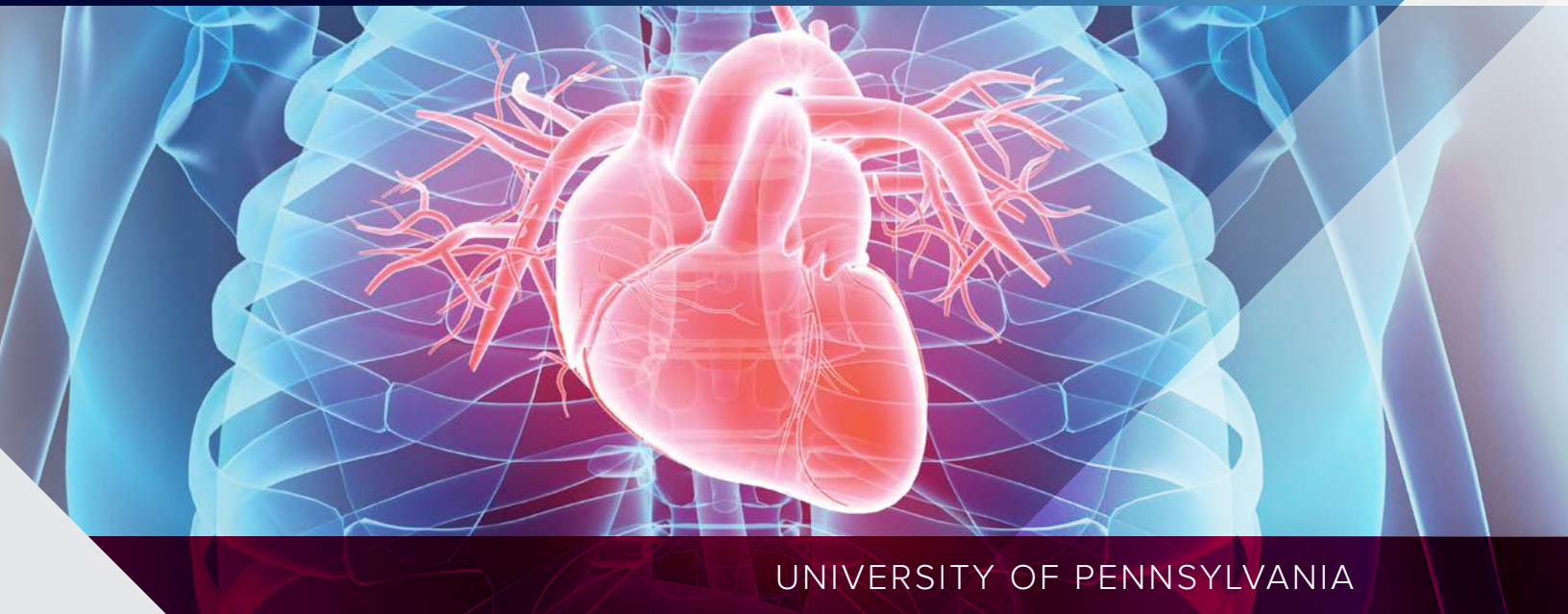




Penn Medicine
Continuing Medical and
Interprofessional Education

HFpEF Symposium 2021



UNIVERSITY OF PENNSYLVANIA

Friday, April 9, 16 & 23

12:00 pm – 5:30 pm EST

LIVE VIRTUAL

This conference will be live streamed

<https://upenn.cloud-cme.com/HFpEF2021>



HFpEF Symposium 2021

HOSTED BY THE DEPARTMENT OF MEDICINE AND THE DIVISION OF CARDIOLOGY AT PENN MEDICINE

PROGRAM OVERVIEW

While the incidence of heart failure with reduced ejection fraction (HFrEF) has decreased, the incidence of heart failure with preserved ejection fraction (HFpEF) continues to rise, accounting for ~50% of heart failure hospitalizations. Patients with HFpEF are markedly limited in terms of their functional capacity and quality of life, similar to their HFrEF counterparts. Yet in contrast to HFrEF, there are no effective pharmacologic treatments for HFpEF, despite numerous clinical trials, leaving our patients with few therapeutic options. Within this context, many providers at Penn Medicine have come together to care for these challenging patients, incorporating multifaceted diagnostic and therapeutic strategies. The meeting organizers believe that sharing our collective experiences in the management of these patients may be of benefit to the greater community.

