

# MEDICINE

## NEWS FROM THE DEPARTMENT OF MEDICINE

# MATTERS

JUNE 2021

 UVA Health | DEPARTMENT OF MEDICINE

### MISSION

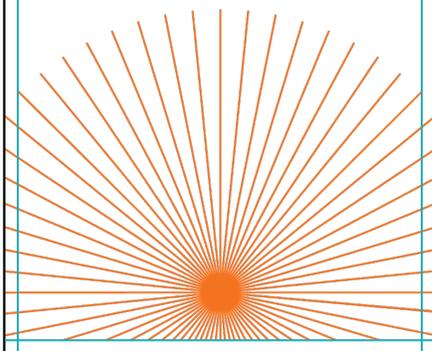
We are dedicated to preventing disease and treating illness, educating and inspiring future leaders in the field of internal medicine, and supporting innovative biomedical research.

### VALUES

We strive for a sense of community, connection, and synergy among all faculty, staff, and trainees.

### PLEDGE

We will conform to the highest ethical standards, uphold the values of our partner organizations, and give back to our community through public service.



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[HIGHLIGHTED DIVISION](#) . . . ▶

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## MESSAGE FROM THE CHAIR



June is always a special month in the Department. We celebrate the graduation of residents and fellows and now, we can do this in person! We are proud of our trainees who come from across the globe to learn with us and they are key contributors to our success. Over the past year, they have worked selflessly during challenging conditions, and our deepest thanks for their work, compassion, and grace under pressure. We also welcome a new group of trainees and the excitement and anxiety that comes with starting your career in medicine. This cycle of renewal is what keeps us fresh and focused on our missions and I find it invigorating, especially since it also signals a return to more normal operations. We will also celebrate the accomplishment of our faculty and staff this June with our DOM awards ceremony when we highlight outstanding accomplishments over the past year.

Please take a moment to reflect on your past year and I certainly thank you for your patience, hard work, dedication, and compassion. Enjoy this issue of Medicine Matters and take pride in our department as we specifically celebrate the accomplishments of the Division of Cardiovascular Medicine led by Dr. Christopher Kramer.

With best wishes,

Mitchell H. Rosner, MD, MACP  
Henry B. Mulholland Professor of Medicine  
Chair, Department of Medicine



# UVA Health

# DOM FINANCIAL UPDATE

## Department of Medicine Summary of Consolidated Financials FY21 as of April 30, 2021

	Budget YTD	Actual YTD	\$ Variance YTD
Work RVUs	775,428	803,378	27,950
Clinical Receipts (NPSR)	51,848,574	52,078,906	230,332
Total Revenues	152,828,142	150,709,441	(2,118,701)
Total Expenditures	155,046,786	151,155,190	3,891,596
<b>Net Income</b>	<b>(2,218,644)</b>	<b>(445,748)</b>	<b>1,772,895</b>

### Summary Explanation of Variance:

For the fiscal year through April 30, 2021 DOM posted a consolidated net loss of \$446K and a favorable variance to net income budget of \$1.8M.

Clinical productivity outperformed budget despite the COVID-19 pandemic.

Clinical revenues underperformed budget by \$1.1M driven by financial mitigations (Indigent Care), less Medical Center support (MOU) and delays in revenue accruals from Outreach Programs.

Non-clinical revenues underperformed budget by \$1.0M driven by required FY20 clinical deficit support recorded in FY21, reduced Medical Center support (Funds Flow) and lower grant expenditures.

Academic personnel and Non-personnel expenditures outperformed budget driven by the impact of financial mitigation efforts by unfavorable clinical personnel expenditures.

Total revenues include \$733K Endowment revenue received for May through June.

Total expenditures include \$70K pension charge back adjustment for May through June.

## *New studies opened in Oncology/Hematology since April 1, 2021*

### **A Phase 2, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate Safety, Tolerability, and Efficacy of TAK-079 in Patients With Persistent/Chronic Primary Immune Thrombocytopenia**

IRB #  
HSR200173  
CT. Gov. ID:z  
NCT04278924  
Sponsor Protocol TAK-079-1004 Sponsor: Millenniuc  
Principal Investigator: Davidson, Kelly Study Contact: Mireille Nkongho, [qqv6pw@virginia.edu](mailto:qqv6pw@virginia.edu), 434-982-3919

### **Efficacy of COVID-19 Vaccine Among Patients with Hematologic Malignancies**

IRB #  
HSR210070  
CT. Gov. ID:  
NA  
Sponsor Protocol HSR210070 Sponsor: University of Virginia  
Principal Investigator: Ayers, Emily Study Contact: Emily Suzanne Hoade, [esh5rq@virginia.edu](mailto:esh5rq@virginia.edu)

### **A Phase 3 Randomized Double-Blind Placebo-Controlled Study Investigating the Efficacy and Safety of Roxadustat (FG-4592) for Treatment of**

**Anemia in Patients with Lower Risk Myelodysplastic Syndrome (MDS) with Low Red Blood Cell (RBC) Transfusion Burden (LTB)**

IRB #  
HSR200246  
CT. Gov. ID:  
NCT03263091  
Sponsor Protocol FGCL-4592-082 Sponsor: Fibrogen, Inc.  
Principal Investigator: El Chaer, Firas Study Contact: Danyelle Coley, [jcs6rz@virginia.edu](mailto:jcs6rz@virginia.edu)

# THANK YOU!

TO ALL THOSE WHO HAVE BEEN VOLUNTEERING AT UVA COMMUNITY COVID-19 TESTING SITES

# DOM UPDATES & NOTES



Margaret Shupnik, PhD



John Watson, MD



Rajkumar Venkatadri, PhD



Christiana Brenin MD



Trish Millard, MD



Patrick Dillon, MD



Lawrence Lum, MD



Imre Noth, MD



Mami Taniuchi, PhD

## Awards and Achievements

Congratulations to **Dr Margaret “Peggy” Shupnik** who was named *Women’s Center’s 2020 Zintl Award Recipient* (the University of Virginia’s pandemic-delayed 2020 Elizabeth Zintl Leadership Award). Read the full article about Dr Shupnik [here](#).

Congratulations to Fellow **Dr John Watson** in the Division of Pulmonary and Critical Care on his *Nursing Excellence Award as an Exemplary Fellow*.

Congratulations to Fellow **Dr Rajkumar Venkatadri** in the Division of Nephrology, and Dr Rahul Sharma’s lab, for winning the *Shyr-Te-Ju Award for 2021* at this year’s UVA Scholar’s Research Day.

Congratulations to our Breast Care Team, **Drs Christiana Brenin, Trish Millard, and Patrick Dillon** on their recent publications:

Sytov, A., Brenin, C., Millard, T. et al. “[Long-Term Non-progression in Metastatic Breast Cancer Beyond 5 Years: Case Series and Review](#)”. *Curr Breast Cancer Rep* (2021). <https://doi.org/10.1007/s12609-021-00410-6>

Mariotti V, Han H, Ismail-Khan R, Tang SC, Dillon P, Montero AJ, Poklepovic A, Melin S, Ibrahim NK, Kennedy E, Vahanian N, Link C, Tennant L, Schuster S, Smith C, Danciu O, Gilman P, Soliman H. “[Effect of Taxane Chemotherapy With or Without Indoximod in Metastatic Breast Cancer: A Randomized Clinical Trial](#)”. *JAMA Oncol*. 2021 Jan 1;7(1):61-69. doi: 10.1001/jamaoncol.2020.5572.

