

**Research Opportunities in the
Division of Cardiovascular Medicine
02/02/2026**

Ferhaan Ahmad, M.D., Ph.D., FRCPC, FAHA, FACC

**Associate Professor of Internal Medicine, Radiology, and
Molecular Physiology and Biophysics**

Director, Cardiovascular Genetics Program

Director, Cardiovascular Disease Fellowship Program

Editor-in-Chief, *Circulation: Genomic and Precision Medicine*

Division of Cardiovascular Medicine

ferhaan-ahmad@uiowa.edu

Cardiology Fellowship Tracks

- **Traditional**
 - F1 - Clinical
 - F2 - Clinical and research / scholarly activity
 - F3 - Clinical and research / scholarly activity
 - F4 / F5 - Optional subspecialty training
- **Research / Scholarly**
 - F1 - Clinical
 - F2 - Research / scholarly activity
 - F3 - Research / scholarly activity
 - F4 - Clinical
 - F5 / F6 - Optional subspecialty training or additional research

Abboud Cardiovascular Research Center (ACRC)

- **Interdisciplinary research and training are the rule, not the exception**
- **Trained >1000 pre- and post-doctoral students**
- **Received >\$500 million in research funding**
- **Ongoing >\$10 million extramural research funding per year**

<https://cardiovascular.medicine.uiowa.edu>

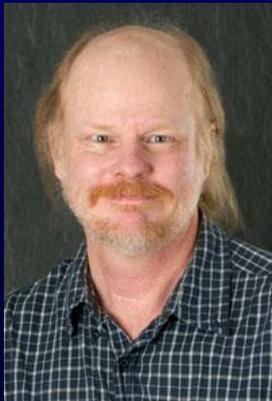
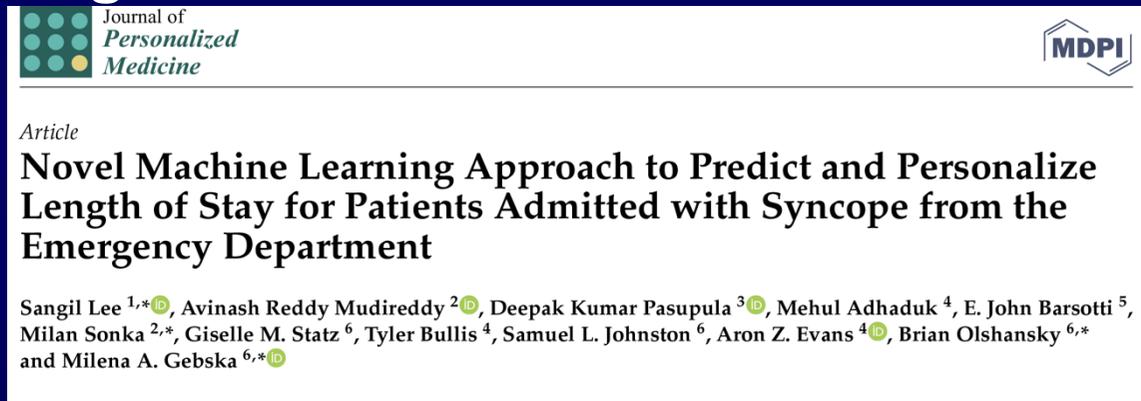
Abboud Cardiovascular Research Center (ACRC)

- **Atherosclerosis and vascular biology**
- **Cardiac metabolism**
- **Cardiomyopathies, muscular dystrophies, and heart failure**
- **Cardio-oncology**
- **Cardiovascular genetics and development**
- **Cystic fibrosis, pulmonary hypertension, and other lung diseases**
- **Hypertension**
- **Imaging**
- **Inflammation**
- **Integrative neurobiology and sensory signals in cardiovascular regulation**
- **Ion channels, calcium handling, and arrhythmias**
- **Valve disease**
- **Clinical trials**

Population / Clinical / Translational / Basic Science: Cardiac Imaging



- **Milena A. Gebska, MD, PhD, MME**
 - Echocardiography, women's health
 - Artificial intelligence in evaluation of syncope



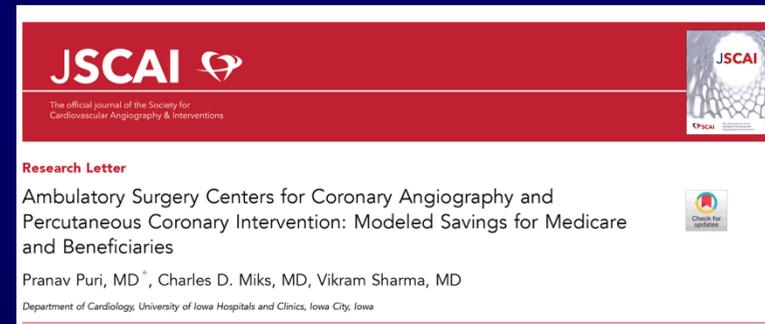
- **Robert Weiss, MD**
 - Human and animal cardiac imaging
 - Radiation-induced valvular heart disease in mice