The topics chosen for this conference represent the state-of-the-art in HFpEF, incorporating the expertise of numerous disciplines including cardiology, pulmonology, radiology, sleep medicine, bariatric surgery, and endocrinology, amongst others. The meeting is intended to provide an overview of HFpEF management to practicing clinicians, nurse practitioners, nurses, physician assistant, residents, fellows and students. Because treatment options for these patients are limited, enrollment in clinical trials is paramount in increasing our understanding and treatment of HFpEF. The symposium will also highlight ongoing research efforts, giving clinicians the opportunity to consider referring to our research programs.



TARGET AUDIENCE

This conference is designed for primary care physicians, cardiologists, nurse practitioners, physician assistants, nurses and others who see HFpEF patients in both the clinical and research settings.



EDUCATIONAL OBJECTIVES

- Review the diagnostic criteria for HFpEF, including when to use advanced imaging or invasive hemodynamic assessment
- Identify HFpEF mimickers, including amyloidosis, sarcoidosis, and inherited cardiomyopathies
- Discuss the role of non-cardiac structures (such as the arterial system and other organs) in the pathogenesis and treatment of HFpEF
- Describe the electrophysiologic manifestations of HFpEF and their treatments
- Discuss ongoing research efforts in cardiology, including pharmacologic and interventional approaches
- Review ongoing research efforts in HFpEF beyond cardiology



CONFERENCE FORMAT

This conference will be held virtually on Friday, April 9, 16 and 23, 2021 by live stream only. The virtual presentations will follow the scheduled agenda in real time. **You must sign into the live, virtual stream in real time (EST) each day in order to receive credit.** Presentations will also be made available to registered attendees for later viewing.



ACCREDITATION AND DESIGNATION OF CREDIT

In support of improving patient care, Penn Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

DISCLOSURES

Penn Medicine, Office of Continuing Medical and Interprofessional Education, adheres to the ACCME Standards for Commercial Support. Faculty and planners disclosure information will be made available in the conference materials and syllabus. Faculty members are also expected to disclose to participants any discussions of off-label and/or investigational uses of pharmaceutical products within their presentations.

NONDISCRIMINATION STATEMENT

The University of Pennsylvania values diversity and seeks talented students, faculty, and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, gender identity, religion, color, national or ethnic origin, age, disability, or status as a Vietnam Era Veteran or disabled veteran in the administration of educational policies, programs or activities; admissions policies; scholarship and loan awards; athletic, or other University administered programs or employment. Questions or complaints regarding this policy should be directed to Executive Director, Office of Affirmative Action and Equal Opportunity Programs, 3600 Chestnut Street, Sansom Place East Suite 228, Philadelphia, PA 19104-6106 or 215.898.6993 (Voice) or 215.898.7803 (TDD). www.upenn.edu/affirm-action.



The UPenn HFpEF 2021 Symposium is officially endorsed by the Heart Failure Society of America. The opinions presented in this educational activity do not necessarily reflect the opinions or recommendations of the HFSA.

▶ PHYSICIANS

Penn Medicine designates this live activity for a maximum of **14.75 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

▶ NURSES

This program provides **14.75** contact hours.

▶ PHYSICIAN ASSISTANTS

AAPA accepts certificates of participation for educational activities certified for **AMA PRA Category 1 Credit™** from organizations accredited by ACCME or a recognized state medical society. PAs may receive a maximum of **14.75** Category 1 credits for completing this activity.

▶ MAXIMUM AMOUNT OF CREDIT PER SESSION:

APRIL 9, 2021 – **5 credits**

APRIL 16, 2021 – **5.25 credits**

APRIL 23, 2021 – **4.5 credits**

▶ CERTIFICATES & TRANSCRIPTS

After the conference has concluded, all participants will receive a follow-up email with instructions and a link on how to claim their credit. Once participants submit the request for credit, the earned credits will be available for viewing on your transcript or available for printing at <https://upenn.cloud-cme.com>. Please note that the individual certificate will not be mailed.

COURSE COMMITTEE

The course director and planning committee listed below are all faculty of the Perelman School of Medicine at the University of Pennsylvania and Penn Medicine, Philadelphia, PA.



