



**Penn Medicine**  
Continuing Medical and  
Interprofessional Education

**IN-PERSON AND VIRTUAL:**

# UPenn HFpEF Symposium 2025



UNIVERSITY OF PENNSYLVANIA

Friday-Saturday  
**May 9-10, 2025**

Arthur H. Rubenstein Auditorium  
Smilow Center for Translational Research  
3400 Civic Center Blvd.  
Philadelphia, PA 19104

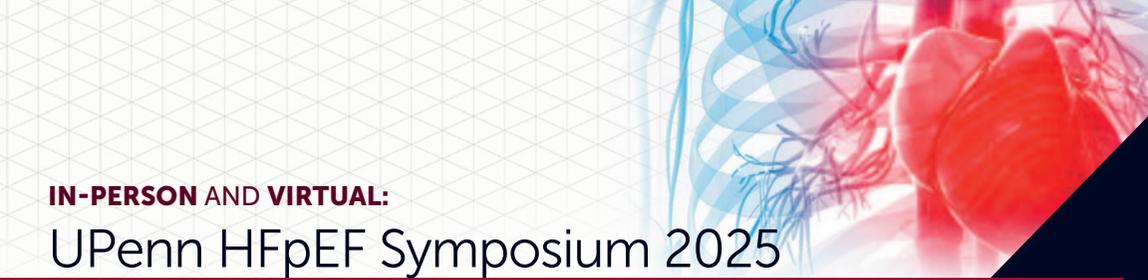
CME/CE-ACCREDITED CONFERENCE



This conference will be live streamed

<https://upenn.cloud-cme.com/HFpEF2025>





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# UPenn HFpEF Symposium 2025

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

## PROGRAM OVERVIEW & TARGET AUDIENCE

While the incidence of heart failure with reduced ejection fraction (HFrEF) has decreased, that of heart failure with preserved ejection fraction (HFpEF) continues to rise, accounting for ~50% of heart failure hospitalizations. Patients with HFpEF suffer mentally and physically, like their HFrEF counterparts, and are markedly limited in terms of their functional capacity and quality of life. Yet in contrast to HFrEF, there are few effective pharmacologic treatments for HFpEF, despite numerous clinical trials. To address this urgent need, many clinicians and researchers have focused on this important medical and societal issue. Improved strategies now exist to diagnose this condition, and multifaceted treatment options can help to alleviate some of the morbidity of the disease. This symposium will highlight diagnostic strategies and review the evidence base for pharmacologic therapies. Treatment of comorbid conditions found in HFpEF patients will also be discussed. Additional didactics highlighting the sources of exertional intolerance in HFpEF patients will be presented, with an emphasis on cardiopulmonary exercise testing. The topics chosen for this conference represent the state-of-the-art in HFpEF management, incorporating the expertise of numerous disciplines including cardiology, pulmonology, radiology, sleep medicine, and endocrinology. The meeting is intended to provide an in-depth summary of HFpEF management to practicing clinicians across numerous disciplines, including Physicians, Nurse Practitioners, and Physician Assistants.

### LEARNING OBJECTIVES

At the conclusion of this educational activity, the participant should be able to:

- Review the diagnostic criteria for HFpEF, including when to use advanced imaging or hemodynamic assessment
- Describe the electrophysiologic manifestations of HFpEF and their treatments
- Identify HFpEF mimickers, including amyloidosis, sarcoidosis, and inherited cardiomyopathies
- Discuss novel therapies that are on the horizon for HFpEF
- Discuss the role of non-cardiac structures (such as the arterial system and other organs) in the pathogenesis and treatment of the patient with HFpEF
- Review the potential causes of exertional intolerance in HFpEF patients



The *UPenn HFpEF 2025 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.

## IN-PERSON AND VIRTUAL: UPenn HFpEF Symposium 2025

### ACCREDITATION



JOINTLY ACCREDITED PROVIDER™  
INTERPROFESSIONAL CONTINUING EDUCATION

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.

### DESIGNATION OF CREDIT

**Physicians:** Penn Medicine designates this live activity for a maximum of 11.25 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### Amount of Credit

##### Available by Day:

Friday – 7.0

Saturday – 4.25

Total = 11.25



**ABIM MOC:** Successful completion of this CME activity,

which includes participation in the evaluation component, enables the participant to earn up to 11.25 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.

**Nurses:** This program provides 11.25 NCPD 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 11.25 Category 1 credits for completing this activity.

**Certificates and Transcripts:** After the conference has concluded, all participants will receive a follow-up email with a link and instructions on where to complete the post-test, evaluation and obtain their credits. After participants complete these elements, the 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.

