

### WEDNESDAY, JULY 17

#### Coronary Complications Part 1

8:30	Acute vessel closure
8:38	Panel discussion
8:45	Perforation: step by step treatment
8:53	Panel discussion
9:00	Equipment loss + entrapment
9:08	Rebuttal 2
9:15	How to make and use snares
9:23	Panel discussion
9:30	Intracoronary imaging for complications
9:38	Panel discussion
9:45	The surgeon's perspective: when I will and when I will not bail you out!
9:53	Panel discussion
10:00	Break and Exhibits

#### Coronary Complications Part 2

10:30	Stroke + peripheral embolic complications during catheterization: acute recognition and management
10:38	Panel discussion
10:45	Arrhythmias in the catheterization laboratory: prevention and treatment
10:53	Panel discussion
11:00	Radiation-related complications
11:08	Panel discussion
11:15	Contrast-related complications
11:23	Panel discussion
11:30	Hypotension in the cath lab
11:38	Panel discussion
11:45	Emotional intelligence in the face of complications
11:53	Panel discussion
12:00	Lunch Break

#### Peripheral Complications

1:30	Vascular access complications
1:38	Panel discussion
1:45	Distal Embolization
1:53	Panel discussion
2:00	Femoropopliteal dissection
2:08	Panel discussion
2:15	Complicated Pedal Access
2:23	Panel discussion
2:30	Failed Iliac intervention pre-PCI, Now what?
2:38	Panel discussion
2:45	Medicolegal aspects of complication management
2:53	Panel discussion
3:00	Break and Exhibits

#### Structural Complications

3:30	Aorta annular rupture
3:38	Panel discussion
3:45	Problems with transcatheter rails
3:53	Panel discussion
4:00	LAA closure and embolization
4:08	Panel discussion
4:15	TAVR prosthesis malposition
4:23	Panel discussion
4:30	The mother of cardiac tamponade
4:38	Panel discussion
4:45	Single leaflet device attachment
4:53	Panel discussion
5:00	Adjourn