COURSE DIRECTOR

Payman Zamani, MD, MTR

Assistant Professor of Medicine, Director, Cardiovascular Phenotyping Unit, Perelman School of Medicine

PROGRAMMING COMMITTEE



Julio A. Chirinos, MD, PhD

Associate Professor of Medicine



Stuart B. Prenner, MD

Assistant Professor of Clinical Medicine



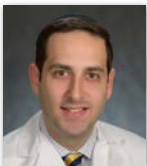
Lee R. Goldberg, MD, MPH

Professor of Medicine
Section Chief, Advanced Heart Failure
and Cardiac Transplant



Ross Zimmer, MD

Clinical Assistant Professor of Medicine
Director, Heart Failure Program
Penn Medicine Presbyterian Medical Center



Jeremy A. Mazurek, MD

Assistant Professor of Clinical Medicine
Medical Director, Pulmonary Hypertension
Program, Hospital of the University of
Pennsylvania
Director, Pulmonary Hypertension/Pulmonary
Vascular Disease Fellowship



Margaret Shanks, MSN, FNP-C, ACGNP-BC*

Nurse Practitioner
*Nurse Planner



COURSE FACULTY

The speakers listed below are all faculty of the Perelman School of Medicine at the University of Pennsylvania and Penn Medicine, Philadelphia, PA.

Zoltan P. Arany, MD, PhD
Professor of Medicine

Therese Bitterman, MD, MSCe
Assistant Professor of Medicine and
Epidemiology

Paco E. Bravo, MD
Assistant Professor of Radiology

Anne Cappola, MD, ScM
Professor of Medicine

Thomas P. Cappola, MD, ScM
Herbert C. Rorer Professor in Medical
Sciences
Director, Division of Cardiology

Julio A. Chirinos, MD, PhD
Associate Professor of Medicine

Jordana Cohen, MD, MSCe
Assistant Professor of Medicine

Rajat Deo, MD
Associate Professor, Clinician-Educator

Brian Drachman, MD
Associate Professor of Clinical Medicine
Associate Chief of Cardiovascular Medicine
Co-Director, Amyloidosis Program

Paul N. Fiorilli, MD
Assistant Professor of Clinical Medicine

David Frankel, MD
Director, Cardiac Electrophysiology
Fellowship Program
Associate Professor of Medicine

Jason Fritz, MD
Associate Professor of Clinical Medicine
Co-Director, Dyspnea Program

Marie Guerraty, MD, PhD
Assistant Professor of Medicine

Michael V. Genuardi, MD
Assistant Professor of Clinical Medicine

Lee R. Goldberg, MD, MPH
Professor of Medicine
Section Chief, Advanced Heart Failure
and Cardiac Transplant

Yuchi Han, MD, MMSc
Associate Professor of Medicine

Howard Herrmann, MD
John Winthrop Bryfogle Professor of
Cardiovascular Diseases
Professor of Medicine in Surgery
Director, Cardiac Catheterization Laboratories
Director for Interventional Cardiology

Daniel P. Kelly, MD
Director, Cardiovascular Institute
Willard and Rhoda Ware Professor of Diabetes
and Metabolic Diseases

Ken B. Margulies, MD
Professor of Medicine
Research Director, Heart Failure/Transplantation

Jeremy A. Mazurek, MD
Assistant Professor of Clinical Medicine
Medical Director, Pulmonary Hypertension Program
Hospital of the University of Pennsylvania
Director, Pulmonary Hypertension/Pulmonary
Vascular Disease Fellowship

Jorge I. Mora, MD
Associate Professor of Clinical Medicine
Associate Chief, Clinical Affairs
Division of Sleep Medicine
Hospital of the University of Pennsylvania
Medical Director, Penn Sleep Center

Anjali T. Owens, MD
Assistant Professor of Medicine

William Pentz, MD, FACC
Clinical Associate Professor of Medicine
Director, Cardiac Rehabilitation

Janice Pieretti, MD
Assistant Professor of Clinical Medicine

Stuart B. Prentner, MD
Assistant Professor of Clinical Medicine

Monika Sanghavi, MD
Assistant Professor of Clinical Medicine

Margaret Shanks, MSN, FNP-C, ACGNP-BC*
Nurse Practitioner
*Nurse Planner

Monique Tanna, MD
Assistant Professor of Clinical Medicine

Raymond R. Townsend, MD
Professor of Medicine
Director, Hypertension Program

Noel Williams, MD, MS
Rhoads-Harrington Professor in Surgery
Director, Penn Metabolic & Bariatric Surgery
Program
Director, William T. Fitts Surgery Education Center

Ross Zimmer, MD
Clinical Assistant Professor of Medicine
Director, Heart Failure Program
Penn Medicine Presbyterian Medical Center

GUEST SPEAKERS

Eugene Braunwald, MD
Professor, Harvard Medical School
Chairman, TIMI Study Group
Boston, MA

