



# 44<sup>TH</sup> CARDIOLOGY UPDATE

EVIDENCE-BASED MANAGEMENT

June 2-4, 2022

The Francis Marion Hotel  
Historic Charleston, South Carolina  
During Spoleto Festival USA

For more information, contact the MUSC Office  
of CME: 843-876-1925, [cmeoffice@musc.edu](mailto:cmeoffice@musc.edu),  
or visit [musc.edu/cme](https://www.musc.edu/cme)

Offering limited in-person\*  
and  
virtual attendance

In-person attendance will be offered on a 1st come, 1st serve basis.

 **MUSC**  
Medical University  
of South Carolina

# 44<sup>TH</sup> CARDIOLOGY UPDATE

## EVIDENCE-BASED MANAGEMENT

June 2-4, 2022 • Francis Marion Hotel, Charleston, South Carolina

### COURSE FACULTY


#### COURSE DIRECTOR

**Michael R. Gold, MD, PhD**  
Michael Assey Professor of Medicine  
Division of Cardiology

#### ASSISTANT COURSE DIRECTOR

**Christopher D. Nielsen, MD**  
Director, Adult Cardiac Labs  
Director, Interventional Fellowship Program  
Professor of Cardiology

#### MUSC FACULTY



**Nicholas Amoroso, M.D.**  
Assistant Professor  
Department of Medicine  
Division of Cardiology

**Jessica Atkins, M.D.**  
Advanced Heart Failure/Transplant  
Cardiology Fellow  
Department of Medicine  
Division of Cardiology

**Jan Basile, M.D.**  
Professor  
Department of Medicine  
Division of Cardiology

**Marc-André Cornier, M.D.**  
Professor  
James A. Keating Endowed Chair in  
Diabetes Director, Division of Endocrinology,  
Diabetes & Metabolic Diseases Department  
of Medicine

**Valerian Fernandes, M.D.**  
Professor  
Department of Medicine  
Division of Cardiology

**Sheng Fu, M.D.**  
Cardiology Fellow  
Department of Medicine  
Division of Cardiology

**Stephanie Gaydos, M.D.**  
Assistant Professor  
Department of Medicine and Pediatrics  
Division of Adult Congenital Cardiology

**Jan Griffin, M.D.**  
Assistant Professor  
Department of Medicine  
Division of Cardiology

**Brian Houston, M.D., FACC**  
Associate Professor  
Medical Director, Mechanical Circulatory  
Support

**Daniel P. Judge, M.D., FACC, FHSA**  
Edwin W. and Teresa H. Rogers  
Professor of Medicine  
Director of Cardiovascular Genetics

**Anne Kroman, D.O, PhD**  
Assistant Professor  
Department of Medicine  
Division of Cardiology

**Sheldon Litwin, M.D.**  
Professor  
Director of Cardiac Imaging Spaulding  
Paolozzi Endowed Chair

**Anbukarasi Maran, M.D.**  
Associate Professor  
Department of Medicine  
Division of Cardiology

**Joshua Payne, M.D.**  
Assistant Professor  
Department of Medicine  
Division of Cardiology

**Daniel Silverman, M.D.**  
Assistant Professor  
Department of Medicine  
Division of Cardiology  
Ralph H. Johnson VA Medical Center

**Adrian B. Van Bakel, M.D., PhD** Professor  
Department of Medicine  
Division of Cardiology

**Ashley Waring, M.D.**  
Assistant Professor  
Department of Medicine  
Division of Cardiology

**J. Marcus Wharton, M.D.**  
Frank P Tourville Professor of Medicine  
Director, Tourville Arrhythmias Center  
Director, Cardiac Electrophysiology  
Training  
Program

**Jeff Winterfield, M.D.**  
Associate Professor  
Director, Ventricular Arrhythmia Service



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### NEEDS STATEMENT AND PROGRAM OVERVIEW

The management of patients with cardiac disease continues to evolve. The goal of this program is to provide the most current evidence-based diagnostic and treatment strategies for your patients. Related areas to cardiology will be covered such as management of hypertension, pulmonary embolus of cardiac patients and management of heart failure. The program structure will focus on case-based presentations including lectures, breakfast cases, panel discussions, and use of our audience response system to provide opportunities for all participants to interact with the conference faculty. This three day program in clinical cardiology is designed for the cardiologist, primary care physician, internist, practicing cardiovascular specialist, cardiovascular nurse and physician assistant.

