



Memorial Sloan Kettering  
Cancer Center



# 2018 MSK **CARDIO-ONCOLOGY** SYMPOSIUM

Cardiovascular Health and Disease  
During and After Cancer Therapy

**A CASE-BASED CURRICULUM**

**MAY 18-19, 2018**

Memorial Sloan Kettering Cancer Center  
Rockefeller Research Laboratories  
430 East 67th Street  
New York, NY 10065

# OVERVIEW



Over the past decade, the cardiovascular care of patients with cancer has evolved as a subspecialty driven by novel therapies that can cure or control patients, allowing many patients to be living long enough to experience the potential cardiotoxic effects of these treatments.

The purpose of this conference is to provide a case-based curriculum that addresses important clinical topics relevant to the cardiovascular health of patients with cancer. Clinical experts from Memorial Sloan Kettering Cancer Center and around the country will present an up-to-date overview on the best practice strategies in the evaluation and management of heart disease in cancer patients from early diagnosis, treatment and long-term surveillance. All presentations will include devoted time to permit interaction between audience members and presenters. There will be a separate computer-based session on how to perform and analyze global longitudinal strain (details below).

This course is intended for cardiologists, internists, hematologists/oncologists and other affiliated healthcare professionals who are involved in the care of cancer patients or have a special interest in this area.

## Computer Based Hands-On Learning Lab (Optional)

### How to Perform and Analyze Global Longitudinal Strain (GLS) - Tips and Tricks

The aim of the learning lab is to provide participants personalized hands-on experience in GLS performance and analysis. Following an introductory lecture on the clinical application of strain, participants will analyze real cases pre-loaded on their own computer workstation under the supervision of the faculty. Tips on acquiring optimal 2D images for speckle tracking and step-by-step how to perform and analyze 2D GLS will be demonstrated with examples of common pitfalls to avoid.

**Seating is limited to allow each participant sufficient opportunity to interact with faculty - please be sure to register early.**



**Join clinical experts from Memorial Sloan Kettering and around the country as they present the latest advancements in:**

#### **Breast Cancer Treatment**

Best practice strategies in cardiotoxicity monitoring and management.

#### **Novel Oncologic Therapy & Emerging Cardiotoxicity**

Understanding immunotherapy induced myocarditis.

#### **Radiation Therapy**

How to minimize radiation doses to the heart in the current era. Management of cardiovascular complications.

#### **Cardiovascular Risk Assessment**

How to identify which patients are at increased risk. Strategies to mitigate cardiotoxicity.

#### **Cardiac Imaging**

Which modality, how often and which patient?

#### **Vascular Complications**

Toxicity related to cancer treatment. Management of venous thromboembolism in cancer.

#### **Clinical Challenges**

- 5FU induced chest pain
- Cardiovascular considerations in bone marrow transplant
- Atrial fibrillation and anticoagulation
- Acute coronary syndrome and arrhythmia

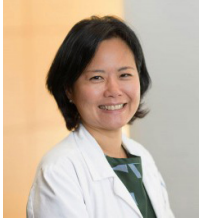
#### **Establishing a Cardio-Oncology Program**

How to get started.

**All presentations will include devoted time to permit interaction between audience members and presenters.**

## MSK FACULTY

### MSK COURSE DIRECTORS



**Jennifer Liu, MD**

Director, Cardiovascular Laboratories  
Attending Physician  
Memorial Sloan Kettering Cancer Center  
Associate Professor of Clinical Medicine  
Weill Cornell Medical College



**Richard M. Steingart, MD**

Chief, Cardiology Service  
Attending Physician,  
Memorial Sloan Kettering Cancer Center  
Professor of Medicine,  
Weill Cornell Medical College

**Michael Baum, MD**  
Cardiology Service

**Oren Cahlon, MD**  
Radiation Oncology

**Angel Chan, MD, PhD**  
Cardiology Service

**Carol Chen, MD**  
Cardiology Service

**Chau Dang, MD**  
Breast Oncology Service

**Dipti Gupta, MD, MPH**  
Cardiology Service

**Michelle Johnson, MD, MPH**  
Cardiology Service

**Katherine Lee-Chuy, MD**  
Cardiology Service

**Michael Postow, MD**  
Melanoma Service

**Wendy Schaffer, MD PhD**  
Cardiology Service

**Gerald Soff, MD**  
Benign Hematology Service

**Ji Can Yang, DO**  
Cardiology Service

**Anthony Yu, MD**  
Cardiology Service

## INVITED FACULTY

### KEYNOTE SPEAKER



**Valentin Fuster, MD, PhD**

Physician-in-Chief  
Director, Mount Sinai Heart  
Director, Zena and Michael A. Wiener Cardiovascular  
Institute Director, Marie-Josée and Henry R. Kravis Center  
for Cardiovascular Health  
Mount Sinai Medical Hospital  
Richard Gorlin, MD/Heart Research Foundation Professor  
Icahn School of Medicine at Mount Sinai