Daniel Burkhoff, MD, PhD
Director, Heart Failure Hemodynamics & MCS
Research, Cardiovascular Research Foundation
Heart Failure Society of America
New York, NY

**Carolyn S.P. Lam, MBBS, PhD, FRCP,
FAMS, FACC, FESC**
Professor, Duke-NUS Medical School
Senior Consultant Cardiologist
National Heart Centre
Singapore

Walter Paulus, MD, PhD
Professor of Cardiac Pathophysiology
Amsterdam University Medical Center
Amsterdam, The Netherlands

Sanjiv Shah, MD
Neil J. Stone, MD, Professor of Medicine
Director, Institute for Augmented Intelligence
in Medicine
Northwestern University Feinberg School
of Medicine
Chicago, IL

Kavita Sharma, MD
Assistant Professor of Medicine
Director of Heart Failure & Cardiac
Transplantation
Director of JHU HFpEF Program
Johns Hopkins School of Medicine
Baltimore, MD

AGENDA

FRIDAY APRIL 9, 2021

DIAGNOSTIC STRATEGIES IN THE CLINICAL MANAGEMENT OF HFPEF

12:00 Opening Remarks: Thomas Cappola, MD, ScM

12:10 Keynote: “HFpEF – A Historical Perspective”

Eugene Braunwald, MD
Professor, Harvard Medical School
Chairman, TIMI Study Group
Boston, MA

12:30 Q&A

MODULE 1

Moderator:

Juan M. Ortega-Legaspi, MD, PhD
Assistant Professor of Clinical Medicine

Committee Moderator:

Ross R. Zimmer, MD
Assistant Professor of Medicine
Director, Heart Failure Program
Penn Presbyterian Medical Center

12:45 Break

12:50 Epidemiology and Diagnosis

Stuart B. Prentner, MD

1:05 Pulmonary Hypertension and Invasive Hemodynamics

Jeremy A. Mazurek, MD

1:20 Restriction vs. Constriction in the Cath Lab

Paul Fiorilli, MD

1:35 Q&A

1:50 Break

MODULE 2

Moderator:

Benjamin J. Vaccaro, MD
Assistant Professor of Clinical Medicine

Committee Moderator:

Jeremy A. Mazurek, MD
Assistant Professor of Clinical Medicine

2:00 Ischemia in HFpEF – Epicardial Disease and Beyond

Monika Sanghavi, MD

2:15 Cardiac MRI in HFpEF

Yuchi Han, MD, MMSc

**2:30 When and Why Should I Be Thinking about a PET?
What about Imaging for Amyloid?**

Paco Bravo, MD

2:45 Q&A

2:55 Break

MODULE 3

Moderator:

Hansie M. Mathelier, MD
Assistant Professor of Clinical Medicine

Committee Moderator:

Jeremy A. Mazurek, MD
Assistant Professor of Clinical Medicine

3:00 An Update on Cardiac Sarcoidosis

Lee R. Goldberg, MD, MPH

3:15 Cardiac Amyloid – Multimodality Diagnosis

Janice Pieretti, MD

3:30 Inherited Myopathies and HFpEF – When to Consider?

Anjali Owens, MD

3:45 Q&A

4:00 Break

4:15 Panel Discussion: When to Recognize HFpEF Mimickers

Stuart Prentner, MD, Margaret Shanks, MSN, FNP-C, ACGNP-BC and Ross Zimmer, MD

4:30 Keynote: “Clinical recognition and diagnosis of HFpEF”

Carolyn Lam, MBBS, PhD, MRCP, MS
Senior Consultant of the National Heart Centre
Singapore

Moderator:

Daniel R. Schwartz, MD
Associate Professor of Clinical Medicine

Committee Moderator:

Stuart B. Prentner, MD
Assistant Professor of Clinical Medicine

5:15 Q&A

5:30 Closing Remarks and Adjourn

AGENDA

FRIDAY APRIL 16, 2021

THERAPEUTIC STRATEGIES IN THE CLINICAL MANAGEMENT OF HFPEF

12:00 Opening Remarks: Payman Zamani, MD, MTR

MODULE 1

Moderator:

Esther S. Pak, MD
Assistant Professor of Clinical Medicine

Committee Moderator:

Ross R. Zimmer, MD
Assistant Professor of Medicine
Director, Heart Failure Program
Penn Presbyterian Medical Center

12:10 Hypertension and HFpEF: Prevention and Treatment

Raymond Townsend, MD

12:25 Is it the Heart or the Lungs? Cardiopulmonary Exercise Testing for Undifferentiated Dyspnea

Michael Genuardi, MD

12:40 Pulmonary Disease in HFpEF – Innocent Bystander?

