# NEWS FROM

SEPTEMBER 2021

#### MUVA Health DEPARTMENT OF MEDICINE

#### **MISSION**

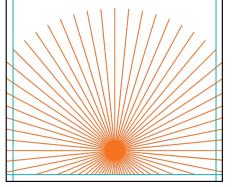
We are dedicated to preventing disease and treating illness, educating and inspiring future leaders in the field of internal medicine, and supporting innovative biomedical research.

#### **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.



**DOM WEBSITE** 

**GRAND ROUNDS** 

HIGHLIGHTED DIVISION • • •

MINDFULLNESS MATTERS • • •

GIVE TO DOM •

### MESSAGE FROM THE CHAIR



Telcome to this month's edition of Medicine Matters. Many of you may not remember the history of the newsletter but this is our 10th anniversary highlighting the wonderful Department community. The original name came from Dr. Bill Petri who won a naming competition. His prize was an iPod mp3 player! Ten years later, the Department has grown by more than 80 faculty, our total patient encounters have nearly doubled and our research and education enterprises have grown and thrived. Most importantly, we have built a community of engaged, supportive, and diverse individuals who work every day to improve the lives of others. Thank you for an amazing ten years of hearing about your accomplishments, learning more about you, sharing your families and pets, and seeing a lot of babies!

This month we highlight the best specialty in all of medicine, nephrology. Of course, I am kidding and completely biased but I do think you will be impressed by the depth and breadth of the activities in the Division and the vibrant staff and faculty that make up a world-class group. Dr. Mark Okusa has led the Division for over a decade and in that time has significantly grown the research and clinical footprint and developed specialty programs that provide differentiating care to patients with all forms of kidney disease. The academic output of the Division in terms of publications is simply amazing and many members of the Division have international reputations as leaders in their field. Just one example is Dr. Rasheed Balogun who leads our apheresis program and is widely considered a world leader in extracorporeal treatments. Please take some time and read about the many accomplishments of your colleagues.

Lastly, please welcome our new Dean, Dr. Melina Kibbe who arrives this month. We are so excited that she will be leading the School of Medicine and those who have met her have all been impressed with her energy, enthusiasm, friendliness, and passion. We are fortunate to have her as our next Dean.

With best wishes,

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



UVAHealth

# **DOM FINANCIAL UPDATE**

# Department of Medicine Summary of Consolidated Financials

FY21 as of July 31, 2021

	Budget	Actual	\$ Variance
	YTD	YTD	YTD
Work RVUs	85,972	85,604	( <mark>368)</mark>
Clinical Receipts (NPSR)	5,617,387	5,697,546	80,159
Total Revenues	22,358,969	22,992,331	633,363
Total Expenditures	17,721,459	18,792,092	(1,070,632)
Net Income	4,637,510	4,200,240	(437,270)

#### **Summary Explanation of Variance:**

For the fiscal year through July 31, 2021 DOM posted a consolidated net gain of \$4.2M and an unfavorable variance to YTD net income budget of \$437K. Clinical revenues underperformed budget by \$952K due to missing Medicial Certer support (MOU).

Personnel and Non-Personnel expenditures outperformed budget driven by unbudgeted charges and invoicing at different intervals than budget. Total revenues include \$4.3M Endowment revenue recorded for August through June.



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





Check Out Mindfulness Matters
A Newsletter from the UVA Mindfulness Center

# **THANK YOU!**

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

# **DOM UPDATES & NOTES**









Christopher Arnold, MD

Eva Otoupalova, MD

#### **Awards and Achievements**

Congratulations to Dr. Stephen Caldwell and the the Coagulation in Liver Disease (CILD) group on the <u>article in EASL</u> on their involvement in the beginnings of EASL's monothematic event, *Bleeding*, *Thrombosis*, and *Vascular Liver Diseases*, which is coming up soon, 7–9 October 2021.

Congratulations to **Dr. Aditya Sharma** in the Division of Cardiovascular Medicine who was named to the *Board of Trustees of the Society for Vascular Medicine*.

