THURSDAY, NOVEMBER 1

Refreshments
2:00 p.m.

Pitch Event
3:00 - 5:00 p.m.

Program

FCVC Danto Auditorium
We would like to welcome you to our Third Annual Frankel Cardiovascular Center (FCVC) Clinical Value Innovation Challenge Pitch Event. The purpose of the FCVC Innovation Program is to create clinical value by empowering a community of innovators who will transform Cardiovascular Medicine. Through support from the FCVC Directors we have created a community of over 1,000 members who submitted 85 ideas over the three years combined. The proposals came from a variety of FCVC community members including physicians, nurses, nutritionists, therapists and patients.

Today, a panel of expert external judges will hear five of those teams pitch their proposals and select a grand prize winner. The grand prize winning team will receive funding to move their project forward and continuous support from the Innovation Team. Through a generous gift from the Aikens Family Fund we are creating an educational program to support innovative ideas generated by FCVC members through education, mentorship and operational support.

We look forward to the pitches of five finalist teams and are confident that our expert external judges will select a compelling grand prize winner. If you have any thoughts or ideas to improve this event for next year, please contact members of the FCVC’s Clinical Value Innovation Challenge Core Team or one of our Innovation Champions, who are listed on the last page of this booklet. Thank you for your engagement and ongoing support!

Chandu Vemuri, MD
Chair of Innovation

Hamid Ghanbari, MD
Vice Chair of Innovation
About the Challenge

The Annual Frankel Cardiovascular Center Clinical Value Innovation Challenge offers an opportunity for the entire FCVC community to partner with patients and families to redesign and improve care.

Our rapidly changing health care environment demands new thinking. The core premise of this program is that those who experience and deliver care have the greatest insights into how to make it better. This concept is the key to creating a better health care system for all.

The FCVC Value Innovation Challenge has been designed to inspire ideas from all levels with wiki optimization from our 1,000+ member innovation community. During today’s selection contest, we hope to catalyze ideas that will have a lasting impact on the quality and cost of care delivered at the FCVC. To learn more, please visit our website: http://bit/ly/CVC-Challenge.

Agenda

3:00 - 3:05 p.m. Welcome and thanks to NAB Members Chandu Vemuri, MD

3:05 - 3:10 p.m. Thanks to Innovation Champions and Introduction of Judges Hamid Gambari, MD, MPH

3:15 - 4:30 p.m. Innovation Challenge Pitch
Five teams will present eight-minute pitches followed by five-minutes of Q&A per team

4:30 - 4:45 p.m. Judge Deliberation
FCVC Directors’ “Just do it” Innovation Awards
Door prize drawing

4:45 - 5:00 p.m. Announcement of Winning Team
Our Judges

Linda Fingerle, CPA, MBA

Linda Fingerle currently serves as President and Managing Director of Tappan Hill Ventures. She possesses over 25 years of business and finance experience, including serving eight years as CFO and Principal of EDF Ventures in (Ann Arbor, MI). Prior to the CFO role, Linda was also a board observer and managed EDF’s operations in addition to serving as a board member and acting CFO for a tech start-up internet technology company.

Linda served on the board and was Audit Committee Chair for Aastrom Biosciences, Inc., and was a Group Operating President for MascoTech, Inc., a Michigan-based manufacturing corporation. She was active in MascoTech’s Mergers & Acquisitions Program and held oversight responsibilities for several operating units. Prior to MascoTech, Linda was a Group Operating Vice President with TriMas Corporation, an industrial proprietary products manufacturer, and a key member of TriMas’s strategic acquisition team. Linda earned her MBA from the University of Michigan and a BA in Accounting from Michigan State University (CPA in the State of Michigan).

Robert Higgins, MD

Dr. Robert Higgins is the Surgeon-in-Chief of Johns Hopkins Hospital. He is a leading authority in heart and lung transplantation, minimally invasive cardiac surgery, and mechanical circulatory support. His scientific interests are broad and far-ranging, including the mechanisms of cell injury in failing hearts, health economics and policy, racial disparities in post-transplant outcomes, access to care, and improving outcomes among heart failure and cardiac surgery patients. Dr. Higgins is also the William Stewart Halstead Professor of Surgery and Director of the Department of Surgery at the Johns Hopkins University School of Medicine.