Congratulations to **Drs Patrick Dillon and Lawrence Lum** on their newly published article in Expert Opinion on Biological Therapy titled “[Bispecific antibodies for the treatment of breast cancer.](#)”

Congratulations to **Dr Imre Noth**, Pulmonary and Critical Care Chief, on the publication of his groundbreaking, co-authored paper, “[Effect of Antimicrobial Therapy in Respiratory Hospitalization or Death in Adults with Idiopathic Pulmonary Fibrosis](#)” in *The Journal of the American Medical Association*.

Congratulations to **Dr Mami Taniuchi** on receiving a \$6 million grant from the [Bill and Melinda Gates Foundation](#) to create an integrated sewage and clinical case surveillance network in Karachi to monitor diseases. Dr Taniuchi worked in partnership with Aga Khan University in Pakistan. This project follows a similar model to the integrated sewage surveillance that Taniuchi implemented in Dhaka, Bangladesh, with promising results.

**Welcome To The World**



Congratulations to Zach and Sydney Boggs who welcomed their baby girl Ellie into the world May 6, 2021.

**WE NEED YOU!**

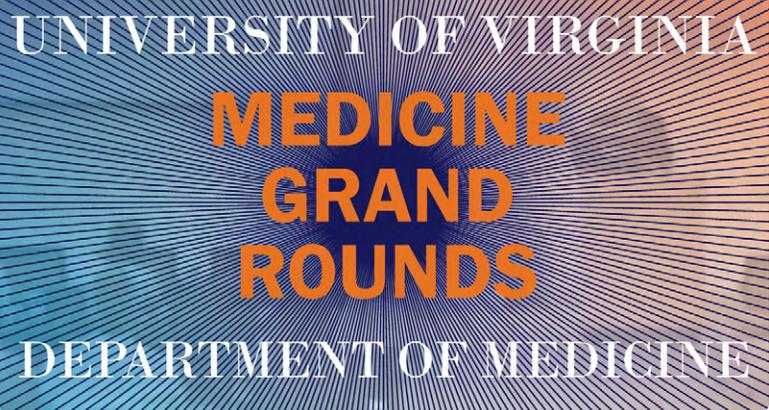
**SIGN UP TO BE  
A VACCINATOR  
OR VOLUNTEER  
SCREENER**

**Seminole  
Square  
Vaccination  
Clinic**

**CONGRATULATIONS  
GRADUATING  
RESIDENTS  
AND  
FELLOWS!**

**WELCOME  
NEW  
MEDICAL  
STUDENTS!**

**FRIDAYS AT NOON** via Zoom  
Click for details and schedule.



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# DIVISION OF CARDIOVASCULAR MEDICINE

## Message from Christopher Kramer, MD, Division Chief, Cardiovascular Medicine



**Christopher Kramer, MD**

million (directs). The division's research activities range from basic biomedical research to physiologic and device-related clinical studies to large international clinical registries.

~ Christopher M. Kramer, MD

The University of Virginia's Division of Cardiovascular Medicine, led by Christopher M. Kramer, MD, is nationally recognized for excellence in clinical care, research, and teaching. Faculty members provide expert, comprehensive care for all forms of cardiovascular disease through the UVA Heart and Vascular Center, which serves more than 4,000 patients at University Hospital and an additional 50,000 in outpatient clinics each year. The division's clinical practice covers a wide range of disciplines, including general cardiovascular disease and prevention, cardiac imaging, diagnostic, and interventional electrophysiology, and cardiac catheterization, valvular heart disease, basic and advanced heart failure, mechanical support, adult congenital heart disease, sports cardiology, and vascular diseases. The collaborative approach the division takes to patient care brings together specialists from cardiovascular medicine, pediatric cardiology, and cardiac surgery, adult cardiac and vascular surgery, and diagnostic and interventional radiology to optimize treatment for each patient. Its faculty and professional research staff excel in the research arena, with over 100 grants and total annual grant funding of over \$7

## Early Career Leadership Academy Program



*Michael Valentine*

The Cardiovascular Division has developed an Early Career Leadership Academy, to enhance self-awareness and team leadership skills, clinician engagement and wellness, individual and division career advancement. Supported by a grant from the Ivy Foundation, this diverse group consists of eight physicians and three APPs. The curricula closely mirror Leadership Academies developed at The American College of Cardiology and Centra Health in Lynchburg, Virginia. Mike Valentine, MD, MACC, and Corrin McCloskey helped create the program and will administer it throughout the next twelve months.

**Michael Valentine, MD, MACC**

Each member of the Academy will work with faculty and guest speakers in a case-based format, helping solve problems and learning advanced skill sets that will advance leadership opportunities much earlier in their careers. A mentoring program is an integral part of this, and each participant will create a Capstone Project to aid individual unit, subspecialty, and division goals. If successful and well-received, a Mid Career Leadership Academy will follow, with data now revealing that this group is most vulnerable to loss of engagement, career dissatisfaction, and burnout.

# DIVISION OF CARDIOVASCULAR MEDICINE

## Division of Cardiovascular Research



**Ken Walsh, PhD**

### *Ken Walsh*

The Walsh lab studies how the development of DNA mutations with age can contribute to disease processes. These DNA alterations are referred to as somatic mutations, and they vastly outnumber the germline mutations that an individual will inherit from their parents. Recent advances in DNA sequencing technology have shown that somatic mutations are detectable throughout the body, but they are particularly prevalent in blood cells due to their rapid turnover. As these mutations can affect cellular viability and proliferation, mutant clones will form as the person ages. In blood, this process is referred to as “clonal hematopoiesis”, and it has been associated with mortality and increased risk of cardiometabolic diseases.



**Todd C. Villines MD, FACC,  
FAHA, MSCCT**

### *Todd C. Villines*

The Villines lab studies the use of cardiac computed tomography techniques, such as coronary artery calcium and coronary CT angiography (CTA) scans, to diagnose cardiovascular diseases, cardiovascular and non-cardiovascular outcomes, and immune cell interactions in atherosclerosis. Our team involves partnerships with a diverse group of physician-scientists at UVA and internationally. Specific areas of current and recent study include the impact of preventive medical therapies on cardiovascular outcomes in patients with varying degrees of subclinical coronary atherosclerosis. Work in this area is currently assessing the potential role of targeted coronary artery disease screening in younger patients younger than 50 years old. Dr. Villines is also collaborating with Dr. Colleen McNamara, Dr. Angela Taylor, and several other investigators from the Human Phenotyping and Immune Cell Core that supports an NIH Program Grant. As part of this collaboration, the group uses coronary CTA to quantify and characterize whole-heart coronary atherosclerosis to study complex immune interactions.

Finally, Dr. Villines is co-leading an international collaborative clinical trial assessing machine-learning-based coronary plaque and cardiac CT-based cardiovascular quantification techniques designed to determine the relationship of quantitative measures of coronary atherosclerosis and other imaging biomarkers on cardiovascular outcomes.



**Matthew J. Wolf, MD, PhD**

### *Matthew J. Wolf*

The Wolf lab investigates mouse models of cardiovascular diseases, particularly myocardial infarction, cardiomyopathies, and coronary microvascular disease. Our lab creates and uses transgenic mice to model human cardiac pathophysiology and disease mechanisms and test potential treatments. We perform small animal cardiac surgeries (performing >1,200 cardiac surgeries to date), echocardiography, histology, and lineage-tracing of cycling cardiomyocytes to achieve these goals. For example, endogenously cycling adult cardiomyocytes increase after myocardial infarction but remain scarce and are generally thought not to contribute to myocardial function. However, this broadly held assumption had not been tested, mainly because of the lack of transgenic reporters that restrict Cre expression to adult cardiomyocytes that reenter the cell cycle. Therefore, we created a novel transgenic mouse harboring sequential orthologous DNA recombinases to fine-tune DNA recombination temporally in cycling adult cardiomyocytes.