**Usman Baber MD**  
Mt. Sinai Hospital

**Ana Barac, MD, PhD**  
MedStar Washington Hospital Center

**Ann Blaes, MD**  
University of Minnesota

**Jim Cheung, MD**  
Weill Cornell Medical Center

**Susan Dent, MD**  
University of Ottawa

**Michael Fradley, MD**  
University of South Florida

**Joerg Herrmann, MD**  
Mayo Clinic

**Daniel Lenihan, MD**  
Washington University

**Tomas Neilan, MD, MPH**  
Massachusetts General Hospital

**Anju Nohria, MD**  
Brigham and Women's Hospital

**Kevin Oeffinger, MD**  
Duke University

**Dinesh Thavendiranathan, MD**  
Toronto General Hospital  
University Health Network

**Jonathan Weinsaft, MD**  
Weill Cornell Medical Center

### SPECIAL LECTURE



**Steven Lipshultz, MD**

Schotanus Professor and Chair, Pediatrics  
Professor of Obstetrics & Gynecology, Family Medicine  
& Public Health Sciences, Internal Medicine,  
Pharmacology, and Oncology (secondary)  
Wayne State University




Memorial Sloan Kettering  
Cancer Center

[www.mskcc.org/Cardio-Onc](http://www.mskcc.org/Cardio-Onc)

# SCIENTIFIC AGENDA

MAY 18, 2018

7:00 AM	REGISTRATION & BREAKFAST
8:00 AM	 <b>Keynote Address</b> Valentin Fuster, MD, PhD
9:00 AM	<b>Welcome &amp; Introduction</b> Jennifer Liu, MD
9:05 AM	<b>Heart Disease in Cancer Patients – Why Is It So Important Now?</b> Richard Steingart, MD
<b>SESSION I</b> <b>Breast Cancer: Best Practice Strategies to Optimize Outcomes</b> MODERATORS Chau Dang, MD and Jennifer Liu, MD	
9:20 AM	<b>Contemporary Breast Cancer Therapy – Anthracyclines and HER2-Targeted Therapy</b> Chau Dang, MD
9:40 AM	<b>Cardiotoxicity Associated With Breast Cancer Treatment: Risk Prediction and Preventative Strategies</b> Ana Barac, MD, PhD
10:00 AM	<b>Cardiac Monitoring and Therapeutic Interventions During and Post Treatment: Guideline Recommendations and Controversy</b> Anthony Yu, MD
10:20 AM	<b>Case Review: When Should Trastumab Therapy be Interrupted?</b> Michelle Johnson, MD, MPH
10:30 AM	<b>Q&amp;A/Panel Discussion</b>
11:00 AM	BREAK
<b>SESSION II</b> <b>Novel Oncologic Therapy and Emerging Cardiotoxicity</b> MODERATORS Dipti Gupta, MD, MPH and Michael Postow, MD	
11:20 AM	<b>Immunotherapy: Understanding Antitumor Immunity and Moving the Field Forward.</b> Michael Postow, MD
11:40 AM	<b>Cardiovascular Toxicity with Immune Checkpoint Blockade.</b> Tomas Neilan, MD, MPH
12:00 PM	<b>A Case of Fulminant Immunotherapy Induced Myocarditis</b> Carol Chen, MD
12:15 PM	<b>Q&amp;A/Panel Discussion</b>
12:35 PM	LUNCH
1:35 PM	 <b>Special Lecture: Prevention in Cardio-Oncology</b> How to Mitigate Cardiotoxicity – Role of Exercise, Statin and Cardioprotective Agents. Lessons Learned From Survivors of Childhood Cancer Steven Lipshultz, MD
2:00 PM	<b>Q&amp;A</b>