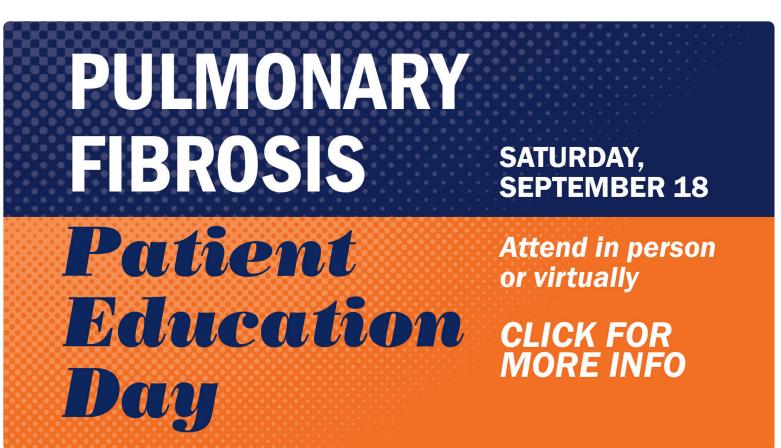
Congratulations to the UVA Division of Cardiovascular Medicine which has been named by the American Heart Association the following:

Gold Plus (Highest Level) Target for Heart Failure – 8th year in a row. Based on achieving high compliance on inpatient care in a number of categories.

Bronze Mission - Lifeline Award for NSTEMI care. Based on achieving high compliance on inpatient care.

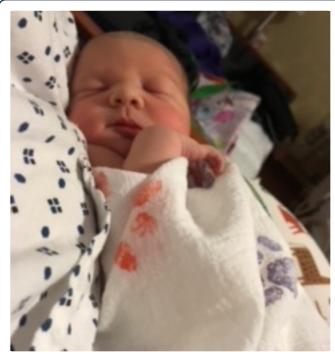
Congratulations to Dr. Chris Arnold who assumed the Directorship of the Infectious Diseases Clinic.

Congratulations to second-year Pulmonary Fellow **Dr. Eva Otoupalova**, selected as a *iThriv iDRIV Scholar*! This year-long program uses education, mentorship, and sponsorship to jump-start the careers of UVA researchers who are nationally under-represented in clinical and translational science.



# **DOM UPDATES & NOTES**

#### **Welcome To The World**



Congratulations to Brittany and Bryce Davis who welcomed baby Wyatt Henry Davis on August 16, 2021.



Congratulations to Ben and Brittani Cahill who welcomed baby John Lawrence Cahill on June 7, 2021.

# FOR UVA COVID-19 COMMUNITY TESTING PROGRAM

# SIGN UP HERE

Strict infection control precautions are followed and PPE is offered to every one according to the risk of exposure per our infection control colleagues.



12 Mental Health and Wellness Resources For You To Know About

#### Message from Mark Okusa, MD, Division Chief of Nephrology



Mark Okusa, MD

Despite the many challenges that we faced in the past year I am proud to say that the division of Nephrology never wavered, and our faculty, fellows, and staff were extraordinary throughout. Our clinicians worked tirelessly in providing excellent patient care. They saw opportunities to vaccinate our vulnerable patient population onsite and cared for them with great success. We collaborated with other institutions around the US on COVID-19 research. The Center for Immunity, Inflammation, and Regenerative Medicine, continued their ongoing research unabated. New Grants were successfully awarded. The indefatigable work of every faculty and staff member allowed the division to thrive and continue to pursue our clinical and academic mission unabated.

#### Clinical:

We expanded our reach into other areas of Virginia, opening a new UVA Nephrology Chronic Kidney Disease clinic in Lynchburg. We added two new physicians as part of our UVA Nephrology Lynchburg practice, Dr. Hanna Zaraket, Assistant Professor of Medicine, and Dr. Waqas Memon, Assistant Professor of Medicine. They will expand our clinical research into the Lynchburg area, and provide their patients with an alternative to current nephrology care.