Dr. Higgins came to Johns Hopkins from The Ohio State University, where he was professor and Chairman of the Department of Surgery, as well as Surgeon-in-Chief and Director of the Comprehensive Transplant Center at Wexner Medical Center. Prior to that, he served in numerous
Rita F. Redberg, MS, MD

Dr. Rita F. Redberg is a cardiologist who practices general and preventive cardiology. She is passionate about helping patients adopting positive lifestyle behaviors to reduce cardiac risk and stay healthy. She is also interested in how to promote high-value healthcare, an approach that emphasizes delivering appropriate treatment while avoiding tests or therapies with no known benefit.

Redberg studies how the assessment of medical technology for safety and effectiveness influences — and is influenced by — public health policy. In particular, she studies high-risk medical devices and women’s inclusion in clinical trials for such devices.

As editor of *JAMA Internal Medicine*, a journal of the American Medical Association, she has spearheaded the publication’s new focus on health care reform and less-is-more medicine, a movement to reduce unnecessary interventions.

Redberg earned her medical degree from the Perelman School of Medicine at the University of Pennsylvania. She then completed a residency in internal medicine and a fellowship in cardiology at Columbia University Medical Center. She then completed a fellowship in noninvasive cardiology with the Mount Sinai Health System. Redberg also has a Masters of Science degree in Health Policy and Administration from the London School of Economics.
Sponsored by the Frankel CVC, the $100,000 Value Innovation prize will be awarded to the team with the innovation project that has the greatest possible impact on patient care at the FCVC as determined by our external panel of expert judges. To guide submissions this year, teams were able to submit to the following categories: Patient/Family Experience, Safety, Clinical Outcome, Care Redesign, Virtual/Digital Health IT, Equity/Health Disparities, Cost and Medical Device.

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**Interactive, Patient-Centered Electronic Procedural and Surgical Consents**

*Our proposal of developing an application for an iPad-based, interactive consent can positively impact the patients of the FCVC across many specialties. Once the patient has reviewed the application for any given procedure, he or she has the opportunity to ask questions, after which they can sign the consent on the iPad which syncs with MiChart via HIM.*

Team members:

- Minhaj S. Khaja, MD, MBA - Interim Division Director of Interventional Radiology, IR Residency Program Director
- Xhorlina Marko, MD - Clinical Lecturer of Interventional Radiology
- David M. Williams, MD, FSIR - Kyung J. Cho Professor of Radiology
- Bill S. Majdalany, MD - Clinical Assistant Professor of Interventional Radiology, Fellowship Program Director
- Karen M. Kim, MD - Clinical Assistant Professor of Cardiac Surgery
- Andrea Obi, MD - Clinical Assistant Professor of Vascular Surgery
- Matthew Corriere, MD, MS - Clinical Associate Professor of Vascular Surgery, Frankel Professor
- Scott Visovatti, MD, FACC, FCCP - Associate Director, Pulmonary Hypertension Program, Clinical Assistant Professor of Cardiology
- Patty Coristine, NP - Vascular Interventional Radiology Outpatient
Kelly Roe, NP - Vascular Interventional Radiology Outpatient
Cynthia Scheuer, NP - Vascular Interventional Radiology Outpatient
Ann Luciano, NP - FCVC PAD Program
Clare Harris, NP - FCVC Venous Health Program
Geoff Barnes, MD - Clinical Assistant Professor, Vascular Medicine
Kieley Brinks, MBA, BSN, RN - Director of Clinical Operations, Radiology
Norma Merritt, MBA, BSN, RN - Clinical Nursing Director, Interventional Radiology
Heather Wilson, MPH, RHIA - Chief Administrator, Heath Information Management

PICCOLO- Post Intensive Cardiac Care Outpatient Long Term Outreach Clinic

Proposing a dedicated multidisciplinary clinic designed to identify and address the health needs of cardiac ICU survivors.

Team members:
Andrea D. Thompson, MD, PhD - Cardiology Fellow
Sarah Adie, PharmD - CICU Pharmacy
Leah Brock, MSW - FCVC Outpatient Social Work
Antoinette (Toni) Coe, PhD, PharmD - Assistant Professor of Pharmacy, Member of Institute for Healthcare Policy & Innovation
Amy Thompson, PharmD - Director of Ambulatory Clinical Pharmacy Practices
Gillian Cohen, MSW - CICU social work
Matthew C. Konerman, MD - Clinical Lecturer, Advanced Heart Failure & Transplant Cardiology
Virtual Reality Tool Simulates MRI Experience

Novel virtual reality (VR) app designed to educate patients about MRIs and serve as a desensitization tool in patients who have anxiety related to the procedure. If the tool proves effective at decreasing claustrophobic cancellations, and/or the need for nurse assisted conscious sedation it will provide a significant value proposition for health care facilities.