THURSDAY, JULY 18

8:30 – 10:00	<b>LIVE CORONARY CASES</b> <b>Live Case Telecast from Germany</b>	<b>All You Need to Know About Acute and Chronic Venous Disease</b> 8:30 Lower extremity edema, my algorithm 8:38 When should I consider endovenous ablation and which approach 8:46 Which patient and what approach for chronic venous intervention 8:54 May Thurner:when, why, and how to treat 9:02 Acute DVT post ATTRACT, patient selection and approach 9:10 Discussion 9:18 PERT, catheter-based thrombolysis or non-lytic based approach for pulmonary embolism 9:26 Discussion 9:34 This venous case I will never forget, lessons learned 9:42 Filter thrombosis and removal, advanced techniques 9:50 Discussion	<b>Tricuspid Regurgitation Therapy Retreat (TR)2: The Problem of Tricuspid Regurgitation</b> 8:30 The public health crisis of TR 8:45 Why does everyone think echo imaging is hard? 9:00 Essential roles for CT and MRI in TR in therapy timing 9:15 Where are the patients in clinical practice? 9:30 Panel discussion	<b>Structural Challenging Case Competition: Semifinals I</b> 8:30 Case 1 8:35 Panel discussion 8:40 Case 2 8:45 Panel discussion 8:50 Case 3 8:55 Panel discussion 9:00 Case 4 9:05 Panel discussion 9:10 Case 5 9:15 Panel discussion 9:20 Case 6 9:25 Panel discussion 9:30 Case 7 9:35 Panel discussion 9:40 Case 8 9:45 Panel discussion 9:50 Case 9 9:55 Panel discussion
10:00 – 10:30	<b>Break</b>			
10:30 – 12:00	<b>PCI How-to Part 1: The Basics</b> 10:30 How to obtain optimal vascular access and closure 10:38 Panel Discussion 10:45 How to use guides and guide catheter extensions 10:53 Panel Discussion 11:00 How and when to use microcatheters 11:08 Panel Discussion 11:15 Which guidewire, when? 11:23 Panel Discussion 11:30 How to deliver stents 11:38 Panel Discussion 11:45 How to decide DAPT type and duration 11:53 Panel Discussion	<b>LIVE PERIPHERAL CASES</b> <b>Live Case Telecast from Greenville, SC</b>	<b>Current Surgical Solutions for TR</b> 10:30 Are outcomes bad or good with open surgery? 10:45 When should one repair or replace for TR? 11:00 Do we really need transcatheter solutions? 11:15 Risk stratification: are all TR patients high risk? 11:30 Things only surgeons know 11:45 Panel discussion	
12:00 – 1:30	<b>Lunch Break</b>		<b>WORKING LUNCH: Challenges, Solutions, and Current Status with Transcatheter Approaches</b> 12:00 Cardioband 12:10 Millipede 12:20 Trialign 12:30 MitraClip 12:40 Navigate 12:50 TriCinch 1:00 Forma 1:10 Pascal 1:20 What is the best method for procedural imaging? Panel discussion	
1:30 – 3:00	<b>PCI: The Great Debates 1</b> 1:30 Radial for all 1:38 Femoral still has a role 1:46 Panel Discussion 2:00 All DES are the same! 2:08 All DES are NOT the same! 2:16 Panel Discussion 2:30 DK crush should be the standard 2-stent bifurcation strategy 2:38 DK crush is just another bifurcation strategy 2:46 Panel Discussion	<b>Innovation in Vascular Disease</b> 1:30 How to incorporate antithrombotic drugs into my PAD and CLI practice 1:38 DOACs, NOACs, and Coumadin - How do I decide when treating DVT? 1:45 SGL2, PCSK-9, and Rivoroxaban for PAD and CLI! How and when? 1:53 Discussion 2:00 Transcervical carotid artery stenting - Will it change our practice? 2:08 Renal denervation, is it really coming back? 2:15 Deep venous arterilization for no option CLI, is there hope? 2:23 Discussion 2:30 Must have tools in the endovascular suite 2:38 Supply Chain - Blessing or curse? Innovative approaches to reduce cost 2:46 Americans are Spoiled! This is how we do it in Italy 2:53 Discussion	<b>Therapy Goals in Tricuspid Regurgitation</b> 2:00 Is there a medical therapy standard that must be met first? 2:15 Is transcatheter therapy an adjunct to medical therapy or a surgical replacement? 2:30 Is residual TR grade an appropriate therapeutic goal? 2:45 What are the compelling endpoints for practice change? 3:00 Will there be standalone TR therapy? 3:15 Panel discussion	
3:00 – 3:30	<b>Break</b>			
3:30 – 5:00	<b>PCI How-to Part 2: CTOs</b> 3:30 When should CTO PCI be done in 2019? 3:38 Panel Discussion 3:45 How to do the best possible antegrade dissection/re-entry 3:53 Panel Discussion 4:00 How to resolve proximal cap ambiguity 4:08 Panel Discussion 4:15 How to treat ostial CTOs 4:23 Panel Discussion 4:30 How and when to do retrograde via epicardial collaterals 4:38 Panel Discussion 4:45 How to use CTA to guide CTO PCI 4:53 Panel Discussion	<b>Masters Approach to Critical Limb Ischemia I: Step-by-Step Technical Tips</b> 3:30 A SFA/popliteal case I could not cross with antegrade approach 3:38 Duplex US technique for pedal and tibial access 3:46 Retrograde SFA, Popliteal, and in-stent access 3:54 Radial 2 Peripheral, tips and tricks 4:02 Discussion 4:10 Wire choice and approaches to cross SFA and popliteal CTOs 4:18 Wire choice and approaches to cross tibial CTOs 4:26 CTO devices to cross SFA and tibial CTOs 4:34 Algorithm to cross infrainguinal CTOs 4:42 Re-entry (CART, RCART, Parallel Balloon, Facilitaed, Pioneer, Outback, Enteer) 4:50 Discussion 5:00 From fellowship to real world; step by step guide on how to be successful 5:08 Discussion	<b>Breaking Boundaries with Mitral Valve Therapy</b> 3:30 The Top 5 latest innovations in transcatheter MV therapy 3:38 New evolutions in surgery that keep it the standard of care 3:46 What I hear when I talk about the public crisis of MR 3:54 Defining mitral annular calcification 4:02 Fusion imaging to address challenges of mitral therapy 4:10 Complimentary transcatheter repair and replacement 4:18 Predictions for the future state of MR therapy 4:26 Will transcatheter repair be used for surgical-eligible patients? 4:34 Where does the field of transcatheter therapy need to go? 4:42 Panel discussion	
5:00	<b>Adjourn</b>			