The transplant program under the leadership of Dr. Alden Doyle is expanding at a rapid pace. In all indicators, it continues to grow in numbers of evaluations, and transplants. Furthermore, graft and patient survival are excellent. We welcomed a new faculty member, Dr. Joe Leeds, Assistant Professor of Medicine to the transplant team, he started on July 1st as well as a transplant fellow Sarah Mouawad, MD.

Our nationally recognized Apheresis Program under the leadership of Rasheed Balogun provides a vital function at UVA. Dr. Balogun is a nationally recognized expert in the field. UVA will host the Therapeutic Apheresis Academy, now in its 13th year, it attracts participants nationwide.

We continue to expand our specialty programs including:

- Glomerulonephritis: Corey Cavanaugh, DO, Assistant Professor is the lead in this area and oversees a glomerulonephritis clinic as well as a combined lupus nephritis clinic with Rheumatology
- Onconephrology: Amanda Renaghan, MD, Assistant Professor is the lead in this area and oversees an Onconephrology clinic which is embedded in Emily Couric Cancer Center
- Point of Care Ultrasound (POCUS): Anubhav Kumar, MD, Assistant Professor in the lead. He is actively training fellows and other trainees in POCUS.

Our clinical program at Augusta Hospital has seen considerable growth and maintains a high quality of care under the leadership of Adam Campbell, MD, Associate Professor and Section Chief at Augusta Hospital. We have moved our dialysis unit from the Augusta Hospital footprint to a new location; a state-of-the-art facility in Waynesboro. Daphne Knicely, Associate Professor, contributes to the clinical care at Augusta Hospital. Before her arrival in December, she was on the faculty at Johns Hopkins University and served as a member of the National Kidney Foundation Medical

Advisory Board serving Maryland and Delaware. She has a special interest in patient-centered nephrology care. In addition, we are pleased that Nina Stewart, RN, MSN, APRN, FNP-C, and Karen Sumner, MSN, RN, AGACNP-BC, joined the team recently to deliver nephrology care.



Karen Sumner, MSN, RN, AGACNP-BC

Karen Sumner is an acute care nurse practitioner at UVA Staunton Dialysis. An Indiana native, she earned her nursing degree from Indiana University Bloomington and spent most of her nursing career working in the cardiac surgery ICU. In 2014 she earned a master's degree from Ball State University as a clinical nurse specialist (CNS) and worked as a CNS for UVA's inpatient acute renal and apheresis unit. She later returned to school at UVA and became a nurse practitioner in UVA's cardiac surgery ICU. She joined the UVA Staunton Dialysis team in June 2021.



Diane Burns, RN, MSN, APRN, FNP-C

Diane Burns holds a master's degree as a family nurse practitioner and practices at the UVA dialysis clinic in Waynesboro and the UVA Nephrology clinic in Fishersville. She earned a nursing degree from Dabney Lancaster Community college. After graduation, she worked in various areas of nursing from medical, dialysis, home care as well as in the field of nephrology working in the UVA Nephrology CKD clinic. In this position, her focus was on education in preventative care. She has a special interest in Nephrology by caring for a family member with a history of kidney disease requiring dialysis. During this time, the experience taught her the importance of being a strong patient advocate and providing patient-centered care. Diane is a native of the Shenandoah Valley, she enjoys traveling, working out, and spending time with her husband, friends, and family.

Value-Based Care. We continue our effort in the delivery of value-based care, in step with the Advancing American Kidney Health (AAKH). With the signing of the Executive Order on July 10, 2019, alternative payment models through the Centers for Medicare and Medicaid Innovation (CMMI) were created, aimed at managing early stages of chronic kidney disease and increasing the number of patients on home dialysis, and those receiving preemptive transplants. Through the leadership of Dr. Brendan Bowman, we applied and received a letter of acceptance from



**Brendan Bowman, MD** 

CMMI into the alternative payment model, Kidney Care First which will be implemented at the beginning of 2022. This is a brilliant opportunity to align incentives with patient care outcomes. We aim to leverage AAKH to drive further integration of advanced CKD and dialysis patient care with transplant preparation and living donation promotion.