### CANCELLATIONS

A refund will be made upon written request prior to May 2, 2022; however \$100 will be retained for administrative costs. No refunds will be made after May 2, 2022. We reserve the right to cancel the conference if necessary. Full registration fees will be refunded for canceled programs. The Medical University of South Carolina cannot be responsible for reimbursement of airline or other transportation fares, hotel or rental car charges, including penalties. By registering for this conference, you acknowledge and agree to this cancellation policy.

### DISCLOSURE STATEMENT

In accordance with the ACCME Standards for Integrity and Independence in Accredited Continuing Education anyone involved in planning or presenting this educational activity will be required to disclose any financial relationships with any ineligible companies. An ineligible company is any entity whose primary business is producing, marketing, selling, reselling, or distributing healthcare products used by or on patients. Any financial relationships with these ineligible companies have been mitigated by the MUSC Office of CME. Speakers who incorporate information about off-label or investigational use of drugs or devices will be asked to disclose that information at the beginning of their presentation.

### AMERICANS WITH DISABILITIES ACT

It is the policy of the Medical University of South Carolina not to discriminate against any person on the basis of disabilities. If you feel you need services or the auxiliary aids mentioned in this act in order to fully participate in this continuing medical education activity, please call the Office of CME at 843-876-1925.

### CREDIT DESIGNATION STATEMENT

The Medical University of South Carolina designates this live activity for a maximum of 14.00 *AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

AAFP: Application for Continuing Medical Education credits has been filed with the American Academy of Family Physicians. Determination of credits is pending.

American Academy of Nurse Practitioners National Certification Program accepts *AMA PRA Category 1 Credit*<sup>™</sup> from organizations accredited by ACCME.

American Academy of Physician Assistants (AAPA) accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit(s)*<sup>™</sup> from organizations accredited by ACCME. PAs may receive a maximum of 14.00 AAPA Category 1 Credits for completing this activity.



Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 14.00 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 participants completion information to ACCME for the purpose of granting ABIM MOC credit.

### ACCREDITATION STATEMENT

The Medical University of South Carolina is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

**QUESTIONS?** Call the Office of CME at 843-876-1925 or email [cmeoffice@muscd.edu](mailto:cmeoffice@muscd.edu)

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June 2-4, 2022 • Francis Marion Hotel, Charleston, South Carolina

### COURSE AGENDA

#### Thursday, June 2

- 7:30 am Sign in and Breakfast with Exhibitors  
**Moderator: Michael Gold, M.D.**
- 7:55 Welcome/ Join Live Stream Session
- 8:00 Lifestyle Changes and Other Noninvasive Interventions to Prevent Atrial Fibrillation, *J. Marcus Wharton, M.D.*
- 8:30 Conduction System Pacing - A New Approach to Avoid Long Term Complications of Pacing Therapy, *Joshua Payne, M.D.*
- 9:00 Sudden Cardiac Death – Predictors, Management and Role of Defibrillators, *Anne Kroman, M.D.*
- 9:30 Digital Health: How it is Changing the Management of Patients with Arrhythmias, *Jeffrey Winterfield, M.D.*
- 10:00 Faculty Panel Q&A (*Drs. Wharton, Payne, Kroman, Winterfield*)
- 10:20 Break with Exhibitors  
**Moderator: Jan Basile, M.D.**
- 10:40 Case-based Strategies for Implementation of Newer Non-statin Therapies in High-Risk Patients  
*Ashley Waring, M.D.*
- 11:10 Case-Based Approaches in Management of Complex Hypertension, *Jan Basile, M.D.*
- 12:10 pm Assessment and Management of Cardiometabolic Risk to Prevent ASCVD, *Marc-Andre Cornier, MD*
- 12:40 Faculty Panel Q&A (*Drs. Waring, Basile, Cornier*)
- 1:00 Adjourn for the day

#### Friday, June 3

- 7:30 am Sign in and Breakfast with Exhibitors  
**Moderator: Brian Houston, M.D. and Daniel Judge, M.D.**
- 7:30 Cases: Bring your Difficult Cases, *Dr. Judge & Houston*
- 8:30 Cardiac Amyloid, *Jan Griffin, M.D.*
- 9:00 Genomic screening: It's In Our DNA, *Daniel Judge, M.D.*
- 9:30 Advanced Heart Failure: Who, What, and "When", *Brian Houston, M.D.*
- 10:00 Heart Failure with Preserved Ejection Fraction in 2022: What's New? What's Important? *Daniel Silverman, M.D.*