**Cancellation Policy:** In order to process refunds for course withdrawals, cancellations must be received in writing by April 29, 2025 (subject to a service charge equivalent to 10% of the registration fee, but no less than \$25.00). No refunds will be issued thereafter.

The University reserves the right to cancel or postpone any course due to unforeseen circumstances. In the event of cancellation or postponement, the University will refund registration fees but is not responsible for related costs or expenses to participants, including cancellation fees assessed by hotels, airlines, and travel agencies.



## IN-PERSON AND VIRTUAL: UPenn HFpEF Symposium 2025

### LIVE AND VIRTUAL PRESENTATIONS

The *UPenn HFpEF Symposium 2025* will be held Friday-Saturday, May 9-10, 2025 by in-person or live-stream (virtual) attendance. The live and virtual presentations will follow the scheduled agenda in real time (EDT).

### TO ATTEND IN-PERSON:

#### Meeting Location

Arthur H. Rubenstein Auditorium at the Smilow Center for Translational Research  
3400 Civic Center Blvd., Philadelphia, PA 19104

### REGISTRATION INFORMATION

Please register online at <https://upenn.cloud-cme.com/HFpEF2025>.

Verified attendance includes access to view the presentations online for one year. Pre-registration is required to attend. Walk-ins are discouraged. Please be sure to register in advance.

### LIVE-STREAM (VIRTUAL) REGISTRATION:

The fees to attend virtually are as follows: \$100 for physicians (US or Non-US based) and industry attendees, \$50 for nurse practitioners, physician assistants and other healthcare professionals, and \$25 for residents, fellows and students. \*There is no fee for Penn Medicine faculty, staff, residents, fellows and students to attend.

Attendees registered to attend virtually will receive an email including the link to join the symposium 48 hours in advance. All virtual attendees will be required to sign into the meeting using your first name, last name and email address in order to be marked as attended, receive credit and view the recordings.

### IN-PERSON REGISTRATION:

The fees to attend in-person are as follows: \$250 for physicians and industry attendees, \$100 for non-US based physicians, \$100 for nurse practitioners, physician assistants and other healthcare professionals, \$50 for Non-Penn Medicine residents, fellows and students. \*There is no fee for Penn Medicine faculty, staff, residents, fellows and students to attend.

All preregistered in-person attendees will receive access to the conference, program handout, continental breakfast, lunch, and breaks.

\*You must register using a Penn Medicine email address to receive complimentary registration.

### Need to Register by Mail?

**Please note:** Mailed registrations may take 5 business days before they are received. We encourage all attendees to register online. See the registration form for mailing instructions. All registrations will be confirmed by email as long as your registration is received before May 7, 2025.

Please save our Penn Medicine email ([penncme@upenn.cloud-cme.com](mailto:penncme@upenn.cloud-cme.com)) to prevent our emails from going to spam.



# 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 DIRECTORS

### **Payman Zamani, MD, MTR**

Assistant Professor of Medicine

### **Stuart B. Prenner, MD**

Assistant Professor of Clinical Medicine  
Program Director, Advanced Heart Failure and Transplant Cardiology Fellowship  
Medical Director, Heart Failure with Preserved Ejection Fraction (HFpEF) Program

## PLANNING COMMITTEE

### **Kaylee Baker MSN, CRNP**

Nurse Practitioner

### **Julio A. Chirinos, MD, PhD**

Professor of Medicine  
Co-Director, Clinical Research  
Training Program in CV Biology and Medicine

### **Lee R. Goldberg, MD, MPH**

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

### **Cassandra J. Demastus, MSN, CRNP, AG-ACNP-BC**

Nurse Practitioner

### **Ross Zimmer, MD**

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

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## DISCLOSURES

Penn Medicine, Office of Continuing Medical and Interprofessional Education, adheres to the *ACCME Standards for Integrity and Independence in Accredited Continuing Education*. Faculty members are expected to disclose to participants any discussions of off-label and/or investigational uses of pharmaceutical products or devices within their presentations.