**COVID-19.** At the height of the Covid-19 pandemic, **Brendan Bowman**, **MD** worked tirelessly advocating on behalf of our dialysis patients, who are at a higher risk of a serious reaction to the disease. Working with Debbie Cote, Administrator of the UVA Health Dialysis program, and the Virginia Department of Health and the Blue Ridge Health District Bowman and his team vaccinated 85% of UVA Health dialysis patients, a vulnerable patient population, at 12 centers. Plans are underway to provide COVID-19 booster vaccinations in each of the dialysis units.

Fellowship Program. Our fellowship program is under the stewardship of a new Program Director, Tushar Chopra, and Associate Program Director, Dr. Corey Cavanaugh. They will take over the helm from Dr. Kambiz Kalantari who has been the program director since 2012. Dr. Chopra is well-trained for the position as he has

been the associate program director for the past two years.



**Tushar Chopra, MD** 

Tushar Chopra, MD, Associate Professor of Medicine, Nephrology Program Director. Tushar joined as clinical faculty in 2015 after completion of his fellowship training at Vanderbilt University. He is an expert in peritoneal dialysis. He directed a new UVA dialysis unit in 2016 and started the first peritoneal dialysis (PD) program in Staunton, Virginia. However, Tushar is known for his outstanding skills as a dedicated educator. He is the recipient of the highly competitive William and Sandra Bennett Clinical Scholars Program by the American Society of Nephrology (ASN) to develop an innovative tool for "Peritoneal Dialysis curriculum development to improve PD prescription writing amongst nephrology trainees." We are confident that he will take our fellowship program to the next level.

Tushar has implemented a comprehensive educational curriculum with innovative conferences such as combined nephrology-hematology case conference, nephrology-rheumatology case conference, CJASN physiology series, NephMadness national nephrology educational initiative, and Critical Care Nephrology Transatlantic Teach-ins with University of Virginia and Guy's and St Thomas'

in London.

**Anubhav Kumar, MD** 

Anubhav Kumar, MD, Assistant Professor has initiated a training program in Point of Care Ultrasound (POCUS). Point of Care Ultrasonography (POCUS) is the use of diagnostic ultrasound to rapidly assess patients' clinical statuses at the bedside. It is used as an augmentation or adjunct to the traditional physical exam. Anubhav's early experience with POCUS in residency led him to continue utilizing this skill in his nephrology fellowship, culminating in the subsequent completion of an ultrasound fellowship at the University



From left: Anubhav Kumar, MD, Ashwin Swaminathan, Jackson Comer, Kayleigh Moran, Marissa Yee (laying down)

of Pennsylvania. We apply POCUS in multiple ways at UVA Nephrology, utilizing it for intravascular volume assessment, evaluation of dyspnea, and examining vascular access dysfunction. This tool allows us to gain a better understanding of our patients' pathophysiology, which engenders more informative consult recommendations. As we train fellows and faculty via didactic lectures, and hands-on experiences in workshops, and at the bedside, we hope to integrate this important resource into our practice to promote demonstrable improvements in patient outcomes and care. This summer he also provided hands-on experience with POCUS to R25 biomedical engineering students participating in the NIH R25 VA K Tutor program, as well as to high school students.

#### Research

We had another strong extramural research year with an increase in research funding from \$3,766,933 (2015) to \$5,745,338 (2021), about 90% is from NIH. Funding comes from NIH R01, K01, R25, T32, U2C/TL1. We have nationally recognized research programs in acute

kidney injury and CKD progression (Okusa, Lobo, Sharma, Morioka), lupus nephritis (Fu), extracellular vesicles (Erdbruegger), complement (Portilla), efferocytosis/phagocytosis (Arandjelovic and Morioka), purinergic receptors (Linden), and mineral metabolism in dialysis patients and acidemia in patients with CKD (Scialla).