#### Friday, June 3, Continued

- 10:30 Faculty Panel Q&A (*Drs. Houston, Judge, Griffin, Silverman*)
- 10:50 Break with Exhibitors  
**Moderator: Brian Houston, M.D. and Sheng Fu, M.D.**
- 11:10 A Regional Cardiogenic Shock Network: Challenges and Progress, *Brian Houston, M.D.*
- 11:40 HFrEF - Practice Changing New Drugs and Devices, *Adrian Van Bakel, M.D.*
- 12:10 pm Best of the Best: Heart Failure Cases of the Year, *Jessica Atkins, M.D. and Sheng Fu, M.D.*
- 12:40 Faculty Panel Q&A (*Drs. Houston, Van Bakel, Atkins, Fu*)
- 1:00 Adjourn for the day

#### Saturday, June 4

- 7:30 am Sign in and Breakfast with Exhibitors  
**Moderator: Christopher Nielsen, M.D.**
- 7:30 Cases: Bring your Difficult Cases, *Drs Nielsen & Fernandes*
- 8:30 Use of Imaging in the Diagnosis and Treatment of Heart Failure, *Sheldon Litwin, M.D.*
- 9:00 Cardiac Imaging in Valve Disease, *Jessica Atkins, M.D.*
- 9:30 Imaging in Congenital Heart Disease, *Stephanie Gaydos, M.D.*
- 10:00 Break with Exhibitors
- 10:20 Structural/Valvular Interventions, Beyond TAVR and Mitraclip, *Nicholas Amoroso, M.D.*
- 10:50 New and Old Therapies for Hypertrophic Obstructive Cardiomyopathy, *Valerian Fernandes, M.D.*
- 11:20 Patent Foramen Ovale: Secondary Stroke Prevention and More, *Christopher Nielsen, M.D.*
- 11:50 Update on Chronic Total Occlusion PCI, *Maran Anbukarasi, M.D.*
- 12:20 pm Course Wrap-Up
- 12:30 Adjourn until 2023

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### LEARNING OBJECTIVES

Upon completion of this Live Activity, participants should be able to:

- Explain the relationship of alcohol consumption to risk & worsening AF
- Explain relationship of obesity to risk and worsening of AF
- Discuss the relationship of exercise to risk and worsening of AF
- Prescribe lifestyle changes to your AF patients
- Discuss the potential benefits of conduction system pacing versus traditional apical pacing
- Identify predictors of sudden cardiac death, start an appropriate treatment plan, and appreciate the role of defibrillator therapy
- Identify patients that would benefit from non-statin therapies
- Discuss the risks/benefits of novel, non-statin therapies with patients
- Feel comfortable prescribing certain non-statin therapies
- Recognize when a referral to a lipid specialist might be beneficial
- Review the most common clinical situations that suggest a complex (secondary) cause of hypertension
- Recognize the screening tests to rule out complex (secondary) causes of hypertension and when to perform them
- Discuss the work up and treatment of the more common complex (secondary) causes of hypertension
- Assess cardiometabolic risk factors including lipids and other biomarkers of ASCVD risk
- Interpret risk factors to better risk stratify patients
- Develop strategies to better manage cardiometabolic risk factors to prevent ASCVD
- Discuss what is Heart Failure
- Recognize when is the right time to refer for Advanced HF therapy
- Identify the AHF therapies available and how efficacious are they
- Review the importance of clinical genetics in cardiovascular medicine
- Recognize the difference between traditional uses of genetics and newer genomic screening
- Discuss MUSC's In Our DNA SC genomic screening program
- Summarize relevant clinical trial results from the last two years
- Recognize early signs of cardiogenic shock
- Identify common triggers for initiation or escalation of mechanical support in cardiogenic shock
- Recognize the challenges and progress that has been made in building a regional "hub and spoke" shock network in South Carolina
- Determine optimal matches in patient phenotypes & novel therapies
- Preview therapies in the pipeline
- Feel confident ordering the most appropriate and cost effective initial tests in patients with suspected heart failure
- Recognize the relative strengths and weaknesses of echocardiography, CT, MRI and nuclear imaging in the different types of heart failure
- Use imaging to help guide therapy & improve prognosis in heart failure
- Recognize how to choose the correct imaging study (Echo, CT, MRI)
- Discuss the role of multimodality imaging in assessment of valve disease and planning for intervention;
- Interpret Transthoracic Echocardiogram reports and when to pursue further imaging or urgent referrals
- Order or coordinate appropriately-timed surveillance imaging for congenital heart disease patients to avoid gaps in care
- Review late risks or sequelae of common types of unrepaired/repairs congenital heart disease that warrant imaging: "Shunts" (ASDs and VSDs), bicuspid aortic valve, pulmonary stenosis and Tetralogy of Fallot, coarctation of the aorta
- Identify strengths and limitations of Echo, CT, and/or MRI in common types of congenital heart disease

