCAI and Gareth J. Morgan, MBBS, BaO, MPhil, FSCAI
10:45-11:00 a.m.	Case Presentation: Straightforward Pediatric Coarctation Tips and Tricks	Gareth J. Morgan, MBBS, BaO, MPhil, FSCAI
11:00-11:15 a.m.	Coarctation Stenting in Adults and Children: What Are the Differences and Similarities?	Jamil A. AboulHosn, MD, FSCAI
11:15-11:30 a.m.	Case Presentation: Complex Adult Coarctation	Eric Horlick, MD, FSCAI
11:30-11:45 a.m.	Aortic Balloon Valvuloplasty	Daniel S. Levi, MD, FSCAI
11:45-noon	Case Presentation: Critical Neonatal AS: How I Do It	Darren P. Berman, MD, FSCAI
12:15-1:30 p.m.	SATELLITE LUNCH	
1:45-3:30 p.m.	HYBRID INTERVENTIONS	Moderators: Ziyad M. Hijazi, MD, MSCAI and Clifford J. Kavinsky, MD, PhD, MSCAI
1:45-2:00 p.m.	Echo Assessment of HLHS	Craig E. Fleishman, MD
2:00-2:15 p.m.	10 Tips on How to Develop a Successful Hybrid Culture in Your Center	Clifford J. Kavinsky, MD, PhD, MSCAI
2:15-2:30 p.m.	Hybrid Management of HLHS: Indications, Techniques, and Outcomes	Darren P. Berman, MD, FSCAI
2:30-2:45 p.m.	Case Presentation: Pediatric Hybrid	Ziyad M. Hijazi, MD, MSCAI
2:45-3:00 p.m.	Interventions Outside the Heart	Matthew J. Gillespie, MD, FSCAI
3:00-3:15 p.m.	Hybrid Procedures: Alternate Approaches to Stenting and Transcatheter Valve Placement	Damien Kenny, MD, FSCAI
3:15-3:30 p.m.	Case Presentation: Hybrid Valve or Stent	Evan Zahn, MD, FSCAI

Monday, December 10 *(continued)*

3:30-4:45 p.m.	THE ADULT WITH CONGENITAL HEART DISEASE	Moderators: <i>Jamil A. AboulHosn, MD, FSCAI and Eric Horlick, MD, FSCAI</i>
3:30-3:45 p.m.	10 Reasons Your 60-Year-Old Is Not a 6-Year-Old	<i>Eric Horlick, MD, FSCAI</i>
3:45-4:00 p.m.	Catheterization of Adults With Single Ventricles	<i>Jamil A. AboulHosn, MD, FSCAI</i>
4:00-4:15 p.m.	Interventions in Adults With PAH	<i>Darren P. Berman, MD, FSCAI</i>
4:15-4:30 p.m.	Case Presentation: Adult With CHD	<i>Eric Horlick, MD, FSCAI</i>
4:30-4:45 p.m.	Paravalvular Regurgitation Treatment in Adults	<i>Clifford J. Kavinsky, MD, PhD, MSCAI</i>
4:45-5:45 p.m.	FELLOWS CASE PRESENTATIONS: PART I	Moderators: <i>Daniel S. Levi, MD, FSCAI and V. Vivian Dimas, MD, FSCAI</i>
5:00-6:30 p.m.	SATELLITE DINNER	

Tuesday, December 11

7:15-8:15 a.m.	BREAKFAST SATELLITE	
8:30-10:00 a.m.	HANDS-ON HEART DISSECTION MASTER CLASS: PUTTING IT ALL TOGETHER BY CUTTING IT APART! (CHD GROUP)	Panelists: <i>Jamil A. AboulHosn, MD, FSCAI; V. Vivian Dimas, MD, FSCAI; Matthew J. Gillespie, MD, FSCAI; Evan Zahn, MD, FSCAI</i>
10:00-11:00 a.m.	FELLOWS CASE PRESENTATIONS: PART II	Moderators: <i>Gareth J. Morgan, MBBS, BaO, MPhil, FSCAI and Damien Kenny, MD, FSCAI</i>

