FRIDAY, JANUARY 17, 2020

7:15 AM  **Registration, Breakfast & Exhibits**

7:45 AM  Course Overview and Objectives  
Daniel S. Berman, MD

**SESSION 1: INTERPRETING AND REPORTING SPECT/PET MPI CASES IN DAILY PRACTICE**  
Daniel S. Berman, MD, Presiding

8:00 AM  Integrating Visual and Quantitative Analyses: Improving Your Scan Interpretation—Case Illustrations  
Sean W. Hayes, MD

8:40 AM  Stress-only SPECT: Reducing Radiation and Increasing Efficiency  
John Mahmarian, MD

9:00 AM  Reducing the False Positive Rate: Artifacts on SPECT and PET MPI: Case Illustrations  
Sean W. Hayes, MD

9:20 AM  CAC Scanning in Patients Undergoing SPECT/PET MPI: Integrated Reporting of MPI  
Daniel S. Berman, MD

9:40 AM  Pharmacologic Stress: Combined with Exercise or Alone: What You Need to Know  
Sean W. Hayes, MD

10:15 AM  **Break/Exhibits/Break-Out Session #1 (Sean W. Hayes, MD)**

**SESSION 2: THE FUTURE OF NUCLEAR CARDIOLOGY**  
Daniel S. Berman, MD, Presiding

10:30 AM  The Emergence of Competing Risk Factor Trends in the 21st Century: Its Implications for Cardiac Testing  
Alan Rozanski, MD

10:55 AM  Patients’ Capability to Exercise and Exercise Performance at the Time of Cardiac Testing: The Variables that Still Get No Respect  
Alan Rozanski, MD

11:25 AM  **KEYNOTE ADDRESS: The Future of SPECT/PET MPI in the Era of Expanding CT**  
John Mahmarian, MD

12:00 PM  Panel Discussion  
Faculty: Drs. Alan Rozanski, Mahmarian, and Hayes, MD  
Moderator: Daniel S. Berman, MD
12:15 PM **Lunch and Exhibits**

12:30 PM Optional CSMC Cardiac Imaging Laboratories Site Visit (No CME/CE credit)

**SESSION 3: RADIOPHARMACEUTICALS, CAMERAS, SOFTWARE, RADIATION**
Daniel S. Berman, MD, Presiding

1:00 PM SPECT Imaging of Ventricular Function
Serge Van Kriekinge, PhD

1:15 PM F-18 Flurpiridaz: The Ideal MPI Radiopharmaceutical
Jamshid Maddahi, MD

1:35 PM Latest Hardware and Software Developments in SPECT and PET: The Emergence of Machine Learning
Piotr Slomka, PhD

**SESSION 4: CARDIAC AMYLOIDOSIS: THE MOST RAPIDLY GROWING NUCLEAR CARDIOLOGY APPLICATION**
Daniel S. Berman, MD, Presiding

2:00 PM Clinical Overview of Cardiac Amyloidosis: Pathophysiology, Phenotypes, Treatment
Jignesh Patel, MD

2:15 PM Role of Multimodality Imaging in Cardiac Amyloidosis: 2019 ASNC/AHA/ASE/EANM/HFSA/SCMR/SNMMI Consensus Recommendations:
Sharmila Dorbala, MD

2:30 PM Tc-99m Pyrophosphate (PYP) Imaging: Acquisition, Processing, Interpretation
Panithaya Chareonthaitawee, MD

2:50 PM Role of Tc-99m PYP and F-18 Amyloid Tracers in Monitoring Therapy
Sharmila Dorbala, MD

3:05 PM Amyloidosis: Case Presentations/Interpretation: CMR and PYP
Presenter: Panithaya Chareonthaitawee, MD
Discussants: Sharmila Dorbala, MD and Balaji Tamarappoo, MD, PhD

3:25 PM Panel Discussion
Faculty: Drs. Patel, Dorbala, Chareonthaitawee, and Tamarappoo
Moderator: Daniel S. Berman, MD

3:40 PM **Break/Exhibits/Break-Out Session #2**
Sharmila Dorbala, MD; Panithaya Chareonthaitawee, MD
SESSION 5: MYOCARDIAL VIABILITY AND NUCLEAR CARDIOLOGY CASES
Daniel S. Berman, MD, Presiding

3:45 PM  
Imaging for Myocardial Viability: Status in 2020
Robert Beanlands, MD

4:05 PM  
Myocardial Viability: Multimodality Assessment with SPECT, PET, and MRI: Classic Cases
Jamshid Maddahi, MD