### CONFERENCE HOTEL INFORMATION

The Francis Marion Hotel, historic Charleston's landmark full service hotel, is in the heart of Charleston's historic district. Located at Marion Square, the Francis Marion Hotel is only a few blocks from the Charleston Visitor's Center, the South Carolina Aquarium, restaurants, boutiques, galleries, museums, antique shops and night life. The hotel offers valet parking, spa, concierge, retail shops and the Swamp Fox Restaurant and Bar.



Special group rates start at \$199.00, plus tax, per night. A limited number of guest rooms have been reserved and are being offered on a first come, first serve basis. The room block will be held until **Monday, May 2, 2022**; however the room block will fill prior to this date. In such a case, neither the group rate nor guest room availability can be guaranteed. Therefore, we recommend you make your reservation as soon as possible. Reservations can be made by calling the hotel directly at 843-722-0600 or 877-756-2121 and identifying yourself as being a participant in this conference, or by following the online directions below.

**To make online reservations:**

-Visit <https://reservations.travelclick.com/76320?groupID=2878269>

-Online Booking Code: CARDIOLOGY2

**Parking:** Valet parking at the hotel is available at \$28++ per day for overnight guests and can be added to your guest folio. In addition, self-parking is available at \$2000 per day, which must be paid directly to the parking garage in cash, MasterCard or Visa. Pricing is subject to change.

### ACCESS TO RECORDED PRESENTATIONS

The MUSC Office of CME, with the permission of each speaker, will be recording each presentation of the conference. The videos will be posted online after the conference and be available for those who are not able to live stream the entire conference. Viewing the videos will offer the same amount of CME credit and can be viewed for up to 14 days following the posting date. The non-refundable fee for this service is \$100.00 and is **only available to individuals registered for the conference.** Access to the videos will be granted to attendees who purchase this option in advance of the conference.

Credit Designation: The Medical University of South Carolina designates this enduring material for a maximum of 0.5 AMA PRA Category 1 Credit(s)<sup>TM</sup> for each video. Physicians should only claim the credit commensurate with the extent of their participation in the activity.

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### REGISTRATION INFORMATION

	On or Before 3/31/2022	After 4/1/2022
Physicians in Practice	\$575.00	\$650.00
Residents & All Other Health Professionals	\$475.00	\$550.00

The fee for in-person attendance includes tuition, breaks, online syllabus, and certificates of attendance. The fee for live streaming the meeting includes tuition, online syllabus, and certificates of attendance.

No pre-registrations will be accepted after **May 27, 2022**. After this date, you must contact the Office of CME at 843-876-1925 to see if space is still available. If space is available you must register on-site. Note: There will be an increased rate for on-site registrations!

(Please use ONE of these methods to register. Do not mail if previously faxed or telephoned).