Population / Clinical / Translational / Basic: Interventional Cardiology and Vascular Biology

- **Vikram Sharma, MBBS**
 - Interventional cardiology
 - Ischemia-reperfusion injury
 - Ischemic preconditioning
 - Chronic total occlusion
 - Biomarkers



- **Jennifer Streeter, MD, PhD**
 - Atherosclerotic plaque regression
 - Correlation of coronary angiography and epigenetics



Basic Science: Vascular Biology



- **Frank M. Faraci, PhD**
 - Cerebral endothelial function



- **Santosh Kumar, PhD**
 - Endothelial function in atherosclerosis

Population / Clinical / Translational / Basic Science: Electrophysiology



- **Paari Dominic, MD**
 - Electrophysiology
 - Epidemiology
 - Electrophysiological modulation of heart failure

Early vs delayed ablation for new-onset atrial fibrillation: 5-Year real-world data outcomes

Jacob R. Heath, MD,¹ Sangwoo Han, MD, PhD,² Ashraf Alzahrani, MBCh,³ David Hamon, MD,³ E. Michael Powers, MD, MBA,³ Sergio Conti, MD, PhD, FHRS,³ Peter D. Farjo, MD, MS,³ Paari Dominic, MBBS, MPH³

From the ¹Department of Internal Medicine, University of Iowa, Iowa City, Iowa, ²University of California Irvine School of Medicine, Irvine, California, and ³Division of Cardiovascular Medicine, Department of Internal Medicine, University of Iowa, Iowa City, Iowa.

HeartRhythm



The Official Journal of the Heart Rhythm Society, The Cardiac Electrophysiology Society, and The Pediatric & Congenital Electrophysiology Society

Research Letter

[Check for updates](#)

Novel methodology for nonfluoroscopic wire visualization during pulsed field ablation for the treatment of atrial fibrillation

Ashraf Alzahrani, MBCh, Peter Farjo, MD, E. Michael Powers, MD, Denice Hodgson-Zingman, MD, Steven Bailin, MD, Paari Dominic, MBBS, MPH



- **Denice Hodgson-Zingman, MD**
 - Electrophysiology
 - Exercise simulation by pacing
 - RV hemodynamic assessments

Population / Clinical / Translational / Basic Science: Electrophysiology



- **Brian Olshansky, MD**
 - **Electrophysiology**
 - **Epidemiology**
 - **Artificial intelligence**

Journal of Cardiovascular Electrophysiology

WILEY

■ BRIEF COMMUNICATION **OPEN ACCESS**

Trends in Atrial Fibrillation Ablation Utilization Following 2022 CMS Reimbursement Reduction: A Nationwide Analysis

Pranav Puri  | Daniel Moe  | Ashraf Alzahrani  | Ghazaleh Goldar | Brian Olshansky  | Peter Farjo | Paari Dominic

University of Iowa Hospitals and Clinics, Iowa City, Iowa, USA

Correspondence: Pranav Puri (ppuri@uiowa.edu)

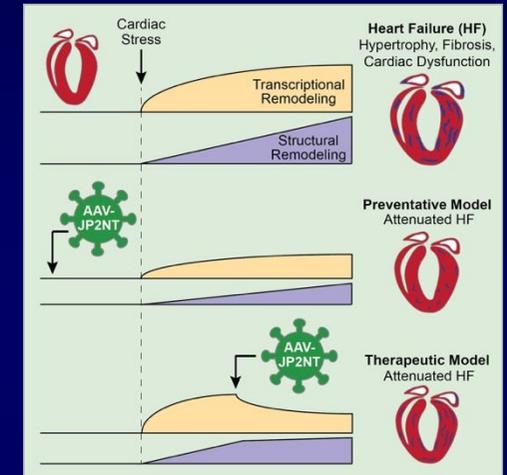
Clinical / Basic Science: Channel Physiology



- **Long-Sheng Song, MD, MS**
 - Ca^{2+} signaling



- **Leonid Zingman, MD**
 - ATP-sensitive K^{+} channels in metabolism



Implementation / Translational / Basic Science: Genetics and Genomics



- **Ferhaan Ahmad, MD, PhD**
 - Cardiomyopathies



- **Colleen Campbell, PhD, MS, LGC**
 - Implementation science for familial hypercholesterolemia

Basic Research in Cardiology (2025) 120:1193–1207
<https://doi.org/10.1007/s00395-025-01136-7>