We observed that ablating endogenous cycling CMs worsened heart function after myocardial infarction, suggesting that these scarce cells may express beneficial paracrine factors (Bradley Wolf, *Circulation Research* (2021)). Dr. Wolf was awarded a Paul Dudley White International Scholar for an abstract describing this research at the Basic Cardiovascular Sciences Scientific Sessions 2020. These findings are the basis of a recent NHLBI R21 grant application to characterize endogenous cycling cardiomyocytes in normal biology and disease. We also recently identified that the inhibition of a kinase, DYRK1a, improved left ventricular function after myocardial infarction and increased the cycling of cardiomyocytes. Exploring the mechanisms by which DYRK1a inhibition improves cardiac function after injury formed the basis of our recent NHLBI R01 grant. Additionally, our team investigates cardiomyopathies and generated a CRISPR-based knock-in transgenic mouse to model V122I transthyretin (TTR) cardiac amyloid, one of the most common TTR mutations in the United States. We plan to use this transgenic mouse to investigate cardiac amyloid and test therapies. Overall, we hope that our work will contribute new, more effective therapies to treat cardiovascular diseases.

# DIVISION OF CARDIOVASCULAR MEDICINE

## Division of Cardiovascular Educational Updates



*Victor Soukoulis*

**Victor Soukoulis MD, PhD**

Like most programs, it has been an interesting year, to say the least, for the Cardiovascular Medicine fellowship. Even with Covid disruptions, our fellows have managed to not only persevere but thrive this academic year. Many of their names can be found throughout the research publications listed in this newsletter. Our graduating fellows will soon be off to new and exciting career adventures across the nation, which is always a bittersweet moment. Two of our fellows, Mike Zimmerman and Patrick Stafford, were nominated for the prestigious Mulholland Teaching Award. At the same time, Mike also was inducted into Alpha Omega Alpha for his medical student teaching. Finally, the UVA Jeopardy team (Leann Denlinger, Xu Gao, Ben Ruth) won the Virginia ACC Jeopardy state competition for the second straight year and proceeded to make it to the national finals (a first for a UVA team) where they impressively finished in second place nationally. Thank you to our fellows for all that you do, and I can't wait to see what you will accomplish next year!

A screenshot of a Jeopardy game interface. The top left features the American College of Cardiology logo. The main title is "FIT Jeopardy Battle of the State Chapters" in large white and yellow text over a heart graphic. Below the title are buttons for "Instructions" and "Board", and a speaker icon. A blue circle on the right says "Put your KNOWLEDGE to the test!". A small video inset in the top right shows three people in a meeting. At the bottom left, there is a small disclaimer: "not in any way endorsed or affiliated with the Jeopardy Game Show".

**CMR Conference (Dr. Kramer)  
First Tuesday of the month  
Moss Auditorium, Radiology**

**Other Tuesdays – Imaging Conference (Dr. Luna)  
4 North Conference Room 4614  
12:00 PM - 1:00 PM**

# DIVISION OF CARDIOVASCULAR MEDICINE

## Division of Cardiovascular Fellowship Updates

### GENERAL CARDIOVASCULAR FELLOWSHIP GRADUATES



LeAnn Denlinger, MD



Xu Gao, MD



Saad Ghumman, MBBS



Steven Noutong Njapo, MD



Toral Patel, MD



Benjamin Ruth, MD

#### General Cardiovascular Fellowship Graduates

<b>LeAnn Denlinger, MD</b>	<b>Non-invasive Cardiologist</b>	<b>Augusta Health, Staunton, VA</b>
<b>Xu Gao, MD</b>	<b>Electrophysiology Fellowship</b>	<b>Northwestern University</b>
<b>Saad Ghumman, MBBS</b>	<b>Interventional Cardiology Fellowship</b>	<b>Brigham and Women's Hospital</b>
<b>Steven Noutong Njapo, MD</b>	<b>General Cardiology</b>	<b>Blount Memorial Hosp., Maryville TN</b>
<b>Toral Patel, MD</b>	<b>Advanced Imaging Fellowship</b>	<b>University of Virginia</b>
<b>Benjamin Ruth, MD</b>	<b>Non-invasive Cardiology</b>	<b>Sentara Rockingham, Harrisonburg, VA</b>

### ADVANCED CARDIOVASCULAR FELLOWSHIP GRADUATES



Christopher Hanson, MD



David Kim, MD



P. Tim Maddux, MD



Adithya Peruri, MD



Elona Rrapo Kaso, MD



Gautam Verma, MD

#### Advanced Cardiovascular Fellowship Graduates

<b>Christopher Hanson, MD</b>	<b>General/Imaging Cardiology</b>	<b>Sparrow Health/Michigan State U., Lansing MI</b>
<b>David Kim, MD</b>	<b>Electrophysiology</b>	<b>Christiana Care Hospital, Newark, DE</b>
<b>P. Tim Maddux, MD</b>	<b>Interventional Cardiology</b>	<b>University Cardiovascular Assoc., Augusta, GA</b>
<b>Adithya Peruri, MD</b>	<b>Cardiovascular Fellowship</b>	<b>Parkview Medical Center, Pueblo, CO</b>
<b>Elona Rrapo Kaso, MD</b>	<b>Advanced Cardiac Imaging/Gen'l Cardiology</b>	<b>Orlando VA Medical Center, Orlando, FL</b>
<b>Gautam Verma, MD</b>	<b>Electrophysiology</b>	<b>St. Peter's Hospital, Albany NY</b>

# DIVISION OF CARDIOVASCULAR MEDICINE

## Division of Cardiovascular Fellowship Updates

### INCOMING FELLOWS



Nick Ashur, MD  
Cardiovascular Disease



Sami Ibrahim, MD  
Cardiovascular Disease



Jonathan Pan, MD  
Cardiovascular Disease



Sneha Gadi, MD  
Cardiovascular Disease



Matthew Miller, MD  
Cardiovascular Disease



Toral Patel, MD  
Advanced Imaging



Chinmaya Mareddy, MBBS  
Electrophysiology



Merry Ellen Barnett, MD  
Vascular



Shivam Saxena, MD  
Electrophysiology



Brian McNichols, MD  
Interventional

### Incoming Fellows

Nicholas Ashur, MD	Duke University	General Cardiovascular Disease
Sneha Gadi, MD	Emory University	General Cardiovascular Disease
Sami Ibrahim, MD	University of Virginia	General Cardiovascular Disease
Matthew Miller, MD	University of Virginia	General Cardiovascular Disease
Jonathan Pan, MD	University of Virginia	General Cardiovascular Disease
Chinmaya Mareddy, MBBS, MBA	Augusta University Medical Center	Electrophysiology
Shivam Saxena, MD	Cooper University Hospital	Electrophysiology
Brian McNichols, MD	University of Florida	Interventional
Toral Patel, MD	UVA Cardiovascular Disease	Advanced Imaging
Merry Ellen Barnett, MD	University of Virginia	Vascular



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## Division of Cardiovascular Clinical Update



**Pamela Mason, MD**

### *Pamela Mason*

#### **UVA Heart Rhythm Center, UVA Electrophysiology Program Expansion:**

Under the leadership of Dr. Pamela Mason, the Heart Rhythm Center at UVA has experienced significant growth and innovation. Despite the COVID pandemic, procedural volumes have increased by 5% over the last year, and consultative and clinic volumes have remained robust. We have welcomed additional faculty to our group, including Dr. Oliver Monfredi, who provides comprehensive clinical and procedural electrophysiology care, and Dr. Mike Valentine, who participates with our consultative services. We have developed quality initiatives, such as same-day discharge programs for patients after pacemaker or defibrillator placement, as well as atrial fibrillation ablation and left atrial appendage occlusion devices. Over 90% of patients undergoing electrophysiology procedures are being discharged the day of their procedure currently.