Jason Fritz, MD

12:55 Sleep Apnea in HFpEF

Jorge Mora, MD

1:10 Q&A

1:25 Break

MODULE 2

Moderator:

Nosheen Reza, MD
Instructor, Division of Cardiovascular Medicine

Committee Moderator:

Lee R. Goldberg, MD, MPH
Professor of Medicine
Section Chief, Advanced Heart Failure and Cardiac Transplant

1:30 Liver and Metabolic Disease in HFpEF

Therese Bitterman, MD, MSCe

1:45 Should I Be Targeting Obesity? Bariatric Approaches and When Should I Refer

Noel Williams, MD, MS

2:00 Ambulatory Pulmonary Artery Monitoring Strategies in HFpEF

Monique Tanna, MD

2:15 HFpEF and Cardiac Rehab: What is the Evidence?

William Pentz, MD, FACC

2:30 Q&A

MODULE 3

Moderator:

Paul J. Mather, MD
Professor of Clinical Medicine
Director, Faculty Development
Division of Cardiovascular Medicine
Physician Leader, Heart Failure Disease Management

Committee Moderator:

Margaret E. Shanks, MSN, FNP-C, ACGNP-BC
Cardiology Nurse Practitioner

2:40 Break

2:45 Targeting Atrial Fibrillation – Is Rate Control Enough? Should We Be Pacing in HFpEF?

David Frankel, MD

3:00 Sudden Cardiac Death in HFpEF – Beyond EF

Rajat Deo, MD

3:15 Cardiac Amyloid – Treatment Update in the Era of Tafamadis and Novel Agents

Brian Drachman, MD

3:30 Endomyocardial Biopsy – When Should I Do it?

Kavita Sharma, MD

3:45 Q&A

4:00 Break

4:15 Keynote: “It’s HFpEF – Now What Do I Do?”

Sanjiv Shah, MD
Neil J. Stone, MD, Professor of Medicine
Director, Institute for Augmented Intelligence in Medicine
Northwestern University Feinberg School of Medicine
Chicago, IL

Moderator:

H. Luise Holzhauser, MD
Assistant Professor of Clinical Medicine

Committee Moderator:

Stuart B. Prentner, MD
Assistant Professor of Clinical Medicine

5:00 Q&A

5:15 Closing Remarks & Adjourn

AGENDA

FRIDAY APRIL 23, 2021

TRANSLATIONAL RESEARCH OPPORTUNITIES IN HFPEF

12:00 Opening Remarks: Dan Kelly, MD

MODULE 1

Moderator:

Teresa Wang, MD
Fellow, Advanced Heart Failure Transplant
Cardiology Program

Committee Moderator:

Lee R. Goldberg, MD, MPH
Professor of Medicine; Section Chief
Advanced Heart Failure and Cardiac Transplant

12:15 Novel Biomarkers in HFpEF

Julio Chirinos, MD, PhD

12:30 The Skeletal Muscle and Mitochondria in HFpEF

Payman Zamani, MD, MTR

12:45 Hypertension and Arterial Stiffness in HFpEF

Jordana Cohen, MD, MSCe

1:00 Q&A

1:15 Break

MODULE 2

Moderator:

Eliot Peyster, MD
Instructor, Division of Cardiovascular Medicine

Committee Moderator:

Jeremy A. Mazurek, MD
Assistant Professor of Clinical Medicine

1:30 Cellular Mechanisms of Diastolic Dysfunction and Potential Novel Treatments

Kenneth Margulies, MD

1:45 Myocardial Metabolism in HFpEF

Zoltan Arany, MD, PhD

2:00 HFpEF and the Thyroid

Anne Cappola, MD, ScM

2:15 Q&A

2:30 Break

MODULE 3

Moderator:

Jeremy A. Mazurek, MD
Assistant Professor of Clinical Medicine

Committee Moderator:

Payman Zamani, MD, MTR
Assistant Professor of Medicine

2:40 Coronary Microvascular Disease in HFpEF

Marie Guerraty, MD, PhD

2:55 Cardiac Contractility Modulation

Daniel Burkoff, MD, PhD

3:10 Update on Interventional Devices for HFpEF

Howard Herrmann, MD

3:25 Q&A

3:40 Break

3:45 Keynote: "The Past, Present, and Future of HFpEF"

Walter Paulus, MD, PhD
Professor of Cardiac Pathophysiology
Amsterdam University Medical Center
Amsterdam, The Netherlands

Moderator:

Julio A. Chirinos, MD, PhD
Associate Professor of Medicine

Committee Moderator:

Payman Zamani, MD, MTR
Assistant Professor of Medicine

4:30 Q&A

4:45 Closing Remarks and Adjourn

► SYMPOSIUM INVITATION

A link to join the symposium will be emailed to all pre-registered attendees two days in advance. Please be sure to check your junk mail or spambox for emails from UPenn Cloud CME or Penn CME.