4:35 PM  
READ WITH THE EXPERTS: Challenging Cases with SPECT and PET
Presenter: John Friedman, MD
Discussants: Drs. Beanlands, Berman, Chareonthaitawee, Dorbala, Maddahi, and Hayes

5:30 PM  
Panel Discussion
Faculty: Drs. Beanlands, Berman, Chareonthaitawee, Dorbala, Maddahi, Hayes, and Friedman
Moderator: Daniel S. Berman, MD

5:45 PM  
Adjourn

SATURDAY, JANUARY 18, 2020

7:30 AM  
Breakfast and Exhibits

SESSION 6: MYOCARDIAL BLOOD FLOW (MBF) and MYOCARDIAL FLOW RESERVE (MFR) WITH PET, SPECT and CMR
Daniel S. Berman, MD Presiding

8:00 AM  
Clinical Value of MBF/MFR Measurements
Robert Beanlands, MD

8:20 AM  
MBF/MFR with PET: How to Perform, Quality Control, Interpret and Report
Timothy Bateman, MD

8:40 AM  
MFR with SPECT: Ready for Prime Time?
Piotr Slomka, PhD

8:55 AM  
MBF/MFR with CMR: As Accurate as PET?
Behzad Sharif, PhD

9:10 AM  
MFR and FFR: Clinically Relevant Similarities and Differences
Robert Beanlands, MD

9:30 AM  
Case Presentations: Myocardial Flow Reserve with PET
Timothy Bateman, MD
9:50 AM  How to Report MBF/MFR Measurements  
Robert Beanlands, MD

10:10 AM  Panel Discussion  
Faculty: Drs. Beanlands, Bateman, Slomka, and Sharif  
Moderator: Daniel S. Berman, MD

10:25 AM  **Break/Exhibits/Break-Out Session #3**  
Robert Beanlands, MD

**SESSION 7: SARCOIDOSIS and INFECTION**  
Daniel S. Berman, MD, Presiding

10:40 AM  Cardiac Sarcoidosis: Clinical Overview of the Disease and Role of Imaging with PET and MRI  
Sharmila Dorbala, MD

11:00 AM  Cardiac Sarcoidosis: Imaging with FDG PET: Practical Considerations  
Panithaya Chareonthaitawee, MD

11:20 AM  Assessing Valvular, Vascular, and Device Infections with F-18 FDG PET, Indium-111 WBC’s, and CT Angiography  
Louise Thomson, MBChB

11:40 AM  **READ WITH THE EXPERTS: PET and CMR for Cardiac Sarcoidosis**  
Presenter: John Friedman, MD  
Discussants: Sharmila Dorbala, MD; Panithaya Chareonthaitawee, MD

12:00 PM  Panel Discussion  
Faculty: Drs. Chareonthaitawee, Dorbala, Thomson, and Friedman  
Moderator: Daniel S. Berman, MD

12:15 PM  Lunch

12:30 PM  Optional CSMC Cardiac Imaging Laboratories Site Visit (No CME/CE credit)  
Mina Sadeghi

**SESSION 8: NEW AND FUTURE DEVELOPMENTS IN PET AND SPECT**  
Daniel S. Berman, MD, Presiding

1:00 PM  Imaging in Cardiac Transplantation with PET, SPECT, and CMR  
Robert Miller, MD

1:15 PM  Pathogenesis of Atherosclerosis: Potential Targets for Plaque Molecular Imaging  
PK Shah, MD

1:30 PM  F-18 Fluoride Cardiovascular Imaging: The Coronary Arteries and Beyond  
Jacek Kwiecinski, MD, PhD
SESSION 9: THE ISCHEMIA TRIAL: IMPLICATIONS FOR CLINICAL PRACTICE
Daniel S. Berman, MD, Presiding

1:45 PM  KEYNOTE ADDRESS: The ISCHEMIA Trial - A Deep Dive into the Results
Leslee Shaw, PhD

2:15 PM  Trial Strengths and Limitations
Robert Beanlands, MD

2:30 PM  Implications for Coronary CTA
John Mahmarian, MD

2:45 PM  Implications for Clinical Practice and Stress Imaging:
Timothy Bateman, MD

3:00PM  Panel Discussion
Faculty: Drs. Shaw, Beanlands, Mahmarian, and Bateman
Moderator: Daniel S. Berman, MD

3:30 PM  Break/Exhibits/Break-Out Session #4 (Timothy Bateman, MD)