The UVA Heart Rhythm Center continues to be at the forefront of clinical innovation. We have expanded our cardiac implantable electronic device offerings to include left bundle pacemakers, which provide more physiologic pacing than standard dual chamber pacers. Our leadless pacemaker volumes and subcutaneous ICD volumes continue to grow. Our lead extraction program is multi-disciplinary and collaborative, with a safety record better than the national average. Under the direction of Dr. Mike Mangrum, the Atrial Fibrillation Center has pioneered the use of non-invasive arrhythmia mapping with the CardioInsight Vest to provide patients with better clinical outcomes.

Finally, UVA continues to be a leader in clinical electrophysiology research. We are part of clinical trials investigating novel technologies, including pulsed-field ablation for atrial fibrillation and wireless ultrasound transmission to provide cardiac resynchronization therapy.

We have strong collaborations with the imaging and heart failure groups to evaluate and improve outcomes for patients receiving cardiac resynchronization devices.

It has been an exciting time for the UVA electrophysiology group, and we are proud of expanding heart rhythm care to more patients while maintaining excellence.



**Jamieson Bourque, MD, MHS**

### *Jamieson Bourque*

#### **Update on Nuclear Cardiology**

Nuclear Cardiology and the Stress Laboratory have continued to innovate in 2021. We have added technetium-99m pyrophosphate assessment of ATTR cardiac amyloidosis, which allows noninvasive diagnosis of this morbid condition, avoiding a biopsy. This is particularly exciting given newly approved therapies that improve survival. We have refined our perfusion imaging and ischemia assessment with the addition of prone imaging, reducing false-positive studies. In cardiac PET, we continue to expand our program, supporting increased use of this advanced ischemia and microvascular assessment technique. We are looking forward to adding inflammation imaging to support the care of patients with infective endocarditis and implantable device infections.

**CARDIOLOGY GRAND ROUNDS**  
**Education Resource Center 2nd Floor Conference Room A**  
**Wednesday 7:30 AM- 8:30 AM**

# DIVISION OF CARDIOVASCULAR MEDICINE

## Division of Cardiovascular Awards and Achievements



Kenneth Bilchick, MD, MS, FACC, FHRS



Pamela Mason, MD, FACC, FAHA, MSCCT



Angela Taylor, MD, MS



Andrew Darby, MD



Rohit Malhotra, MD, FACC



Todd Villines, MD, FACC, FAHA, MSCCT



Mohammad Abuannadi, MBBS



Michael Ayers, MD, FACC



Zhen Yan, PhD



Christopher Kramer, MD



Sula Mazimba, MD, MPH



Nishtha Sodhi, MD, FACC, FASE, FSCAI



Michael Salerno, MD, PhD, MS

### *Promotions*

**Kenneth Bilchick, MD, MS, FACC, FHRS** - *Professor of Medicine*

**Pamela Mason, MD, FACC, FAHA, MSCCT** - *Professor of Medicine*

**Angela Taylor, MD, MS** - *Professor of Medicine*

**Andrew Darby, MD** - *Associate Professor with Tenure*

**Rohit Malhotra, MD, FACC** - *Associate Professor with Tenure*

### *Awards*

**Todd Villines, MD, FACC, FAHA, MSCCT** - received the *Gold Medal Award* from the *Society for Cardiovascular Computed Tomography* and appointed *Chair of the American College of Cardiology Education, Standards, and Outcomes Committee*

**Mohammad Abuannadi, MBBS** and **Michael Ayers, MD, FACC** - have been named as members of the *UVA Academy of Distinguished Educators*

**Ken Bilchick, MD** - has been appointed to the *American College of Cardiology Faculty Development Workgroup*

**Zhen Yan, PhD** - has had his paper published in the *Journal of Applied Physiology* and has been named APS select article of the month and received coverage by the NY Times

**Christopher Kramer, MD** - has been named the *2021 Distinguished Mentor by the American College of Cardiology*

**Sula Mazimba, MD, MPH** - and his team were one of five winners of the *NHLBI Big Data Heart Failure challenge*. He has also been appointed *Associate Editor at Journal of the American Heart Association*

**Nishtha Sodhi, MD, FACC, FASE, FSCAI** - has been appointed to the *American College of Cardiology Accreditation Services Committee*

**Michael Salerno, MD, PhD, MS** - has been appointed to the *American College of Cardiology Cardiovascular Imaging Leadership Council* and was inducted into *Alpha Omega Alpha* at UVA

## Selected Publications

Ayers MP, Peruri AV, Bourque JM. Transforming ATTR cardiac amyloidosis into a chronic disease: The enormous potential of quantitative SPECT to improve diagnosis, prognosis, and monitoring of disease progression. *J Nucl Cardiol*. 2021 Apr 13. doi: 10.1007/s12350-021-02587-w. Epub ahead of print. PMID: 33851351.

Ghadimi S, Auger DA, Feng X, Sun C, Meyer CH, Bilchick KC, Cao JJ, Scott AD, Oshinski JN, Ennis DB, Epstein FH. Fully-automated global and segmental strain analysis of DENSE cardiovascular magnetic resonance using deep learning for segmentation and phase unwrapping. *J Cardiovasc Magn Reson*. 2021 Mar 11;23(1):20. doi: 10.1186/s12968-021-00712-9. PMID: 33691739; PMCID: PMC7949250.

Mathew RC, Bourque JM, Salerno M, Kramer CM. Cardiovascular Imaging Techniques to Assess Microvascular Dysfunction. *JACC Cardiovasc Imaging*. 2020 Jul;13(7):1577-1590. doi: 10.1016/j.jcmg.2019.09.006. Epub 2019 Oct 11. PMID: 31607665; PMCID: PMC7148179.

Mehta NK, Morgaenko K, Haines D, Rojas-Pena E, Heard B, Malhotra R, Darby A, Mangrum JM, Mason P, Campbell C, Bilchick K. Baseline incision characteristics and early scar maturation indices following cardiac device implantation. *J Arrhythm*. 2021 Jan 19;37(2):400-406. doi: 10.1002/joa3.12464. PMID: 33850582; PMCID: PMC8021997.

Gao X, Chang D, Bilchick KC, Hussain SK, Petru J, Skoda J, Sediva L, Neuzil P, Mangrum JM. Left atrial thickness and acute thermal injury in patients undergoing ablation for atrial fibrillation: Laser versus radiofrequency energies. *J Cardiovasc Electrophysiol*. 2021 May;32(5):1259-1267. doi: 10.1111/jce.15011. Epub 2021 Apr 6. PMID: 33760290.

Hanson CA, Kamath A, Gottbrecht M, Ibrahim S, Salerno M. T2 Relaxation Times at Cardiac MRI in Healthy Adults: A Systematic Review and Meta-Analysis. *Radiology*. 2020 Nov;297(2):344-351. doi: 10.1148/radiol.2020200989. Epub 2020 Aug 25. PMID: 32840469; PMCID: PMC7605362.

Klibanov AL. Early-Stage Alzheimer Disease Image-guided Therapy Clinical Trial Serendipity: Glymphatic Efflux and Prolonged Meningeal Venous Permeability Enhancement. *Radiology*. 2021 Mar;298(3):663-664. doi: 10.1148/radiol.2021204271. Epub 2021 Jan 5. PMID: 33404362; PMCID: PMC7924513.