The registration fee covers your attendance to one or all of the sessions. You must sign into the virtual platform at least once for each of the sessions you register for in order to be marked as attended for that day. Once your attendance has been verified, the recordings will be made available following the conclusion of each session. The recordings will be accessible from the UPenn Cloud CME toolbar by clicking on "My CE/CME" and then "Syllabus". The session topics are as follows:

► FRIDAY, APRIL 9, 2021

Diagnostic Strategies in the Clinical Management of HFpEF

► FRIDAY, APRIL 16, 2021

Therapeutic Strategies in the Clinical Management of HFpEF

► FRIDAY APRIL 23, 2021

Translational Research Opportunities in HFpEF

Please be sure to select the session(s) you plan to attend during the registration process. Attendees will be eligible to receive credit and view the videos after attendance to the session(s) is verified.

REGISTRATION

REGISTRATION FEES to attend UPenn HFpEF Symposium 2021:

- **\$200** for physicians and industry representatives
- **\$100** for non-United States based physicians
- **\$100** for nurse practitioners, physician assistants, nurses and other healthcare professionals
- **\$50** for residents and fellows from other institutions

Attention! Penn Medicine employees, faculty and staff: The registration fee is \$50.

Registration is complimentary for Penn Medicine fellows, residents and students. In order to register at the reduced rate, you must sign into your account at <https://upenn.cloud-cme.com> and register online.

HOW TO REGISTER ONLINE

If you do not already have a UPenn Cloud CME profile, you will need to create one

- 1** Go to <https://upenn.cloud-cme.com> and click "Sign-in".
- 2** Sign-in using your email address and then selecting the "Don't have an account?" option.

Please be sure that you do not already have an existing UPenn Cloud CME account before creating a new profile. All Penn Medicine employees, faculty and staff must sign-in using your UPenn ID. Use your credit card to instantly pay online.

<https://upenn.cloud-cme.com/HFpEF2021>

QUESTIONS?

penncme@penmedicine.upenn.edu | 215.898.6400 | 215.898.8005



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PAYMENT METHOD

- **If you are paying by credit card,** register online at <https://upenn.cloud-cme.com/HFpEF2021>
- **If you are paying by check,** you may mail your completed registration form and check made payable to The Trustees of the University of Pennsylvania/CME to: Conference Manager, Office of Continuing Medical & Interprofessional Education, Academic Programs, Penn Medicine, JMEC, SPE, 6th floor 3400 Civic Center Blvd, Bldg. 421, Philadelphia, PA 19104-5162

OR

Follow the instructions to register online and mail your check along with a copy of your confirmation email. We cannot accept faxed or mailed registration forms with credit card information. Do not include any credit card information on the registration form or share via email.

Please note: Mailed registrations can take up to 5-10 business days before they are received. We are experiencing longer delays receiving mail due to the COVID-19 pandemic. We encourage all attendees to register online with a credit card.

All registrations will be confirmed by email as long as your registration and payment is received no later than April 7, 2021.

REFUND AND CANCELLATION POLICY

In order to process refunds for course withdrawals, cancellations must be received in writing by April 2, 2021 (subject to a service charge of \$15.00). No refunds will be issued thereafter.

The University reserves the right to cancel or postpone any course due to unforeseen circumstances.

HFpEF Symposium 2021



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<https://upenn.cloud-cme.com/HFpEF2021>

First Name _____

Last Name _____

Academic Degree _____

Medical Specialty _____

Affiliation (Hospital, Office, or Company) _____

Address _____

(Affiliation / Home)

City State Zip _____

Phone Fax _____

E-mail _____

REGISTRATION FEE

(Pre-payment is required to be officially registered)

- Practicing Physicians and Industry**
\$200
- Non-US based Physicians** \$100
- Nurse Practitioners, Physician Assistants, Nurses and other Healthcare Professionals** \$100
- Non-Penn Medicine Residents and Fellows**
\$50
- Penn Medicine Employees, Faculty and Staff**
\$50
- Penn Medicine Fellows, Residents and Students**
Complimentary

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