# 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.

## **Anastassia Amaro, MD**

Professor of Clinical Medicine  
Medical Director, Penn Metabolic Medicine

## **Paco Bravo, MD**

Assistant Professor of Radiology  
Director, Nuclear Cardiology and  
Cardiovascular Molecular Imaging

## **Jordana B. Cohen, MD, MSCE**

Associate Professor of Medicine  
Associate Professor of Epidemiology in  
Biostatistics and Epidemiology

## **Brian M. Drachman, MD**

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

## **David Frankel, MD**

Professor of Medicine  
Director, Cardiac Electrophysiology Laboratory

## **Jason S. Fritz, MD**

Associate Professor of Clinical Medicine  
Co-Director, Dyspnea Program

## **Matthew C. Hyman, MD, PhD**

Assistant Professor of Medicine

## **Jorge I. Mora, MD**

Associate Professor of Clinical Medicine  
Associate Chief, Clinical Affairs  
Division of Sleep Medicine  
Medical Director, Penn Sleep Center

## **Anjali T. Owens, MD**

Associate Professor of Medicine  
Medical Director, Center for Inherited  
Cardiac Disease

## **Janice Pieretti, MD**

Associate Professor of Clinical Medicine

## **Barbara Riegel, PhD, RN**

Professor, University of Pennsylvania  
School of Nursing  
Senior Research Scientist, Center for  
Home Care Policy & Research at VNS Health  
Co-Director, International Center for  
Self-Care Research

## **Mahesh Vidula, MD**

Assistant Professor of Clinical Medicine



# GUEST FACULTY

**Antonio Abbate, MD, PhD**

Ruth C. Heede Professor of Cardiology  
Medicine - Cardiovascular Medicine  
University of Virginia School of Medicine  
Charlottesville, VA

**Barry A. Borlaug, MD**

Professor of Medicine  
Chair for Research, Division of Circulatory Failure  
Department of Cardiovascular Medicine  
Mayo Clinic  
Rochester, MN

**Pete Brubaker, PhD**

Professor and Chair  
Department of Health and Exercise Science  
Wake Forest University  
Winston-Salem, NC

**Javed Butler, MD, MPH, MBA**

Professor and Chair  
Department of Medicine  
Patrick H. Lehan Chair of Cardiovascular Research  
University of Mississippi Medical Center  
Jackson, MS

**Salvatore Carbone, PhD, RDN**

Associate Professor  
Virginia Commonwealth University  
Richmond, VA

**Benjamin Levine, MD**

Director of the Institute for Exercise and  
Environmental Medicine  
S. Finley Ewing Chair for Wellness  
Harry S. Moss Heart Chair for  
Cardiovascular Research  
Distinguished Professor of Exercise Sciences  
Professor of Internal Medicine/Cardiology  
University of Texas Southwestern Medical Center  
Dallas, TX

**Jeremy A. Mazurek, MD**

System Director of Advanced Heart Failure  
St. Francis Hospital & Heart Center  
Catholic Health Services of Long Island  
East Hills, NY

**Senthil Selvaraj, MD, MSTR, MA**

Assistant Professor of Medicine  
Duke University School of Medicine  
Durham, NC

**Sanjiv J. Shah, MD**

Director, Institute for Augmented  
Intelligence in Medicine  
Center for Deep Phenotyping and  
Precision Therapeutics  
Neil J. Stone, MD Professor of Medicine  
Northwestern University Feinberg School  
of Medicine  
Chicago, IL

**Kavita Sharma, MD**

Associate Professor of Medicine  
Director, Heart Failure & Cardiac Transplantation  
Director, JHU Heart Failure with  
Preserved Ejection Fraction Program  
Johns Hopkins School of Medicine  
Baltimore, MD

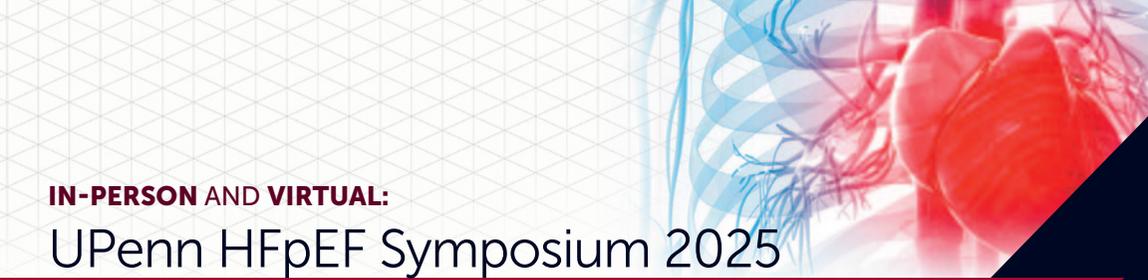
**Brittany Nicole Weber, MD, PhD**

Director, Cardio-Rheumatology Clinic  
Division of Preventive Cardiology  
Division of Cardiovascular Imaging  
Brigham and Women's Hospital  
Boston, MA

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**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](http://www.upenn.edu/affirm-action).

**SERVICES FOR THE DISABLED** If special arrangements are required for an individual with a disability to participate this meeting, please contact the Office of Continuing Medical and Interprofessional Education no later than April 29, 2025, at 215-898-6400.