Kothari H, Williams CM, McSkimming C, Drago F, Marshall MA, Garmey J, Vigneshwar M, Zunder ER, McNamara CA. Identification of human immune cell subtypes most responsive to IL-1 $\beta$ -induced inflammatory signaling using mass cytometry. *Sci Signal*. 2021 Mar 9;14(673):eabc5763. doi: 10.1126/scisignal.abc5763. PMID: 33688079.

Harper AR, Goel A, Grace C, Thomson KL, Petersen SE, Xu X, Waring A, Ormondroyd E, Kramer CM, Ho CY, Neubauer S; HCMR Investigators, Tadros R, Ware JS, Bezzina CR, Farrall M, Watkins H. Common genetic variants and modifiable risk factors underpin hypertrophic cardiomyopathy susceptibility and expressivity. *Nat Genet*. 2021 Feb;53(2):135-142. doi: 10.1038/s41588-020-00764-0. Epub 2021 Jan 25. PMID: 33495597.

Blackard KR, Krahn KN, Andris RT, Lake DE, Fairchild KD. Autism risk in neonatal intensive care unit patients associated with novel heart rate patterns. *Pediatr Res*. 2021 Feb 18. doi: 10.1038/s41390-021-01381-1. Epub ahead of print. PMID: 33603208.

Grayburn PA, Sannino A, Cohen DJ, Kar S, Lim DS, Mishell JM, Whisenant BK, Rinaldi MJ, Kapadia SR, Rajagopal V, Crowley A, Kotinkaduwa LN, Lindenfeld J, Abraham WT, Mack MJ, Stone GW. Predictors of Clinical Response to Transcatheter Reduction of Secondary Mitral Regurgitation: The COAPT Trial. *J Am Coll Cardiol*. 2020 Sep 1;76(9):1007-1014. doi: 10.1016/j.jacc.2020.07.010. PMID: 32854834.

Mehta NK, Morgaenko K, Haines D, Rojas-Pena E, Heard B, Malhotra R, Darby A, Mangrum JM, Mason P, Campbell C, Bilchick K. Baseline incision characteristics and early scar maturation indices following cardiac device implantation. *J Arrhythm*. 2021 Jan 19;37(2):400-406. doi: 10.1002/joa3.12464. PMID: 33850582; PMCID: PMC8021997.

Gao X, Chang D, Bilchick KC, Hussain SK, Petru J, Skoda J, Sediva L, Neuzil P, Mangrum JM. Left atrial thickness and acute thermal injury in patients undergoing ablation for atrial fibrillation: Laser versus radiofrequency energies. *J Cardiovasc Electrophysiol*. 2021 May;32(5):1259-1267. doi: 10.1111/jce.15011. Epub 2021 Apr 6. PMID: 33760290.

Mason PK, Desai A, Ajijola OA, Amin AK, Barbhuiya C, Basil A, DeBiasi R, Dukes J, Fradley M, Ismail H, Jackson L 2nd, Mendelson T, Montgomery J, Orencole MP, Syed FE, Wan E, Zilinski J, Singh JP. Integrated electrophysiology care for patients with heart failure: An envisioned future. *Heart Rhythm*. 2021 Feb;18(2):e51-e63. doi: 10.1016/j.hrthm.2020.10.008. Epub 2020 Oct 13. PMID: 33065255.

Min J, Badesch D, Chakinala M, Elwing J, Frantz R, Horn E, Klinger J, Lammi M, Mazimba S, Sager J, Shlobin O, Simon M, Thenappan T, Grinnan D, Ventetuolo C, Al-Naamani N; PHAR Investigators. Prediction of Health-related Quality of Life and Hospitalization in Pulmonary Arterial Hypertension: The Pulmonary Hypertension Association Registry. *Am J Respir Crit Care Med*. 2021 Mar 15;203(6):761-764. doi: 10.1164/rccm.202010-3967LE. PMID: 33211974; PMCID: PMC7958508.

## Selected Publications

- Alencar GF, Owsiany KM, Karnewar S, Sukhavasi K, Mocci G, Nguyen AT, Williams CM, Shamsuzzaman S, Mokry M, Henderson CA, Haskins R, Baylis RA, Finn AV, **McNamara CA**, Zunder ER, Venkata V, Pasterkamp G, Björkegren J, Bekiranov S, Owens GK. Stem Cell Pluripotency Genes Klf4 and Oct4 Regulate Complex SMC Phenotypic Changes Critical in Late-Stage Atherosclerotic Lesion Pathogenesis. *Circulation*. 2020 Nov 24;142(21):2045-2059. doi: 10.1161/CIRCULATIONAHA.120.046672. Epub 2020 Jul 17. PMID: 32674599; PMCID: PMC7682794.
- Keim-Malpass J, Sullivan BA, **Moorman JR**. Continuous Pulse Oximetry Monitoring in Bronchiolitis Patients Not Receiving Oxygen. *JAMA*. 2020 Oct 6;324(13):1349-1350. doi: 10.1001/jama.2020.12740. PMID: 33021661.
- Peruri A**, Payvar S, Gerhard-Herman M, Gupta K, Kim ES, Ramcharitar RK, Sharma A. Mentorship program and telemedicine for the vascular medicine physician. *Vasc Med*. 2020 Oct;25(5):511-514. doi: 10.1177/1358863X20949683. Epub 2020 Sep 4. PMID: 32886891.
- Löffler AI, Gonzalez JA, Sundararaman SK, Mathew RC, Norton PT, Hagspiel KD, Kramer CM, **Ragosta M**, Rogers C, Shah NL, Salerno M. Coronary Computed Tomography Angiography Demonstrates a High Burden of Coronary Artery Disease Despite Low-Risk Nuclear Studies in Pre-Liver Transplant Evaluation. *Liver Transpl*. 2020 Nov;26(11):1398-1408. doi: 10.1002/lt.25869. PMID: 32772465.
- Peruri A**, Payvar S, Gerhard-Herman M, Gupta K, Kim ES, **Ramcharitar RK**, Sharma A. Mentorship program and telemedicine for the vascular medicine physician. *Vasc Med*. 2020 Oct;25(5):511-514. doi: 10.1177/1358863X20949683. Epub 2020 Sep 4. PMID: 32886891.
- Rodriguez Lozano P**, Bourque JM. Beyond traditional cardiovascular risk factors: Could frailty and other morbidities explain the worse prognosis in patients undergoing pharmacologic stress? *J Nucl Cardiol*. 2020 Nov 25. doi: 10.1007/s12350-020-02441-5. Epub ahead of print. PMID: 33241477.
- Rrapo Kaso E**, Bourque JM. Regadenoson SPECT MPI post-troponin elevation in two different patient populations: A reliable risk-stratification tool. *J Nucl Cardiol*. 2020 Dec;27(6):2332-2336. doi: 10.1007/s12350-019-01726-8. Epub 2019 Apr 30. PMID: 31041679.
- Salerno M**, Kwong RY. CMR in the Era of COVID-19: Evaluation of Myocarditis in the Subacute Phase. *JACC Cardiovasc Imaging*. 2020 Nov;13(11):2340-2342. doi:10.1016/j.jcmg.2020.06.013. Epub 2020 Jul 3. PMID: 32771570; PMCID: PMC7332904.
- Schumann CL**, Mathew RC, Dean JL, Yang Y, Balfour PC Jr, Shaw PW, Robinson AA, Salerno M, Kramer CM, Bourque JM. Functional and Economic Impact of INOCA and Influence of Coronary Microvascular Dysfunction. *JACC Cardiovasc Imaging*. 2021 Apr 7:S1936-878X(21)00179-0. doi: 10.1016/j.jcmg.2021.01.041. Epub ahead of print. PMID: 33865784.
- Myc LA, Richardson ED, Barros AJ, Watson JT, **Sharma A**, Kadl A. Risk Stratification in Acute Pulmonary Embolism: Half of the Way There? *Ann Am Thorac Soc*. 2020 Dec 17. doi: 10.1513/AnnalsATS.202005-461RL. Epub ahead of print. PMID: 33332992.
- Mazimba S, Ginn G, Mwansa H, Laja O, Jeukeng C, Elumogo C, Patterson B, Kennedy JLW, Mehta N, Hossack JA, Parker AM, Mihalek A, Tallaj J, **Sodhi N**, Kwon Y, Pamboukian SV, Adamson PB, Bilchick KC. Pulmonary Artery Proportional Pulse Pressure (PAPP) Index Identifies Patients With Improved Survival From the CardioMEMS Implantable Pulmonary Artery Pressure Monitor. *Heart Lung Circ*. 2021 Apr 13:S1443-9506(21)00105-0. doi: 10.1016/j.hlc.2021.03.004. Epub ahead of print. PMID: 33863665.
- Damp JB, Cullen MW, **Soukoulis V**, Tam MC, Keating FK, Smith SA, Bhakta D, Abudayyeh I, Qasim A, Sernyak A, Auseon A, Theriot P, Weissman G. Program Directors Survey on Diversity in Cardiovascular Training Programs. *J Am Coll Cardiol*. 2020 Sep 8;76(10):1215-1222. doi: 10.1016/j.jacc.2020.07.020. PMID: 32883415.
- Srikakulapu P, Upadhye A, Drago F, Perry HM, Bontha SV, McSkimming C, Marshall MA, **Taylor AM**, McNamara CA. Chemokine Receptor-6 Promotes B-1 Cell Trafficking to Perivascular Adipose Tissue, Local IgM Production and Atheroprotection. *Front Immunol*. 2021 Feb 19;12:636013. doi: 10.3389/fimmu.2021.636013. PMID: 33679793; PMCID: PMC7933012.
- Einstein AJ, Shaw LJ, Hirschfeld C, Williams MC, **Villines TC**, Better N, Vitola JV, Cerci R, Dorbala S, Raggi P, Choi AD, Lu B, Sinitsyn V, Sergienko V, Kudo T, Nørgaard BL, Maurovich-Horvat P, Campisi R, Milan E, Louw L, Allam AH, Bhatia M, Malkovskiy E, Goebel B, Cohen Y, Randazzo M, Narula J, Pascual TNB, Pynda Y, Dondi M, Paez D; INCAPS COVID Investigators Group. International Impact of COVID-19 on the Diagnosis of Heart Disease. *J Am Coll Cardiol*. 2021 Jan 19;77(2):173-185. doi: 10.1016/j.jacc.2020.10.054. PMID: 33446311; PMCID: PMC7836433.
- Evans MA, Sano S, **Walsh K**. Clonal haematopoiesis and cardiovascular disease: how low can you go? *Eur Heart J*. 2021 Jan 20;42(3):266-268. doi: 10.1093/eurheartj/ehaa848. PMID: 33313787.
- Bradley LA, Young A, Li H, Billcheck HO, **Wolf MJ**. Loss of Endogenously Cycling Adult Cardiomyocytes Worsens Myocardial Function. *Circ Res*. 2021 Jan 22;128(2):155-168. doi: 10.1161/CIRCRESAHA.120.318277. Epub 2020 Nov 4. PMID: 33146578.
- Laker RC, Altınta A, Lillard TS, Zhang M, Connelly JJ, Sabik OL, Onengut S, Rich SS, Farber CR, Barrès R, **Yan Z**. Exercise during pregnancy mitigates negative effects of parental obesity on metabolic function in adult mouse offspring. *J Appl Physiol* (1985). 2021 Mar 1;130(3):605-616. doi: 10.1152/jappphysiol.00641.2020. Epub 2020 Dec 17. PMID: 33332990.