#### Clinical Research

The Nephrology Clinical Research Center (NCRC) has continued to make outstanding progress, supporting research activities for the faculty, trainees, and our patients with kidney diseases. Led by Julia Scialla, Igor Shumilin, Elizabeth Kurland, Tracey Blount, and Binu Sharma the team has assisted the Division with several new studies including Assessment of COVID-19 and vaccine responses within UVA Dialysis, facilitating participation in multisite COVID-19 and other kidney registries, clinical trials of new therapeutics for polycystic kidney disease and devices for home hemodialysis, analyses in national health datasets such as the NHANES and SRTR, among others. We continue to support UVA participation in national consortia such as the TRIDENT Study and OPPUS/PDOPPS.

We have recently won two awards to train the next generation of kidney researchers. 1) Integrated Virginia Research Training Centers in Kidney Urology and Hematology (IGNITE KUH; 1 U2C DK129500). 2) The University Of Virginia

Integrated Virginia Research Training Centers in Kidney, Urology and Hematology - *IGNITE KUH A Pre- and Postdoctoral Training Program* 



Kidney Technology Development Research Education Program (VA K-TUTOR; (1R25DK124918-01)

**IGNITE KUH.** We are excited to share with you that we will be the recipient of a new 5 year NIH training grant: NIH U2C/TL1 titled

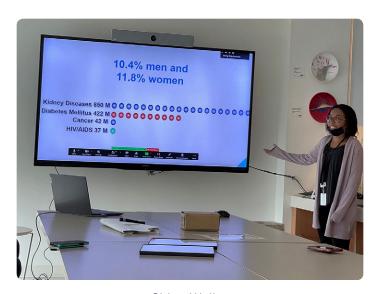
Integrated Virginia Research Training Centers in Kidney Urology and Hematology (IGNITE KUH). This is a state-wide pre-and post-doctoral training grant. IGNITE KUH is based on a collaborative partnership involving three main research training centers in the Commonwealth of Virginia. It is committed to developing future generations of KUH researchers. The three IGNITE KUH institutions are the University of Virginia (UVA), Virginia Commonwealth University (VCU), and Virginia Polytechnic Institute and State University (Va Tech). Integral to IGNITE KUH is our outreach networking program to undergraduate students throughout the Commonwealth to include historically Black Colleges and Universities (Virginia Union, Virginia State U., Hampton University., and Norfolk State U.) and rural universities (UVA-Wise). The program with its 65 mentors provides basic/fundamental training and didactic instruction in multiple disciplines, including molecular, cellular, transgenic technologies, immunology, functional genomics, and novel imaging technologies, with a focus in kidney, urology, and hematology. The patient-oriented clinical research program provides training in clinical investigation, epidemiology, biostatistics, and data sciences.



From left: Mark Okusa, MD, Jackson Comer, Kayleigh Moran, Marissa Yee, Ashwin Swaminathan, Autumn Blackshear, Rahul Sharma, PhD

mentoring him via zoom, it was time for a visit. He is studying electrical and optogenetic vagus stimulation to abate inflammation. He spent long hours in the lab enthusiastically learning, and observing techniques to further his study. In addition, he was able to participate in POCUS.

Chloe Walker joined the research team as part of the SOAR program supported by iTHRIV. She too was a mentee of Dr. Okusa



Chloe Walker

VA K-TUTOR. Is aimed at engaging technically oriented undergraduate students to pursue kidney research. This program consists of a 10-week summer program of clinical immersion and didactics followed by a 6-12 months research program. This summer we hosted our first group of students. Three students from UVA and two from Virginia Tech divided their time between online and in-person classes, basic research, and clinical immersion. They brought a fresh and youthful perspective to every area of nephrology; it was greatly valued by both mentors and mentees. We look forward to their ongoing participation, as they explore their chosen areas of interest. Dr. Rahul Sharma (Co-PI) was instrumental in organizing and overseeing this successful inaugural summer program.