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Friday, December 7

2:00-3:30 p.m.	INTRODUCTION TO STRUCTURAL IMAGING	Simulation Proctors: <i>Chad Kliger, MD, FSCAI; John M. Lasala, MD, PhD, MSCAI; Dominik Wiktor, MD</i>
2:00-2:45 p.m.	Imaging: Introduction to Intracardiac Echocardiography (ICE)	<i>John M. Lasala, MD, PhD, MSCAI</i>
2:45-3:30 p.m.	Imaging: Introduction to Fusion Imaging (CT-Fluoro, Echo-Fluoro)	<i>Chad Kliger, MD, FSCAI and Dominik Wiktor, MD</i>
3:30-5:00 p.m.	TRANSSEPTAL PUNCTURE	Simulation Proctors: <i>Jamil A. AboulHosn, MD, FSCAI; Zahid C. Amin, MD, MSCAI; Chad Kliger, MD, FSCAI; John M. Lasala, MD, PhD, MSCAI; Dominik Wiktor, MD</i>
3:30-4:00 p.m.	Septal Anatomy: Anatomical Dissection, 3-D Modeling, and Device Interaction	Simulation Proctors: <i>Jamil A. AboulHosn, MD, FSCAI; Zahid C. Amin, MD, MSCAI; Dominik Wiktor, MD</i>
4:00-4:15 p.m.	Understanding Equipment and Procedural Steps	<i>Dominik Wiktor, MD</i>
4:15-5:00 p.m.	Case-Based Simulation: Basic and Complex Anatomy	<i>Jamil A. AboulHosn, MD, FSCAI</i>
5:00-7:00 p.m.	PATENT FORAMEN OVALE CLOSURE AND ATRIAL SEPTAL DEFECT	Simulation Proctors: <i>Jamil A. AboulHosn, MD, FSCAI; Zahid C. Amin, MD, MSCAI; Chad Kliger, MD, FSCAI; John M. Lasala, MD, PhD, MSCAI; Dominik Wiktor, MD</i>
5:00-5:15 p.m.	Imaging: Echo, ICE, and Fusion	<i>Zahid C. Amin, MD, MSCAI</i>
5:15-5:30 p.m.	Understanding Equipment and Procedural Steps	<i>Jamil A. AboulHosn, MD, FSCAI</i>
5:30-6:00 p.m.	Case-Based Simulation	<i>Dominik Wiktor, MD</i>
6:00-6:30 p.m.	Case-Based Simulation: Basic Anatomy	<i>Jamil A. AboulHosn, MD, FSCAI</i>
6:30-7:00 p.m.	Case-Based Simulation: Complex Anatomy	<i>Zahid C. Amin, MD, MSCAI</i>
8:00-9:30 p.m.	SCAI WOMEN IN INNOVATIONS (WIN) DESSERT RECEPTION (for female interventionalists)	

All faculty are subject to change.

Saturday, December 8

7:15-8:15 a.m.	SATELLITE BREAKFAST	
8:30 a.m.- 2:30 p.m.	TRANSCATHETER AORTIC VALVE REPLACEMENT	Simulation Proctors: <i>Danny Dvir, MD; Chad Kliger, MD, FSCAI; John M. Lasala, MD, PhD, MSCAI; James M. McCabe, MD, FSCAI; Puja B. Parikh, MD, MPH, FSCAI</i>
8:30-9:00 a.m.	TAVR: Anatomical Dissection, 3-D Modeling, and Device Interaction	Simulation Proctors: <i>Danny Dvir, MD; James M. McCabe, MD, FSCAI; Puja B. Parikh, MD, MPH, FSCAI</i>
9:00-9:45 a.m.	Imaging: CT Analysis via Post-Processing Software	<i>Puja B. Parikh, MD, MPH, FSCAI</i>
9:45-10:00 a.m.	Understanding Equipment and Procedural Steps	<i>Danny Dvir, MD</i>
10:00-10:30 a.m.	BREAK/VISIT EXHIBITS	
8:30 a.m.- 2:30 p.m.	TRANSCATHETER AORTIC VALVE REPLACEMENT (continued)	
10:30-11:15 a.m.	Case-Based Simulation: Balloon-Expandable Valve	<i>James M. McCabe, MD, FSCAI</i>
11:15 a.m.-noon	Case-Based Simulation: Self-Expanding Valve	<i>Puja B. Parikh, MD, MPH, FSCAI</i>
12:15-1:15 p.m.	SATELLITE LUNCH	
8:30 a.m.- 2:30 p.m.	TRANSCATHETER AORTIC VALVE REPLACEMENT (continued)	
1:30-2:00 p.m.	Case-Based Simulation: TAVR Valve-in-Valve	<i>Danny Dvir, MD</i>
2:00-2:15 p.m.	Complications: Device-Anatomy Correlation and Simulation	<i>Paul Sorajja, MD, FSCAI</i>
2:15-2:30 p.m.	Novel Techniques: Valve Fracturing, BASILICA, and Coronary Protection	<i>Danny Dvir, MD</i>