# DIVISION OF CARDIOVASCULAR MEDICINE

## Meet Cardiovascular Medicine's Nishtha Sodhi, MD, FACC, FASE, FSCAI



*Tell us a little bit about yourself.*

I am a Structural and Interventional Cardiologist and joined the faculty at UVA in August 2019. I completed my Internal Medicine Residency at The Cleveland Clinic and subsequently trained at Washington University in St. Louis for General Cardiology Fellowship, Interventional Cardiology Fellowship, and Structural Heart Disease Fellowship. I grew up in South Jersey and am excited to be back on the East coast in this area.

*What motivated you to select this field?*

I was in my first year of medical school when the early clinical trials on TAVR were initiated in the United States. Seeing the medical team replace a patient's aortic valve without opening the chest was incredible. For the first time, there was an option for patients with severe aortic valve disease who might not otherwise be candidates for surviving traditional open-heart surgery. The technology, the faster post-procedure recovery, and the immediate improvement in patients' symptoms made a huge impression on me. I decided at that very early stage in my medical career that this was what I wanted to specialize in. Transcatheter therapies have completely transformed and revolutionized the management of valvular and coronary disease, and I feel privileged to be part of this exciting and dynamic subspecialty.

Less than 2% of structural and interventional cardiologists in the United States are women.

*Was this also a motivator for you?*

There are very few female structural and interventional cardiologists in the United States. I am grateful to be part of this small group and had incredible mentorship and training. Heart disease in women is underdiagnosed. It often presents itself differently in women than in men, and there are also unique circumstances, for instance, during pregnancy, where women may be at higher risk of developing certain conditions. As a female structural and interventional cardiologist, I am attuned to these issues when treating patients. I am also in a position to raise awareness among my colleagues and the community about the importance of taking these differences into account.

*What brought you to Charlottesville?*

The UVA Advanced Cardiac Valve Center is one of a few places in the U.S. that offers a full range of transcatheter and minimally invasive procedures for cardiac valve disease of the aortic, mitral, tricuspid, and pulmonary valves. Additionally, as one of the leading programs in the country, we are fortunate to be involved with a large number of clinical trials utilizing novel transcatheter devices. These clinical trials can offer therapeutic options for patients who otherwise might not have any options.

One of the most important reasons that I think our Advanced Cardiac Valve Center is unique at UVA is that we are a truly multidisciplinary and collaborative team comprised of cardiologists, cardiac surgeons, nurse practitioners, nurses, clinical researchers, and coordinators. We all work together as a team to design a comprehensive treatment plan that meets the unique needs of each patient and their families. We don't just treat a medical condition in isolation; we take care of the patient and all of their needs in a comprehensive manner. We also try and streamline the evaluation process because we understand that many of our patients are elderly or traveling from far distances; we want to coordinate everything as best as possible for patients and their families.

## Meet Cardiovascular Medicine's Nishtha Sodhi (continued)

*You recently were appointed the Medical Director of the Advanced Cardiac Valve Center. Could you share program updates and highlights?*

**Program Growth:** The Valve program continues to have dynamic growth and innovation with nearly 50% procedural volume growth. As a result, we have expanded the number of days we are performing valve procedures and now have an established inpatient valve consult service every day of the week with associated Epic orders. This has led to a dramatic growth of referrals both in the inpatient and outpatient setting. The fiscal year 2021 is projected to be our highest volume since the creation of the valve program.

**Program Optimization:** We continue to pioneer and optimize quality initiatives such as our post-procedural PACU pathway to avoid unnecessary ICU admissions. We now are performing a predominant 75% of cases under conscious sedation and not general anesthesia. This initiative has decreased the length of ICU stay, overall hospital length of stay, and has increased patient satisfaction tremendously.

**Program Innovation:** We continue to be at the international forefront of innovation offering unique clinical trials for the tricuspid valve, for heart failure patients, advanced pre-procedural imaging, amongst other niche structural devices and technologies offered at only select institutions worldwide.