Two more students (high school) joined our ranks this summer. Seventeen-year-old **Dylan Habar** came from Westchester, NY, and spent two weeks in the Okusa Lab, in Pinn Hall. Our division chief, Dr. Mark Okusa has spent the last two years



Dylan Habar



# Follow UVA Nephrology Twitter here.

Congratulations to division faculty and staff members, who received DOM Excellence awards:

Adam Campbell, recipient of the Excellence in Clinical Care Award

Julie Scialla, recipient of the Excellence in Mentorship Award

Corey Cavanaugh, recipient of the Excellence in Teaching Award

Rahul Sharma, recipient of the Excellence in Research Award

Igor Shumlin, recipient of Outstanding Staff Contributor Award

Kambiz Kalantari received the Mulholland Award for Teaching Excellence in Foundation of Medicine, SOM Class of 2022

Congratulations to:

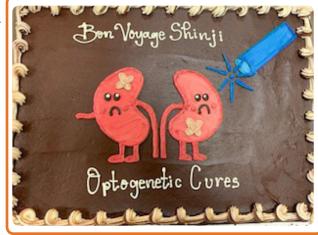
Jeanne Kamal on winning the Young Investigator Award at the American Transplant Congress (ATC) 2021Virtual Connect June 4 – June 9, 2021, for her presentation on "Comparison Of Outcomes Of Hepatitis C Virus (hcv) Nucleic Acid (nat) Positive Donor Between Hcv-naïve and Hcv + Recipients—ADonor Mate Analysis."

Nabin Poudel, PhD, a postdoctoral fellow on winning second place in the basic science competition at the 16th Annual 2021 Mid-Atlantic Nephrology Young Investigator's Forum March 24-25, 2021, New Orleans, LA, for his presentation entitled "Pannexin 1 Channel Regulates Mitochondrial Function and Ferroptosis During Acute Kidney Injury"

At the Carey, Marshall, Thorner DOM Research Day the Shyr Te Ju Immunology Award was presented to Rajkumar

Venkatadri, PhD (best immunology abstract) -Rajkumar Venkatadri, Vikram Sabapathy, Murat Dogan, Saleh Mohammad, Scott Harvey, Fred W. Perrino, and Rahul Sharma. "Targeting interferon stimulatory DNA (ISD) pathways and Bcl6 transcription factor rescues TREX1 D18N animals from autoimmunity"

Shinji Tanaka, MD, PhD received two awards, the Publication, and Poster Presentation Award Tanaka, S., A. Chikara, S.B.G. Abbott, S.Zheng, Y.Yamaoka, J.E. Lipsey, N.I. Skrypnyk, J.Yao, T. Inoue, W.T. Nash, D.S. Stornetta, D.L. Rosin, R.L. Stornetta, P.G. Guyenet, M. D. Okusa. Vagus nerve stimulation activates two distinct neuro-immune circuits converging in the spleen to protect mice from kidney injury. Proc Natl Acad Sci U S A, Mar 23;118(12):e2021758118, 2021. Shinji returned to Japan after spending 5 years at UVA, in the Okusa Lab. To celebrate his new position as an Assistant Professor at the University of Tokyo Hospital, we had the perfect cake.





Kambiz Kalantari, MD

**Dr. Kambiz Kalantari.** It is a bittersweet moment that we announce that Dr. Kambiz Kalantari has accepted a faculty position at the Mayo Clinic, Rochester, MN. He will become a Senior Associate Consultant overseeing inpatient and outpatient clinical and teaching activities. We recruited Kambiz to join UVA as a clinical fellow in 2000, and he has been here for almost 21 years. He has contributed immensely to the institution as one of the premier educators, winning nearly every teaching award possible.

As he leaves UVA, Kambiz is one of the most decorated current educators at the University of Virginia, he will be greatly missed. I am personally sad to see him go, he has been a friend and colleague for so many years. However, I am extremely proud that he will continue his career at the Mayo Clinic as a great ambassador of the UVA Nephrology Division, I wish Kambiz and his family the very best of luck in the future.