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Saturday, December 8 *(continued)*

2:30-5:45 p.m.	TRANSCATHETER MITRAL VALVE INTERVENTION: MITRAL ViV/MITRACLIP	Simulation Proctors: Danny Dvir, MD; Chad Kliger, MD, FSCAI; John M. Lasala, MD, PhD, MSCAI; Paul Sorajja, MD, FSCAI; Molly Szerlip, MD, FSCAI
2:30-3:00 p.m.	Anatomical Dissection, 3-D Modeling, and Device Interaction	Simulation Proctors: Danny Dvir, MD; Paul Sorajja, MD, FSCAI; Molly Szerlip, MD, FSCAI
3:00-3:15 p.m.	Imaging: Echo, ICE, CT, and Fusion	Chad Kliger, MD, FSCAI
3:15-3:30 p.m.	Understanding Equipment and Procedural Steps: Mitral ViV	Paul Sorajja, MD, FSCAI
3:30-4:00 p.m.	Case-Based Simulation: Mitral ViV	Molly Szerlip, MD, FSCAI
4:00-4:30 p.m.	BREAK/VISIT EXHIBITS	
2:30-5:45 p.m.	TRANSCATHETER MITRAL VALVE INTERVENTION: MITRAL ViV/MITRACLIP (continued)	
4:30-4:45 p.m.	Complications: Device-Anatomy Correlation and Simulation	Molly Szerlip, MD, FSCAI
4:45-5:00 p.m.	Understanding Equipment and Procedural Steps: MitraClip	Paul Sorajja, MD, FSCAI
5:00-5:30 p.m.	Case-Based Simulation: MitraClip	Paul Sorajja, MD, FSCAI
5:30-5:45 p.m.	Complications: Device-Anatomy Correlation and Simulation	John M. Lasala, MD, PhD, MSCAI
5:30-5:35 p.m.	PRESIDENTIAL WELCOME ADDRESS (DAVID A. COX, MD, MSCAI, PRESIDENT 2018-2019)	
5:45-6:45 p.m.	WELCOME RECEPTION WELCOME RECEPTION (includes Cases Over Cocktails)	
7:00-8:30 p.m.	SATELLITE DINNER: KEYNOTE SPEAKER	

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Sunday, December 9

7:15-8:15 a.m.	SATELLITE BREAKFAST	
8:30-11:00 a.m.	LEFT ATRIAL APPENDAGE (LAA) CLOSURE AND OTHER SHD TOPICS	Simulation Proctors: <i>Chad Kliger, MD, FSCAI; John M. Lasala, MD, PhD, MSCAI; Matthew J. Price, MD, FSCAI; Jacqueline Saw, MD, FSCAI; Molly Szerlip, MD, FSCAI; Dominik Wiktor, MD</i>
8:30-9:00 a.m.	Anatomical Dissection, 3-D Modeling, and Device Interaction	Simulation Proctors: <i>Matthew J. Price, MD, FSCAI; Jacqueline Saw, MD, FSCAI; Molly Szerlip, MD, FSCAI</i>
9:00-9:15 a.m.	Understanding Equipment and Procedural Steps With Imaging	<i>Dominik Wiktor, MD</i>
9:15-9:45 a.m.	Case-Based Simulation: LAA Occluder	<i>Jacqueline Saw, MD, FSCAI</i>
9:45-10:00 a.m.	Complications: Device-Anatomy Correlation and Simulation	<i>Matthew J. Price, MD, FSCAI</i>
10:00-10:15 a.m.	Step-by-Step Mitral Balloon Valvuloplasty	<i>Molly Szerlip, MD, FSCAI</i>
10:15-10:30 a.m.	Step-by-Step Paravalvular Leak Closure	<i>Chad Kliger, MD, FSCAI</i>
10:30-10:45 a.m.	Transcatheter Mitral Repair/Replacement Technologies	<i>Molly Szerlip, MD, FSCAI</i>
10:45-11:00 a.m.	CLOSING REMARKS	<i>Chad Kliger, MD, FSCAI and John M. Lasala, MD, PhD, MSCAI</i>

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