Team members:

- Richard K.J. Brown, MD - Professor of Radiology
- Sean Petty - Graphics Engine Programmer, Duderstadt Center
- Stephanie O’Malley - Interactive Imaging and Production Specialist, College of Engineering
- Jadranka Stojanovska, MD, MS - Assistant Professor of Radiology, Director of Cardiovascular MRI
- Matthew S. Davenport, MD - Associate Professor of Radiology and Urology
- Ella A. Kazerooni, MD, MS - Professor of Radiology, Acting Chair, Department of Radiology
- Daniel Fessahazion - Associate Director, Duderstadt Center, Emerging Technologies Group
Routine Grip Strength Measurement for Frailty Screening in Cardiovascular Clinics

Frailty is highly prevalent among patients with cardiovascular disease and associated with increased risk of mortality and procedure-related complications, but is seldom assessed objectively within routine practice. We propose integrating grip strength measurement as a fast, inexpensive, and risk-free frailty screen in Cardiovascular Center Clinics for improved risk assessment, individualized treatment selection, and enhanced communication between patients, providers, and families.

Team members:

- Matthew Corriere, MD, MS - Clinical Associate Professor of Vascular Surgery, Frankel Professor
- Neal Duggal, MD - Assistant Professor, Department of Anesthesiology; Director, Vascular Anesthesia.
- Paul (Michael) Grossman, MD - Professor of Cardiology, Interventional Cardiology
- William Lynch, MD - Associate Professor of Thoracic Surgery, Surgical Critical Care
- Ann Luciano, NP - PAD Program
- Ann Eschelbach, NP - Vascular Surgery
- Susan Young, RN - Vascular Surgery Clinical Care Coordinator
- Cathy Kolpacki, RN - FCVC RN Case Manger
- Traci Blancke, MSW - Inpatient Social Work
- Jacklyn Thibert, PA-C - Vascular Surgery Physician Assistant
- Ashley Duby - Clinical Research Project Manager
- Linda Batrow - Research Specialist
Preventing Deconditioning in Heart Failure Patients While Inpatient and After Discharge

The Michigan Surgical and Health Optimization Program (MSSHOP) has been successful in training Michigan Medicine patients before surgery. This team plans to apply this concept to heart failure patients to prevent deconditioning before and after discharge as a way to prevent readmissions.

Team members:

- James Froehlich, MD - Professor of Internal Medicine, Assistant Chair of Medicine for Quality and Innovation, Director, Vascular Medicine, Director, MCORRP, and Director, Anticoagulation at Medical School
- Adam Stein, MD - Assistant Professor, Div. of Cardiology, 7B & 7C MPLAN Medical Director
- Michael Englesbe, MD - Cyrenus G. Darling, Sr., MD and Cyrenus G. Darling Jr., MD Professor of Surgery in Transplant
- Paul Paliani - Administrative Manager, Clinical Design and Innovation
- Heidi McCoy, MS - Project Manager, Clinical Design and Innovation
- Carali Van Otteren, BSE - Continuous Improvement Engineer
- Krisinda Palazzolo, PA-C - Clinical Director, Pre-Operative Clinics; Medical Director, MSHOP Michigan Surgical Health Optimization Program; HR Director, MiTime
- Shawna Lorch, CHES - MSHOP Lead
- Alex Hallway - MSHOP Specialist
- Bill Palazzolo, PA-C - Director of Clinical Operations, Department of Surgery
- Tina Fields, PT, DPT - Physical Therapy Supervisor
- Samantha Fink - Program Director Cardiac Rehabilitation & Stress Testing
FCVC Directors “Just do it” Awards

Sponsored by the Frankel CVC, the winner(s) for this award will be determined by the FCVC Directors in advance of the challenge event itself. The award is intended to support the implementation of low cost ($2,000 - $4,000), low complexity innovation ideas.