ORIGINAL CONTRIBUTION

Cardiac sodium-glucose co-transporter 1 (SGLT1) contributes to heart failure in a mouse model of diabetic cardiomyopathy

Zhao Li^{1,2} · Sydney Freiberg¹ · Meredith L. Music¹ · Lina Gu¹ · Sarah Nacos¹ · Joseph P. Phillips¹ · Adil Hassan¹ · Kamel Shibbani¹ · Sanah S. Munir¹ · Vooha K. Kumar¹ · Luke Halligan¹ · Mia E. Michel¹ · Benjamin F. London¹ · Ngan Bui¹ · Michael Cicha¹ · Valerie Buffard¹ · E. Dale Abel^{3,4} · Ferhaan Ahmad^{1,5,6} 

Clinical / Translational / Basic Science: Genetics and Genomics



- **Ryan L. Boudreau, PhD**
 - Transcriptomics, non-coding RNAs



- **Barry London, MD, PhD**
 - Sudden cardiac death and inherited arrhythmias

The role of cardiac magnetic resonance imaging in the evaluation of malignant ventricular arrhythmias in Brugada syndrome

Hunter Frederiksen, MD,^{*} Sruti Prathivadhi-Bhayankaram, MD,^{*}
Barry London, MD, PhD,[†] Mahi L. Ashwath, MD, MBA, FACC, FASE, FSCMR[†]

From the ^{}Department of Internal Medicine, University of Iowa Hospitals and Clinics, Iowa City, Iowa, and [†]Department of Cardiovascular Medicine, University of Iowa Hospitals and Clinics, Iowa City, Iowa.*

Clinical / Basic Science: Metabolism



- **Chad Grueter, PhD**
 - Transcriptional and post-transcriptional processes

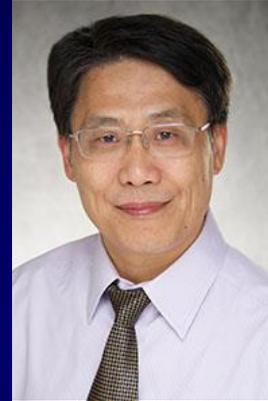


- **Ajit Vikram, PhD**
 - Diet and microbiota in cardiometabolic disease

Basic Science: Neural Function



- **Christopher J. Benson, MD**
 - ASICs



- **Shunguang Wei, PhD**
 - Hypertension, heart failure, nanomedicine



- **Sailesh Harwani, MD, PhD**
 - Hypertension

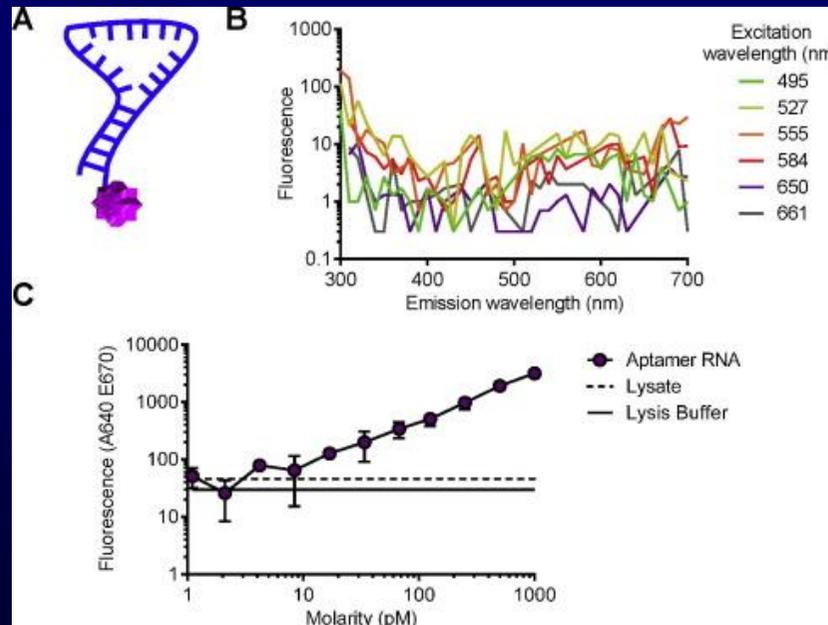


- **Rasna Sabharwal, MS, PhD**
 - Hypertension, heart failure

Basic Science: Aptamers



- **William Thiel, PhD**
 - Vascular injury, cardiac disease, bioinformatics



More Information



Barry London, MD, PhD
Division Director



Ferhaan Ahmad, MD, PhD
Fellowship Program Director



Paari Dominic, MD
Associate Program Director



- A
– B

- A
– B

- A
– B