UVA was one of nine hospitals worldwide selected to perform live cases for the 2020 Transcatheter Cardiovascular Therapeutics conference. Drs. Scott Lim, Gorav Ailawadi, and I performed live a clinical trial Tendyne transcatheter mitral valve replacement case. Drs. Scott Lim, Mike Hainstock, and I also performed a live transcatheter pulmonic valve replacement case.

We are honored that we are invited to once again perform live cases for this year's Transcatheter Valve Therapeutics conference this month.

**Program Quality:** We recently launched a Valve Program patient satisfaction survey that we are administering to our patients at their 30-day post-procedure visits to capture their experience at UVA and share some of their incredible stories!

*What areas of research are you currently involved in?*

I received a National Heart Lung and Blood Institute (NHLBI) Cardiothoracic Surgical Network (CTSN) Grant to investigate contemporary real-world management of patients with mitral regurgitation. Additionally, I am the PI for our site's Gore Registry looking at the Cardioform septal occluder for recurrent stroke in patients with patent foramen ovals; and am a Sub-Investigator on our 18 and ever-expanding valve and coronary related clinical trials. It's an exciting time to see how transcatheter technologies evolve and change the paradigm and this clinical research is necessary to assess patient outcomes and impact.

*Who is your inspiration?*

My parents; they've taught me the importance of hustle, grit, and seizing opportunities without letting the fear of failure get in the way. They always encourage me to reach for the stars, the sky is the limit!

*What do you enjoy doing outside of work and what is your favorite thing about Charlottesville?*

I run every morning before work, love working out, hiking, painting, dancing, and hanging out with family and friends! I love Charlottesville and this area-- amazing mountains, wineries, and outdoor activities! And of course, the culture at UVA of collaboration and collegiality is exceptionally awesome to be a part of!

## Women in Cardiology

Women in Cardiology is an organization of physicians from the Division of Cardiovascular Medicine (Department of Medicine) and the Division of Cardiovascular Surgery (Department of Surgery) focused on issues and challenges unique to women in cardiovascular-related fields.

**LEARN MORE**

# DIVISION OF CARDIOVASCULAR MEDICINE

## STAFF PROFILE - Hollis Phillips



*Tell us a little bit about yourself.*

I have worked in clinical research for 11 years, starting as a Research Assistant in Neurosurgery (spine surgery) at the University of Pittsburgh and now leading a team of CRCs in Electrophysiology. My husband and I moved to Charlottesville in 2014 to complete his residency in adult psychiatry and fellowship in child and adolescent psychiatry. We have been married for 11 years and have two little girls, ages 5 and 2, and a four-legged “child” named Bella.

*What excites you about your work?*

I am always learning something new! To work “behind the scenes” and be a small part of the advancement of medicine is very rewarding.

*What is your proudest/greatest achievement outside the professional realm?*

My two little girls! I also finished (for the first time) the Charlottesville

10 miler at Foxfield this past March.

*Next life?*

My husband and I would love to travel when our kids are older/grown. Top destinations: Israel, Italy, South Africa, the Western US for some great hiking.

*What are you usually doing on the weekend?*

We love to be outdoors! Running, hiking, and playing.

*How did you meet your partner?*

We met at VCU during our senior year in Animal Physiology. I spotted him in previous classes, but it wasn't until a mutual friend introduced us that we officially met.

*What's the one thing you always have in your fridge?*

Wine!

*Favorite vacation/activity spot?*

It's a tie between Deep Creek Lake, MD, and the Outer Banks, NC.

*Most admired person, and why?*

My best friend, Allison. She is the epitome of strength, kindness, and humility. I love her dearly!

*What is the best advice anyone ever gave you?*

You don't have to do it all and be it all.

*What about you would surprise us?*

I am a huge fan of I Love Lucy and Lucille Ball. I admire the strength and power she had as a woman during the 1950s and beyond.

*What is a talent or skill that you don't have that you wish you did?*

When it comes to making things, I am not at all “crafty”. Etsy for the win!

*Favorite fictional characters?*

Any Peanuts character.

*If you could go back in time, what year would you travel to?*

Probably the 1940s. I love the fashion and music, and I'm a romantic at heart.

*What is the last book you read for pleasure?*

I am starting to read Little Women with my oldest daughter!

*What's the most unusual thing you have ever eaten?*

I really like calamari.

*Do you collect anything?*

I love socks with fun designs!

*What was your first job, how old were you?*

I was a dishwasher at a small tea shop. I was sixteen.



## STAFF PROFILE - Allison Raymond



### *Tell us a little bit about yourself.*

I've been at UVA for six years, two as a nurse in the Coronary Care Unit, and four as a research coordinator for Cardiology. I graduated from UVA's Nursing School and after several years as a CCU nurse in Baltimore, Maryland, came back to the University. I live here in Charlottesville with my husband and our dog.

### *Why Healthcare?*

I'd always been drawn to healthcare and science, and after graduating nursing school and working as an inpatient cardiology nurse, I had the opportunity to obtain my MPH in Epidemiology. I continued working as an ICU nurse until an opportunity in clinical research came up and it seemed like a great way to mesh my clinical skills and knowledge with public health.

### *What brought you to Charlottesville?*

After working in Baltimore for four years, my husband got into the PhD program at UVA. Having attended UVA as an undergrad, I was excited to come back to the area!

*What excites you about your work?* The best part of clinical research is getting to know your patients over the long term and seeing the benefits that intervention can have on their lives and diseases. It's fulfilling when you see something you've worked on in trials become the standard treatment.

### *Next life?*

I'd love to be a park ranger or work for the National Park Service. I've done a fair share of traveling to national parks both in the US and abroad and want to share my love of nature with others!

### *What are you usually doing on the weekend?*

Typically, you can find us hiking, and then enjoying the afternoon at a local brewery or winery.

### *How did you meet your partner?*

We met on a river-tubing trip in Blacksburg, Virginia.

### *What's the one thing you always have in your fridge?*

Avocados; there is nothing they aren't good for!

### *Favorite vacation/activity spot?*

One of my favorite vacations was our trip to Tanzania in 2019. We hiked Mt. Kilimanjaro, which was one of the best experiences I've ever had; sleeping under the stars and above the clouds. We also did a safari and spent time in Zanzibar. The food and culture were fantastic, and the people so friendly!

### *What is the best advice anyone ever gave you?*

Do what makes you happy.

### *What is a talent or skill that you don't have that you wish you did?*

I wish that I was bilingual and could speak fluent Spanish. Especially in the past year, I've realized how useful it would be!

### *Favorite fictional characters?*

I'm a huge fan of The Office so I'd have to say Michael Scott and Dwight Schrute (and the entire office).

### *What is the last book you read for pleasure?*

Behold the Dreamers – Imbolo Mbue

### *What was your first job, how old were you?*

When I was 14, I worked at a car wash owned by my great uncle. I worked there for two summers in high school drying cars and cleaning car interiors.



## STAFF PROFILE - Katy Krahn



*Tell us a little bit about yourself.*

I've been at UVA on and off for 32 years, starting as an undergraduate student in Arts and Sciences. Since then, I've lived in six states and two countries and have come back to UVA again and again, always connected in some way to the field of biomedical research.

*Why Research?*

I love puzzles, and I'm always coming up with my silly hypotheses to explain things that seem to have a pattern.

*What brought you to Charlottesville?*

I started as a UVA undergrad because in-state it was the "bargain" among top-ranked schools.

*What excites you about your work?* I appreciate working with people who are motivated by the pursuit of honest science, not profit.

*What is your proudest/greatest achievement outside the professional realm?*

Rarely a day goes by that I don't find a 4-leaf clover. For my mom's birthday this month, I found her a 5-leaf one.