## SESSION III Vascular Complications in Patients with Cancer

MODERATORS Anthony Yu, MD and Joerg Herrmann, MD

2:10 PM	<b>CML and Tyrosine Kinase Inhibitors – What are the Cardiovascular Toxicities?</b> Joerg Herrmann, MD
2:30 PM	<b>Venous Thromboembolism in Cancer Patients: Prevention and Treatment</b> Gerald Soff, MD
2:50 PM	<b>Anti-Angiogenesis TKI Associated HTN – Challenges in BP Management</b> Daniel Lenihan, MD
3:10 PM	<b>Chemotherapeutic Agents Associated Coronary Ischemia</b> Richard Steingart, MD
3:30 PM	<b>Cardiovascular Effects of Androgen Deprivation Therapy in Prostate Cancer Patients</b> Dipti Gupta, MD, MPH
3:50 PM	<b>Q&amp;A/Panel Discussion</b>
4:10 PM	BREAK

## SESSION IV Radiation and the Heart

MODERATORS Oren Cahlon, MD and Steven Lipshultz, MD

4:30 PM	<b>Radiation Therapy: Past, Present and Future</b> Oren Cahlon, MD
4:50 PM	<b>Cardiovascular Complications of Radiation</b> Jennifer Liu, MD
5:10 PM	<b>Autonomic Dysfunction in Patients Treated with Mediastinal or Neck Radiation</b> Anju Nohria, MD
5:30 PM	<b>Device Therapy Related Issues During Radiation Treatment</b> Michael Fradley, MD
5:50 PM	<b>Q&amp;A/Panel Discussion</b>
6:10 PM	DAY 1 ADJOURNMENT

MAY 19, 2018

7:30 AM	BREAKFAST
7:50 AM	<b>Opening Remarks &amp; Day 1 Review</b> Richard Steingart, MD and Jennifer Liu, MD
<b>SESSION V</b> <b>Imaging and Preclinical Markers for Cardiotoxicity Monitoring</b> MODERATORS Richard Steingart, MD and Angel Chan, MD, PhD	
8:00 AM	<b>Is 2D LVEF Enough? The Role of Serum Biomarker, Strain Imaging and 3D Echocardiography</b> Dinesh Thavendiranathan, MD
8:20 AM	<b>Role of Echo in Clinical Decision Making for Patients During and After Cancer Therapy</b> Jennifer Liu, MD
8:40 AM	<b>Role of MRI in Cardio-Oncology</b> Jonathan Weinsaft, MD
9:00 AM	<b>Case Presentation: Illustrate the Role of Imaging and Modality Selection in the Diagnosis and Management of Cardiotoxicity</b> Michael Fradley, MD
9:10 AM	<b>Q&amp;A/Panel Discussion</b>

## SESSION VI

### Cardiovascular Considerations in Hematologic Malignancies

MODERATORS Daniel Lenihan, MD and Richard Steingart, MD

9:30 AM	<b>Cardiac Amyloidosis: Diagnosis and Management</b> Jennifer Liu, MD
9:50 AM	<b>Treatment of Multiple Myeloma – Cardiac Safety with Proteasome Inhibition</b> Daniel Lenihan, MD
10:10 AM	<b>Common CV Issues Encountered During Bone Marrow Transplant</b> Wendy Schaffer, MD PhD
10:30 AM	<b>Q&amp;A/Panel Discussion</b>
10:50 AM	BREAK

## SESSION VII

### Cancer Survivorship Issues

MODERATORS Michael Baum, MD and Ana Barac, MD, PhD

11:10 AM	<b>Late Onset Cardiotoxicity in Adult Survivors of Childhood Cancer: Incidence, Risk Factors and Individual CV Risk Prediction</b> Kevin Oeffinger, MD
11:30 AM	<b>Practice Guidelines/Positions Statements: Pearls To Take Home</b> Susan Dent, MD
11:50 AM	<b>Transition to Survivorship Care: How to Set Up a Survivorship Clinic</b> Ann Blaes, MD
12:10 PM	<b>Q&amp;A/Panel Discussion</b>
12:30 PM	LUNCH

## SESSION VIII

### Cardiovascular Challenges in Cancer Patients

MODERATORS Carol Chen, MD and Joerg Herrmann, MD

1:30 PM	<b>Clinical Conundrums</b> <ul style="list-style-type: none"><li>• <b>Medical and Interventional Management of Acute and Chronic CAD</b> Usman Baber, MD</li><li>• <b>AF and Anticoagulation – Does the CHADS Score Apply?</b> Jim Cheung, MD</li><li>• <b>Advanced HF Therapy in Patients During and After Cancer Treatment</b> Anju Nohria, MD</li></ul>
2:30 PM	<b>Q&amp;A/Panel Discussion</b>