**IN-PERSON AND VIRTUAL:**

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

## AGENDA | FRIDAY, MAY 9, 2025

- 7:30 AM – 8:15 AM In-person Sign-in and Continental Breakfast
- 8:15 AM – 8:30 AM Virtual Audience Sign-in (Broadcast goes live at 8:30 AM)
- 8:30 AM – 8:40 AM **Welcome Address**  
*Payman Zamani, MD, MTR*

### FRIDAY MORNING SESSION:

#### IS IT HEART FAILURE? GETTING THE DIAGNOSIS RIGHT

- 8:40 AM – 8:55 AM **HFpEF Epidemiology – A Growing Problem**  
*Stuart B. Prentner, MD*
- 8:55 AM – 9:10 AM **Advanced Echo Techniques to Diagnose HFpEF**  
*Julio A. Chirinos, MD, PhD*
- 9:10 AM – 9:25 AM **Advanced Imaging – PET and cMRI in HFpEF**  
*Paco Bravo, MD*
- 9:25 AM – 9:45 AM **Diagnosis: Risk Scores and Catheters**  
*Barry A. Borlaug, MD*
- 9:45 AM – 10:05 AM **My Approach to the Evaluation of Dyspnea**  
*Kavita Sharma, MD*

### MINI-SYMPOSIUM:

#### EXERCISE CAPACITY IN HFPEF

- 10:05 AM – 10:50 AM **Exercise Physiology, as Seen Through a CPET**  
*Jason S. Fritz, MD; Payman Zamani, MD, MTR*
- 10:50 AM – 11:05 AM Break
- 11:05 AM – 11:35 AM **Debate: It's the Heart! High Pressures Limit Exercise in HFpEF**  
*Barry A. Borlaug, MD*
- 11:35 AM – 12:05 PM **Debate: There is More to HFpEF Than the Wedge**  
*Benjamin Levine, MD*
- 12:05 PM – 12:20 PM **Rebuttal, Q&A and Questions**
- 12:20 PM – 1:00 PM **Keynote: Patients With HFpEF Need to Exercise, But How? Logistics of Designing and Implementing an Exercise Prescription**  
*Pete Brubaker, PhD*
- 1:00 PM – 2:00 PM Lunch

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## AGENDA | FRIDAY, MAY 9, 2025

### FRIDAY AFTERNOON SESSION:

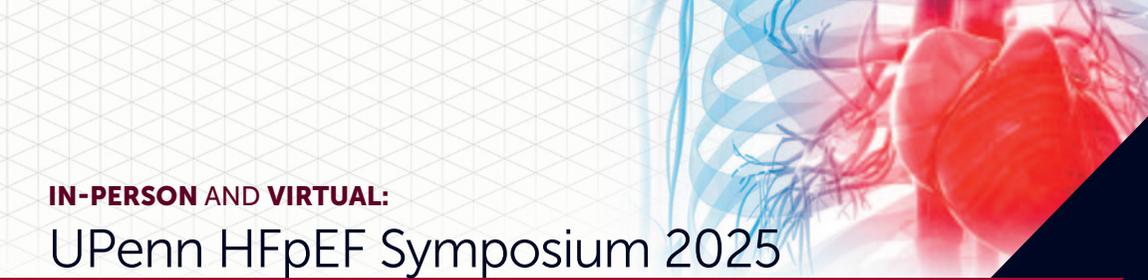
#### GUIDELINE-DIRECTED PHARMACOLOGY AND DEVICES FOR HFpEF

- 2:00 PM – 2:15 PM **HFpEF and Nutrition**  
*Salvatore Carbone, PhD, RDN*
- 2:15 PM – 2:35 PM **SGLT2's and MRA's: The Evidence and Practical Considerations**  
*Senthil Selvaraj, MD, MSTR*
- 2:35 PM – 2:50 PM **HFpEF Management Guidelines and Algorithms**  
*Jeremy A. Mazurek, MD*
- 2:50 PM – 3:05 PM **Ask the Experts**  
*Kavita Sharma, MD; Senthil Selvaraj, MD, MSTR, MA; Stuart B. Prentner, MD*
- 3:05 PM – 3:45 PM **Keynote: Targeting Obesity to Target HFpEF**  
*Javed Butler, MD*
- 3:45 PM – 4:00 PM Break