*Next life?*

Get my PhD in Europe, where even cell-biology grad students stop work by 5pm and graduate by age 24.

*What are you usually doing on the weekend?*

Finding places to sneak my dog off-leash.

*How did you meet your partner?*

At a UVA frat party!!

*What's the one thing you always have in your fridge?*

Cream: Milk, cheese, butter, yogurt, sour cream, cottage cheese, ice cream, ghee, tzatziki, crème fraiche, kefir, whipped cream, and heavy cream! (Helpful Hint: all of the above taste better if you stir in a little heavy cream.)

*Favorite vacation/activity spot?*

Blue ridge

*Most admired person, and why?*

Husband: I was first attracted to him because of his music, art, style, and humor, but now admire his work for social justice.

*What is the best advice anyone ever gave you?*

Deep dog bites always need antibiotics.

*What about you would surprise us?*

I can read Dutch

*What is a talent or skill that you don't have that you wish you did?*

Sit-ups.

*Favorite fictional characters?*

Beatrix Potter animals.

*If you could go back in time, what year would you travel to?*

1976 – I was so happy to be alive, I vowed to live to see the tricentennial.

*What is the last book you read for pleasure?*

The Amazing Adventures of Kavalier and Clay.

*What's the most unusual thing you have ever eaten?*

I tried to swallow a NG Tube for a research study (failed).

*Do you collect anything?*

Found earrings (my ears aren't even pierced!)

*What was your first job, how old were you?*

Sixteen; as a Volunteer Museum Staff at Maymont Nature Center.



# DIVISION OF CARDIOVASCULAR MEDICINE

## FELLOW PROFILE - Paras Patel



*Tell us a little bit about yourself.*

I have been at UVA for five years. I grew up in Charleston, SC, and went to Clemson University for undergrad and then MUSC for medical school. My wife and I are HUGE Clemson fans. We have two dogs, Ramos and Hopkins. My wife and I recently welcomed our daughter, Asha, who is the highlight of our lives. I am currently training in the cardiology fellowship program and plan to sub-specialize in EP after fellowship.

*What brought you to Charlottesville?*

I initially came to Charlottesville for IM residency. I had spent most of my life in South Carolina and wanted to venture out a little and move “north.” My wife and I loved our first three years here, so we decided to stay another three as I train to be a cardiologist.

*What excites you about your work?*

I like that in cardiology, we have the opportunity for preventative medicine. Still, when necessary, we perform procedures, read imaging studies, and even assist with advanced support devices and heart transplantation. It is incredible to see how much has changed over the past 20 years in terms of medical therapy and procedural interventions. I have grown to appreciate the bond that we develop with our patients and have the opportunity to assist in their care over their lives.

*Next life?*

Professional soccer player with the opportunity to play in the World Cup.

*What are you usually doing on the weekend?*

I love to hike with our dogs, bike, play soccer, visit wineries and breweries (now with our daughter), and golf. I also enjoy a little Call of Duty with the boys.

*How did you meet your partner?*

We met during our freshman year at Clemson University (Go Tigers!). I was in the middle of an intense game of hall soccer in our dorm, and my wife happened to get in my way. I scolded her for obstructing a clear goal-scoring opportunity. We became good friends and started dating our junior year. The rest is history.

*What’s the one thing you always have in your fridge?*

Salsa...lots of salsa.

*Favorite vacation/activity spot?*

I think it would be a tie between Spain and Costa Rica. Spain is such a relaxing place to be with great food, wine, tapas, and sangria. Costa Rica is just so naturally beautiful with so many terrains to explore. I would recommend either location as a vacation if you are looking to relax and have some fun.



*Most admired person, and why?*

My parents. They immigrated to a new country in their early twenties and worked their way up through the ranks to provide a better life for their family. They both worked full time while being present in all aspects of my life. Their love for each other and their children is something I hope to emulate in my life.

*What about you would surprise us?*

I easily get “trapped” into watching reality TV. When my wife is watching the Bachelor, Real Housewives, or some random Bravo show, it only takes a few minutes before I’m all in on the drama.

*What is a talent or skill that you don’t have that you wish you did?*

I wish I could play the guitar or the piano. I find it so impressive when people can hear a song/tune and start playing.

*Favorite fictional characters?*

Probably Cartman and Deadpool. If you know, you know.

*What is the last book you read for pleasure?*

I recently read The Outsider by Stephen King. It is kind of dark but quite entertaining. There is now an HBO show as well, but I haven’t gotten around to that yet. Books are always better anyway.

*What was your first job, how old were you?*

My first job was at Factory Brand Shoes at the Tanger Outlets in Charleston. They have all of the shoes on display, so it was always fun walking around the store making sure all of the boxes were “flush.” Not so fun when you are assigned the baby section...

## FELLOW PROFILE - Mike Zimmerman



### *Tell us a little bit about yourself.*

I'm originally from Lancaster, PA, and I came to Charlottesville with my wife in 2019 for general cardiology fellowship. Prior to fellowship, I lived in New Orleans for 12 years, where I started my first job after college. I stayed there for medical school at LSU and internal medicine residency at Tulane. My wife and I just had our first child, so we are adjusting to being new parents (please excuse the bags under my eyes). We live downtown off West Main Street, and I love being able to walk or bike to work as well as walk down to the mall. After over a year of the pandemic, we are hopeful to get back to exploring everything Charlottesville and the surrounding area have to offer. I am also excited to be in my last year of general cardiology fellowship and hope to train in electrophysiology after graduation.

### *Why Healthcare?*

I graduated college with biomedical and electrical engineering degrees and started my first job at St. Jude Medical, now Abbott, selling pacemakers and defibrillators. I loved the patient care aspect of my job and wanted to have more of an active role and understanding in treating electrical problems of the heart. So, after five years, I decided to go back to medical school to pursue a career in electrophysiology.

### *What brought you to Charlottesville?*

I had visited several times to see friends who live in the area well before interviewing here for fellowship. I was impressed with all the outdoor activities, restaurants, and wineries/breweries Charlottesville offers. These, combined with a well-balanced cardiology program, make it a great place to be for fellowship.

### *What excites you about work?*

Problem-solving, mentoring, interacting, and forming relationships with patients.

### *How did you meet your partner?*

We officially met at a coffee shop in New Orleans my first year of med school; we lived two blocks from each other and had a mutual friend who coordinated us hanging out after we first met. We got married last May at the height of the pandemic with just our dogs as guests.

### *What is your proudest/greatest achievement outside the professional realm?*

Probably have to say my daughter right now; she's pretty perfect. Lennie was born on April 7th.

### *Favorite vacation/activity spot?*

I'd have to say trips back to New Orleans for events like Jazz Fest and Mardi Gras, although we haven't been there since the pandemic started. We miss it a lot and will be glad to get back down soon. I also love family vacations in the Outer Banks and will be going there this summer for Lennie's first trip to the beach.

### *What's the one thing you always have in your fridge?*

Ketchup.

### *What are you usually doing on the weekend?*

In my first year of fellowship, I would have said taking the call and finishing up notes; however, thankfully, now I'm more likely to be getting outside for a bike ride or playing some basketball. If I'm lucky, I'll get to play a round of golf or visit a brewery or vineyard.

### *What about you would surprise us?*

I have a lot of tie-dye t-shirts.

### *What's the most unusual thing you have ever eaten?*

Crickets at the New Orleans Butterfly Garden and Insectarium.

### *Favorite fictional characters?*

Michael Scott, James Bond, Baby Yoda

### *What is a talent or skill that you don't have that you wish you did?*

I wish I could play an instrument, probably the keyboard/piano.