## SESSION IX

### Building the Team: The Cardio-Oncology Program

MODERATORS Kevin Oeffinger/Susan Dent

2:50 PM	<b>How to Build a Cardio-Oncology Program</b> Joerg Herrmann, MD
3:10 PM	<b>Round Table Discussion: Experience from the Panel and Audience</b> Michael Fradley, MD, Ana Barac, MD, PhD, Joerg Herrmann, MD and Tomas Neilan, MD, MPH
3:30 PM	CLOSING REMARKS & ADJOURNMENT

### Computer Based Hands-On Learning Lab (Optional)

#### How to Perform and Analyze Global Longitudinal Strain (GLS) - Tips and Tricks

Jennifer Liu, MD, Dinesh Thavendiranathan, MD, Ji Can Yang, DO and Katherine Lee-Chuy, MD

4:00 PM - 6:00 PM	<b>Educational Objectives:</b> <ul style="list-style-type: none"><li>• <b>State the methodology behind speckle tracking and the utility of GLS in clinical practice.</b></li><li>• <b>Demonstrate how to acquire 2D images for GLS measurement.</b></li><li>• <b>Perform GLS analysis and discuss common pitfalls to avoid.</b></li></ul>
-------------------	---

# REGISTRATION

	EARLY*	GENERAL
Physicians (MDs, PhDs and DOs)	\$375	\$475
Residents, Fellows, Nurses and Other Healthcare Providers	\$200	\$300
Industry Professionals**	n/a	\$835
Optional Learning Lab Workshop (Space is Limited)	n/a	\$100

\*Early registration available until March 17, 2018

\*\*Industry professionals may attend CME activities for their own education. Marketing, sales, and promotion of products and services is strictly prohibited at MSK CME activities.

### Register Online:

[www.mskcc.org/Cardio-Onc](http://www.mskcc.org/Cardio-Onc)

Registration includes continental breakfast, lunch, and refreshment breaks. Please contact [cme@mskcc.org](mailto:cme@mskcc.org) at least one week prior to the course if you have any special dietary needs.

- **30% Discounted Rate for MSK Alumni and MSK Alliance Members:** MSK offers a 30% discounted rate to all MSK Alumni and MSK Alliance members to attend a CME course. Please contact [cme@mskcc.org](mailto:cme@mskcc.org) for a promotion code or more information.
- **MSK Staff Registration:** Registration is complimentary for MSK staff. However, you must register online: [www.mskcc.org/Cardio-Onc](http://www.mskcc.org/Cardio-Onc)

### ACCREDITATION STATEMENT

MSK is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.



### LECTURES AMA CREDIT DESIGNATION STATEMENT

MSK designates this live activity for a maximum of **14.75 AMA PRA Category 1 Credit(s)**<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

### WORKSHOP AMA CREDIT DESIGNATION STATEMENT

MSK designates this live activity for a maximum of **2.00 AMA PRA Category 1 Credit(s)**<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

### ABIM MOC RECOGNITION STATEMENT\*

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to **14.75 Medical Knowledge MOC points** in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.



\*Please note MOC points will not be available for the workshop.

### FACULTY DISCLOSURE

It is the policy of MSK to make every effort to insure balance, independence, objectivity, and scientific rigor in all continuing medical education activities which it provides as an ACCME accredited provider. In accordance with ACCME guidelines and standards, all faculty participating in an activity provided by MSK are expected to disclose any significant financial interest or other relationship with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services which are discussed by the faculty members in an educational presentation. As required by the ACCME, when an unlabeled use of a commercial product or an investigational use not yet approved for any purpose is discussed during an educational activity, MSK requires the speaker to disclose that the product is not labeled for the use under discussion or that the product is still investigational.



Memorial Sloan Kettering Cancer Center  
Rockefeller Research Laboratories  
430 East 67th Street  
New York, NY 10065



**Memorial Sloan Kettering  
Cancer Center**

CONTINUING MEDICAL EDUCATION  
MEMORIAL SLOAN KETTERING CANCER CENTER  
633 Third Avenue, 12th Floor, New York, NY 10017  
[www.mskcc.org/cme](http://www.mskcc.org/cme) | [cme@mskcc.org](mailto:cme@mskcc.org)

[www.mskcc.org/Cardio-Onc](http://www.mskcc.org/Cardio-Onc)