### MINI-SESSION:

#### CARDIAC AMYLOIDOSIS

- 4:00 PM – 4:15 PM **When to Suspect Cardiac Amyloidosis and Diagnostic Strategies**  
*Janice Pieretti, MD*
- 4:15 PM – 4:30 PM **MRI vs. PYP for TTR Amyloidosis**  
*Mahesh Vidula, MD*
- 4:30 PM – 4:45 PM **Update on Amyloid Therapies**  
*Brian M. Drachman, MD*
- 4:45 PM – 5:00 PM **Ask the Experts**  
*Mahesh Vidula, MD; Janice Pieretti, MD; Brian M. Drachman, MD; Kaylee Baker MSN, CRNP*
- 5:00 PM Adjourn



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## AGENDA | SATURDAY, MAY 10, 2025

- 7:30 AM – 8:00 AM In-person Sign-in and Continental Breakfast  
7:45 AM – 8:00 AM Virtual Audience Sign-in (Broadcast goes live at 8:00 AM)

### **SATURDAY MORNING SESSION:**

#### **MANAGEMENT OF HFPEF RELATED COMORBIDITIES AND HFPEF MIMICKERS**

- 8:00 AM – 8:10 AM **Recap of Day 1 and Intro to Day 2**  
*Lee Goldberg, MD*
- 8:10 AM – 8:25 AM **Hypertension Management**  
*Jordana B. Cohen, MD, MSCE*
- 8:25 AM – 8:40 AM **GLP1s: Practical Considerations**  
*Anastassia Amaro, MD*
- 8:40 AM – 8:55 AM **Not all Hypertrophy is HFpEF**  
*Anjali Owens, MD*
- 8:55 AM – 9:10 AM **Chronotropic Incompetence: Modulating Sinus Rhythm and Pacing**  
*Matthew C. Hyman, MD, PhD*
- 9:10 AM – 9:25 AM **Atrial Fibrillation in HFpEF – Screening and Treatment**  
*David Frankel, MD*
- 9:25 AM – 9:45 AM Break
- 9:45 AM – 10:00 AM **Sleep Apnea in HFpEF**  
*Jorge Mora, MD*
- 10:00 AM – 10:15 AM **Lung Disease in HFpEF**  
*Jason S. Fritz, MD*
- 10:15 AM – 10:35 AM **Rheumatologic Disease in HFpEF**  
*Brittany Weber, MD*
- 10:35 AM – 11:15 AM **Keynote: HFpEF at Home – What Should We Be Telling Our Patients and What Should Our Patients Be Telling Us?**  
*Barbara Riegel, PhD, RN, FAAN, FAHA*
- 11:15 AM – 11:30 AM Break
- 11:30 AM – 12:10 PM **Keynote: Inflammation in HFpEF**  
*Antonio Abbate, MD*
- 12:10 PM – 12:50 PM **Future of HFpEF Management**  
*Sanjiv Shah, MD*
- 12:50 AM Adjourn



## Registration Form

### IN-PERSON AND VIRTUAL:

# UPenn HFpEF Symposium 2025

Friday-Saturday  
May 9-10, 2025

We strongly encourage you to register for this conference online by check or credit card at  
<https://upenn.cloud-cme.com/HFpEF2025>

#### Questions? Contact us at:

[penncme@pennmedicine.upenn.edu](mailto:penncme@pennmedicine.upenn.edu) • Phone: 215-898-6400 or 215-898-8005

Please note: we are unable to accept faxed registration forms.

Please print or type

\_\_\_\_\_  
Name (First) (Last)

\_\_\_\_\_  
Academic Degree

\_\_\_\_\_  
Medical Specialty

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Affiliation (Hospital, Office, or Company)

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Address (  Affiliation or  Home)

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City State Zip

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Phone Fax

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E-mail

## REGISTRATION FEES

### IN-PERSON ATTENDANCE:

- \$250 for physicians and industry attendees
- \$100 for Non-US based physicians
- \$100 for nurse practitioners, physician assistants and other healthcare professionals
- \$50 for Non-Penn residents and fellows
- There is no fee for Penn Medicine faculty, staff, residents, fellows and students to attend.

### LIVE-STREAM (VIRTUAL) ATTENDANCE:

- \$100 for physicians (US and Non-US based) and industry attendees,
- \$50 for nurse practitioners, physician assistants and other healthcare professionals.
- \$25 for residents, fellows and students
- There is no fee for Penn Medicine faculty, staff, residents, fellows and students to attend.

### PAYMENT METHOD

- If you are paying by check or credit card, please register online at  
<https://upenn.cloud-cme.com/HFpEF2025>
- 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  
Perelman School of Medicine/CME  
JMEC, SPE, 6th Floor, University of Pennsylvania  
3400 Civic Center Blvd, Building 421, Philadelphia, PA 19104-5162
- Do not include any credit card information on the registration form or share via email.