- **Online:** Complete registration through the [Online Registration Portal](#)
- **Mail:** Please send registration form with check payable to “Medical University of South Carolina” or credit card information to: Odessa Ussery, Office of CME - MUSC, 96 Jonathan Lucas Street, HE 221A, MSC 754, Charleston, SC 29425
- **Telephone:** 843-876-1925 - Credit card only.
- **Fax:** 843-876-1931 - Credit card only. (Secured area)
- **Email:** Email/Scan Scan completed registration form to [cmeoffice@musc.edu](mailto:cmeoffice@musc.edu)

### TOUR HISTORIC CHARLESTON AND EXPERIENCE SPOLETO FESTIVAL USA 2022



Photos © Spoleto Festival USA

“For 17 days and nights each spring, Spoleto Festival USA fills Charleston, South Carolina’s historic theaters, churches, and outdoor spaces with performances by renowned artists as well as emerging performers in opera; theater; dance; and chamber, symphonic, choral, and jazz music. Now approaching its 42nd season, Spoleto Festival USA is internationally recognized as America’s premier performing arts festival.” -[SpoletoUSA.org](http://SpoletoUSA.org)

For more information, call 843-722-2764 or visit [spoletousa.org](http://spoletousa.org)

### CHARLESTON, SOUTH CAROLINA

Charleston is America’s most beautifully preserved architectural and historic treasure. Formal gardens magnify the beauty of stately old homes and church bells toll the hour as history unfolds around each corner. Browse through Charleston’s famous open-air market and marvel at sweetgrass baskets and other crafts. Visit the inviting boutiques, art galleries and antique shops along Meeting and King Streets. Enjoy many of the South’s most celebrated restaurants. **Experience Charleston and it’s Southern hospitality!**

*Voted #1 City in the USA by the readers of Condé Nast Traveler and Travel & Leisure Magazines*

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### REGISTRATION FORM

Name \_\_\_\_\_ Personal ID# XXX - XX - \_\_\_\_\_  
(As you would like it printed on your name badge) (Last four digits of your SSN)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Specialty \_\_\_\_\_ Degree/Credentials \_\_\_\_\_

Email \_\_\_\_\_  
(Please provide your active email address to ensure proper receipt of all CME Credit documentation.)

Phone (\_\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ Fax (\_\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

#### PLEASE READ THE STATEMENTS BELOW AND CHECK THE BOX IF YOU AGREE TO

- YES I give permission to the MUSC Office of CME to share my name, city, and state with other attendees and the companies that will be exhibiting at and/or supporting the conference through educational grants.
- NO I do not give permission to the MUSC Office of CME to share my name, city, and state with other attendees and the companies that will be exhibiting at and/or supporting the conference through educational grants.

#### REGISTRATION TYPE

PLEASE SELECT THE REGISTRATION TYPE

In-Person Registration

Virtual Registration

#### REGISTRATION FEES & METHOD OF PAYMENT

	On or Before 3/31/2022	After 4/1/2022
Physicians in Practice	<input type="checkbox"/> \$575.00	<input type="checkbox"/> \$650.00
All Other Health Professionals	<input type="checkbox"/> \$475.00	<input type="checkbox"/> \$550.00

I would like access to the recorded videos for an additional fee of \$100\*

YES

NO

\*The videos will be posted online after the conference. Viewing the videos will offer the same amount of CME credit and can be viewed for up to 14 days following the posting date

The fee for in-person attendance includes tuition, breaks, online syllabus, and certificates of attendance. The fee for live streaming the meeting includes tuition, online syllabus, and certificates of attendance.

Enclosed Check Payable to Medical University of South Carolina  MasterCard  Visa  Discover  American Express

Card Number \_\_\_\_\_

Expiration Date \_\_\_\_\_

Name as it appears on card \_\_\_\_\_

CVV Code \_\_\_\_\_

(Please use ONE of these methods to register. Do not mail if previously faxed or telephoned).

- **Mail** registration form with check made out to "Medical University of South Carolina" or credit card information to:  
MUSC Office of CME, 96 Jonathan Lucas Street, HE221A, MSC 754, Charleston, SC, 29425
- **Telephone:** (843) 876-1925 – Registration by credit card only.
- **Fax:** (843) 876-1931 – Registration by credit card only.
- **Email:** Scan & email completed registration form to [cmeoffice@musc.edu](mailto:cmeoffice@musc.edu)
- **Online:** Complete registration through the [Online Registration Portal](#)



[www.musc.edu/cme](http://www.musc.edu/cme)

#### CANCELLATION

A refund will be made upon written request prior to **May 2, 2022** less a \$100 cancellation fee. We reserve the right to cancel the program if necessary. Full registration fees will be refunded for cancelled programs. The University cannot be responsible for reimbursement of airline or other transportation fares, hotel or rental car charges, including penalties. *By registering for this conference, you acknowledge and agree to this cancellation policy.*