FRIDAY, JULY 19

8:30 - 10:00	<b>PCI How-to Part 3: Acute Coronary Syndromes and Shock</b> 8:30 How to find the culprit lesion(s) in ACS 8:38 Panel Discussion 8:45 How to initiate and troubleshoot ECMO 8:53 Panel Discussion 9:00 How to do e-CPR 9:08 Panel Discussion 9:15 When and how to use hemodynamic support in shock 9:23 Panel Discussion 9:30 How to support the right ventricle 9:38 Panel Discussion 9:45 The future of cardiogenic shock management 9:53 Panel Discussion	<b>LIVE PERIPHERAL CASES</b> <b>Live Case Telecast from Germany</b>	<b>Innovations in Structural Heart Therapy</b> 8:30 Top 5 innovations in transcatheter aortic therapy 8:37 Polymer-based technology for valve prostheses 8:44 Emerging cerebral protection methods 8:51 Prosthetic design for repeat valve therapy 8:58 No more boundaries for TAVR 9:05 Expectations and challenges for future IDE studies 9:12 Five things CT will tell you that you don't know 9:19 Novel atrial shunts 9:26 From surgery to transcatheter and back 9:33 Tissue processing for durability 9:40 The unanswered questions I have 9:47 Panel Discussion
10:00 - 10:30	<b>Break</b>		
10:30 - 12:00	<b>LIVE CORONARY CASES</b> <b>Live Case Telecast from Columbia University</b>	<b>Common Femoral, SFA, and Popliteal Disease</b> 10:30 Endovascular approach for common femoral artery 10:38 Cases - Complex endovascular therapy for CFA 10:45 Panel Discussion 10:53 Heavily calcified SFA, Master's approach to treat? 11:00 Why and when I use atherectomy? 11:08 DCB, DES, wire interwoven, or covered stents, segmentalized approach to SFA and popliteal disease 11:15 Leave nothing behind, hope or hype? 11:23 Panel Discussion 11:30 Surgical approach to CFA, SFA and popliteal disease 11:38 SFA/popliteal case I should I have sent to surgery 11:45 SFA/popliteal case I should I have sent to endovascular 11:53 Panel Discussion	<b>The Boundaries of Structural Heart Therapy I</b> 10:30 My most challenging transcaval case 10:37 A rich emotional experience 10:44 My new save for 2019 10:51 Transcatheter MVR challenge and management 10:58 Novel large bore closure 11:05 Innovative TAVR therapy 11:12 It's not luck if you're trying 11:19 A difficult PFO case I got done 11:26 Fancy catheter manipulations 11:33 Novel transcatheter mitral repair 11:40 Nameless LAA anatomy for closure 11:47 A frontier crossed with a self-expanding TAVR
12:00 - 1:30	<b>Lunch Break</b>		
1:30 - 3:00	<b>PCI: The Great Debates 2</b> 1:30 Resting physiologic indices suffice for coronary physiology 1:38 Adenosine FFR remains the "gold standard" 1:46 Panel Discussion 2:00 Intracoronary imaging should be done in every PCI: pro 2:08 Intracoronary imaging should be done in every PCI: con 2:16 Panel Discussion 2:30 e-CPR is a "life-saver" 2:38 e-CPR is futile 2:46 Panel Discussion	<b>Aortoiliac Disease</b> 1:30 Supervised exercise program and medical therapy for aortoiliac disease 1:38 I wish I had sent this aortoiliac occlusion to surgery 1:46 Perforated iliac, and how I bail myself out 1:54 Panel Discussion 2:02 Access site selection to treat aortoiliac disease, retrograde, brachial, radial, when and why? 2:10 Step by step approach to crossing aortic occlusion, approach and role of IVUS 2:18 Panel Discussion 2:26 How to manage nondilatable heavily calcified iliacs 2:34 Reentry in the aorta or iliacs, case based 2:42 Using endografts to treat occlusive aortoiliac disease, when and how? 2:50 Panel Discussion	<b>The Boundaries of Structural Heart Therapy II</b> 1:30 I wish you had sent this patient to surgery 1:37 A new transcatheter method I found in the last year 1:44 Complex basilica 1:51 Image overlay for TR therapy success 1:58 Strategy for difficult LAA therapy 2:05 Novel PFO therapy 2:12 Transcatheter treatment of residual MR 2:19 Surprise and a save 2:26 Balloon valve fracturing on a new level 2:33 Pseudoaneurysm therapy 2:40 I've been doing this a long time, but... 2:47 Innovative therapy with transcatheter mitral repair
3:00 - 3:30	<b>Break</b>		
3:30 - 5:00	<b>PCI How-to Part 4: Complex Lesions and Patients</b> 3:30 How to select patients for PCI: from COURAGE to ISCHEMIA 3:38 Panel Discussion 3:45 PCI in the prior TAVR patient 3:53 Panel Discussion 4:00 How to manage SCAD 4:08 Panel Discussion 4:15 How to manage large thrombus 4:23 Panel Discussion 4:30 How to do PCI in a patient with prior radiation Rx 4:38 Panel Discussion 4:45 How to manage in-stent restenosis 4:53 Panel Discussion	<b>Limb Salvage, Functional Amputation, Wounds and Podiatry</b> 3:30 This is what I want from my revascularization colleagues 3:38 The ABCs of wound care 3:46 Panel Discussion 3:54 Time to redefine critical limb ischemia 4:02 When to use US, CTA or MRA before going to the cath lab 4:10 Panel Discussion 4:18 What is a functional amputation? 4:26 Mixed venous and arterial ulcers, this is my approach 4:34 How to address ulcer recidivism 4:42 Panel Discussion 4:50 Must read articles in CLI - Editors view point	<b>LIVE STRUCTURAL CASES</b> <b>Live Case Telecast from Columbia University</b>
5:00	<b>Adjourn</b>		