2018 “Just do it” Award Winner:

Protecting Equipment to Reduce Healthcare Costs

Standardize protection and storage of LVAD emergency equipment to decrease the potential damage and improper handling through use of standardized storage bags. This will reduce the frequency of having to replace LVAD controllers and batteries.

• Submitted by: Heidi Haynes, RN
  (Center for Circulatory Support Team)

Innovation Core Team

• Chandu Vemuri, MD - FCVC Chair of Innovation, Assistant Professor of Vascular Surgery
• Hamid Ghanbari, MD, MPH - FCVC Vice-Chair of Innovation, Assistant Professor of Cardiology, Electrophysiology
• Jon Servoss, Manager - Commercialization Education, FFMI
• Meghan Cuddihy, PhD - Commercialization Education Project Manager, Aikens Innovation Academy
• Jamie Beach, RN - FCVC Quality Data Manager
Innovation “Champions”

- Diane Drago - Patient Family Advisor
- Shelly Lassey, RN, BSN - FCVC Clinic
- Ran Lee, MD - Fellow, Advanced Heart Failure & Transplant Cardiology
- Andrea Obi, MD - Clinical Assistant Professor of Vascular Surgery
- Nikki Taylor, RN, MSN - FCVC Clinical Nurse Specialist
- Raymond Yeow, MD - Resident, Internal Medicine

With Gratitude...

Thank you to our National Advisory Board Members and guests who are in attendance at today’s challenge event.

NAB Members:

- Lynne T. Braun, PhD
- Robert Higgins, MD
- Mark Kallus, MD
- Paul Kovack, DO
- Florine Mark
- Roger Newton, PhD, FAHA, FACN
- Antonia Novello, MD, MPH, DrPH, VADM
- Anne Rosenfeld, PhD, RN, FAHA, FAAN
- Roger Sergel
- Thomas Simmer, MD
- Thoralf Sundt, MD
- Jil Tardiff, MD, PhD
- Anne Taylor, MD
- Gerald Zelenock, MD

NAB Guests:

- Molly Higgins
- Suzan Kallus
- Kelli Kovack
2018 Idea and Proposal Submissions

- **Sharon Thomas** - Community Nutrition TEACH Kitchen Demo Program for VAD Patients
- **Regi Freeman, MSN, RN** - Implementation of the Society of Thoracic Surgeons Standard For Resuscitation of Patients Who Arrest After Cardiac Surgery: Cardiac Advance Life Support
- **Michael Dorsch, PharmD** - Creation of a simplified and standardized EHR application to increase provider time with patients and reduce clinic time in front of the computer
- **Diane Perry** - Co-led patient/staff Cardiac Rehab Group Orientation
- **Kathleen Fasing and Laura Horwood** - Dedicated Antiarrhythmia Medication Telemanagement Clinic
- **Carol Kaus** - Michigan Medicine Navigation (GPS)
- **Kimberly Newcomb-Forro** - Nursing Admission Paperwork via the Patient Portal
- **Risa Kirschner** - Patient and Family Centered Care Seal
- **Patient and family submissions** - Leverage patient portal for new patient paperwork; Improve feedback to families waiting during surgery and procedures; Create a guidebook of facility amenities; Revise appointment scheduling process

2019 Innovation Challenge...

*Details on next year’s FCVC Innovation Challenge will be released in the months to coming, so be on the lookout!*

[Image of Innovation Challenge]
The Aikens Innovation Academy is a new program designed to create, nurture, and support a culture of innovation and entrepreneurship through education and mentorship targeted at FCVC faculty, staff, and trainees.

The program, a collaboration between Fast Forward Medical Innovation and the Frankel Cardiovascular Center, will offer a unique set of educational and project development activities for all cardiovascular innovators, including:

- **In-depth education on innovation, entrepreneurship, and commercialization**
- **An opportunity to develop innovative biomedical technologies**
- **Mentorship from seasoned entrepreneurs and commercialization experts**
- **Guidance on your commercialization strategy and business case**
- **Connections to industry and investors**
- …and more!

**SIGN UP TODAY!**

The Aikens Innovation Academy kicks off in Spring 2019 with an innovation and commercialization course customized for the Frankel Cardiovascular Center. Whether or not you have an idea, you are welcome to attend and learn about the innovation process. To learn more and apply, visit innovation.medicine.umich.edu/cvc-innovation-academy

**QUESTIONS?**

Contact Meghan Cuddihy at: mcuddihy@umich.edu or 734-615-9904