SESSION 10: NUCLEAR CARDIOLOGY AND CARDIAC CT
Daniel S. Berman, MD, Presiding

3:45 PM  Radiation Dose Reduction in SPECT, PET and Cardiac CT
Damini Dey, PhD

4:00 PM  Coronary CTA and SPECT/SPECT Imaging in Patients with Chest Pain in the ED
John Mahmarian, MD

4:20 PM  “2020 Vision”: The Future of Cardiac Imaging from a Healthcare System Perspective
Jack Ziffer, MD

SESSION 11: CMR: CURRENT AND FUTURE POTENTIAL
Daniel S. Berman, MD, Presiding

4:45 PM  When is CMR the Test of Choice? A Case-based Approach
Louise Thomson, MBChB

5:00 PM  CMR for Myocardial Fibrosis, Edema, and Infarction
Rohan Dharmakumar, MD, PhD

5:15 PM  A Game-changer in Performance of CMR: No Breath-holds, No ECG, No “Scouts” in a Comprehensive 30 Minute Study
Anthony Christodoulou, PhD

5:30 PM  Cardio-oncology: Broadening the Clinical Applications of Multimodality Imaging
Balaji K. Tamarappoo, MD, PhD
5:45 PM  Panel Discussion
Faculty: Drs. Thomson, Dharmakumar, Christodoulou, and Tamarappoo
Moderator: Daniel S. Berman, MD

6:00 PM  Adjourn

SUNDAY, JANUARY 19, 2020

7:30 AM  Breakfast and Exhibits

SESSION 12: CARDIAC CT: CURRENT STATUS and FUTURE APPLICATIONS
James K. Min, Presiding

8:00 AM  Coronary CTA: Interpretation and Reporting CTA
Todd C. Villines, MD

8:20 AM  Pitfalls in Coronary CTA: Problematic Cases
Victor Cheng, MD

8:40 AM  Coronary Artery Calcium (CAC) Scanning: Role in Asymptomatic and Symptomatic Patients
Matt Budoff, MD

9:00 AM  Central Role of Coronary CTA in Clinical Practice
Tracy Callister, MD

9:20 AM  Ischemia Evaluation with Coronary CTA: FFRct
Jonathon Leipsic, MD

9:40 AM  Ischemia Evaluation with Coronary CTA: CT Perfusion
Koen Niem, MD

10:00 AM  Quantification of Coronary Plaque: Prediction of Risk-Prediction, Ischemia and Monitoring Therapy
Damini Dey, PhD

10:20 AM  Whole-Heart Atherosclerosis Characterization: A New Way to Predict Risk and Guide Revascularization
James K. Min, MD

10:40 AM  Panel Discussion
Faculty: Drs. Villines, Niemen, Budoff, Callister, Leipsic, Dey, and Cheng
Moderator: Daniel S. Berman, MD

11:00 AM  Break/Exhibits/Break-Out Session #6
Todd C. Villines, MD
SESSION 13: BEST PAPERS AND BEST CASES
James K. Min, MD, Presiding

11:10 AM Top Ten Imaging Papers of the Year
James K. Min, MD

11:30 AM BATTLE OF THE EXPERTS
Challenging Unknown Coronary Cases from Clinical Practice
Presenter: Todd C. Villines, MD
Reading Teams: Drs. Leipsic, Nieman, and Callister vs Drs. Budoff, Cheng, and Friedman

12:30 PM Game-Show Jeopardy: Cardiac CT, Nuclear, and CMR
Presenter: James K. Min, MD
Attendee Participation. Prize awarded to winner!

SESSION 14: CARDIAC CT IN AORTIC STENOSIS AND NON-CORONARY HEART DISEASE
Daniel S. Berman, Presiding

12:50 PM Eight Cardiac Applications Beyond the Coronary Arteries
   1) TAVR
   2) TMV repair/replacement
   3) LAA occlusion devices
   4) LAA thrombus
   5) Pulmonary vein mapping
   6) Cardiac masses
   7) The “triple rule out” and “double rule-out”
   8) Shunts
Jonathon Leipsic, MD

1:15 PM Assessments of CABG and Stents in Coronary CTA
Matt Budoff, MD

1:35 PM Incidental” Non-Cardiac Findings on Cardiac CT: A Simple, Standardized Approach
Johnathan Leipsic, MD

1:55 PM Putting It All Together: Multimodality Cardiac Imaging in the Era of Value-based Imaging
Daniel S. Berman, MD

2:15 PM Adjourn