### SATURDAY, JULY 20

8:30 - 10:00	<b>Innovations in PCI Part 1</b> 8:30 The top 5 interventional cardiology trials of the past year 8:40 Panel discussion 8:45 The most anticipated trials for the year ahead 8:55 Panel discussion 9:00 Innovation in coronary physiology 9:05 Panel discussion 9:10 Innovations in coronary imaging 9:15 Panel discussion 9:20 Innovation in robotic PCI 9:30 Panel discussion 9:35 Innovation in SVG management 9:45 Panel discussion	<b>Master's Approach to Critical Limb Ischemia II</b> 8:30 My challenges in starting a PAD/CLI program 8:38 Multidisciplinary Team - Why a surgeon is a must 8:46 Discussion 8:54 BEST CLI, what will we learn from it? 9:02 I should have sent this one for bypass: cased-based CLI 9:10 Discussion 9:18 Hybrid approach to multilevel CLI, Cased based 9:26 I should have treated this one percutaneously: cased-based CLI 9:34 I should have treated this one medically: cased-based CLI 9:42 Discussion 9:50 Limbs Salvage board, the future of multidisciplinary team	<b>Passing the Limits of Occluder Therapy</b> 8:30 Unmet needs for LAA therapy 8:37 Where are the boundaries for LAA closure? 8:44 Novel ASD and PFO devices 8:51 Do occluders need to permit septal recrossing? 8:58 Suture-mediated defect closure 9:05 When surgery is needed 9:12 Projections for PFO Therapy 9:19 The CT will save your patient and you 9:26 Overcoming challenges with medical therapy for LAA closure 9:33 Undertreatment in LAA closure 9:40 Panel Discussion
10:00 - 10:30	<b>Break</b>		
10:30 - 12:00	<b>Innovations in PCI Part 2: PCI - Back to the Basics</b> 10:30 Innovation in cardiac surgery 10:38 Panel discussion 10:45 Innovation in coronary stents 10:53 Panel discussion 11:00 Innovation in vascular access 11:08 Panel discussion 11:15 Innovation in antiplatelet management 11:23 Panel discussion 11:30 Innovation in hemodynamic support 11:38 Panel discussion 11:45 Innovation in cath lab safety 11:53 Panel discussion	<b>Master's Approach to Critical Limb Ischemia III</b> 10:30 How to build a research infrastructure for clinical trials 10:38 How I follow-up my patients post revascularization 10:45 Disparities in CLI treatment, how can we change this 10:53 I am proud of this limb salvage case 11:00 My worst aortoiliac complication 11:08 Panel Discussion 11:15 My worst SFA complication 11:23 Panel Discussion 11:30 Tibial perforation, how to manage 11:38 Panel Discussion 11:45 Distal embolization, how to manage 11:53 Panel Discussion	<b>The Boundaries of Structural Heart Therapy III</b> 10:30 Complex mitral therapy 10:37 Management of severe calcification 10:44 I thought I blew it 10:51 A case of transcatheter mitral therapy 10:58 A canted prosthetic valve 11:05 My best case in the last year 11:12 A novel technique 11:19 I didn't know my probe could do this 11:26 Success outside the range for balloon-expanding prostheses 11:33 Embolism and retrieval 11:40 Panel Discussion
12:00	<b>Break for Case Competition Finals</b>		
12:00 - 1:10	<b>Cardiovascular Innovations Case Competition Finals</b> 12:15 Case 1 (Coronary)      12:50 Case 3 (Peripheral) 12:20 Panel Discussion      12:55 Panel Discussion 12:22 Case 2 (Coronary)      12:57 Case 1 (Structural) 12:27 Panel Discussion      1:02 Panel Discussion 12:29 Case 3 (Coronary)      1:04 Case 2 (Structural) 12:34 Panel Discussion      1:09 Panel Discussion 12:36 Case 1 (Peripheral)      1:11 Case 3 (Structural) 12:41 Panel Discussion      1:16 Panel Discussion 12:43 Case 2 (Peripheral)      1:18 Awards presentation 12:48 Panel Discussion		
1:15	<b>Course Adjournment</b>		