We also said goodbye to Negiin Pourafshar who joined Georgetown University School of Medicine. She joined our division in 2017 and had a strong interest in cardiorenal syndrome. She was a welcome addition to our team at Augusta Hospital but often attending on the University consult service. Her teaching was greatly appreciated by the fellows and students.

# **Nephrology Awards, Grants, and Achievements**

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Emaad M. Abdel-Rahman	BIORASI, LLC	Clinical Evaluation of HemoCare Hemodialysis System for Home Nocturnal Hemodialysis.
Emaad M. Abdel-Rahman	Outset Medical, Inc.	Prospective, multi, post-market study of the Tablo Hemodialysis System for the treatment of participants with end-stage renal disease in the home setting.
Uta Erdbrügger	KBP Biosciences	Modulation of ACE2, TMPRSS2, Furin or PNI by Mineralocorticoid receptor antagonists to combat SARS CoV-2.
Sana F. Khan	Reata Pharmaceuticals, Inc.	A Phase 3 Trial of the Efficacy and Safety of Bardoxolone Methyl in Patients with Autosomal Dominant Polycystic Kidney Disease.
Peter, I. Lobo	US NIK Institute of Diabetes & Kidney Diseases	CpG and B cells, pretreated ex-vivo with natural IgM, protect against renal IRI.
Sho Morioka	Yamada Bee Company, Inc.	Establishment of new methods for improving human health using propolis and phagocytosis promotion model.
Sho Morioka	The University of Alabama at Birmingham (Flow- Through Sponsor U.S NIH Institute of Diabetes & Digestive & Kidney Diseases)	Boosting apoptotic cell removal during acute kidney injury.
Sho Morioka	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases	Removal of apoptotic cells during acute kidney injuries.
Mark D. Okusa Rahul Sharma William Guilford	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases	The University of Virginia Kidney Technology Development Research Education Program (VA K-TUTOR)
Mark D. Okusa	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases	Sphingolipids in Acute Kidney Injury and Disease Progression.
Mark D. Okusa	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases	Neuroimmune Regulation of Acute Kidney Injury.
Mark D. Okusa	Janssen Research & Development, LLC	Janssen – Effects of GFRAL Agonism during Ischemia- Reperfusion Injury in Mice.
Mark D. Okusa Michael Brown Didier Portilla	U.S. NIH National Institutes of Health (NIH) U2C/TL1	Integrated Virginia Research Training Centers in KUH (IGNITE KUH).
Mark D. Okusa Julia Scialla (Associate Director) Didier Portilla (Associate Director) R. Ariel Gomez (Associate Director)	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases	MD-INMD Kidney Disease and Inflammation.
Didier Portilla	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases	Role of intracellular complement activation in kidney fibrosis.
Mitchell H. Rosner	Kadmon Corporation, LLC Duke University (Flow-Through Sponsor U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases)	Phase 2 study of effects of KD019 on patients with autosomal dominant polycystic kidney disease.
Julia Scialla	Duke University (Flow-Through Sponsor U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases)	Predictive Analytics in Hemodialysis: Enabling Precision Care for Patient with ESKD.
Julia Scialla	U.S. NIH Diabetes & Digestive & Kidney Diseases	Integrated Mineral Metabolism Treatment Strategies in Patients on Dialysis.
Julia Scialla	University Of Pennsylvania (Flow-Through Sponsor Boehringer Ingelheim International GmbH) – UPenn_Scialla_TRIDENT	Transformative Research in Diabetic Nephropathy (TRIDENT) Clinical Trial.
Rahul Sharma	Slate Bio, Inc	Slate Bio IL233 Variants
Rahul Sharma	Manning Fund for COVID-19 Research Program	Immune and Glycemic Dysregulation from COVID-19 in Diabetes
		Diabetes

### **UVA Nephrology Fellows 2021-2022**



Sudipa Chowdhury, DO

Residency: New York Medical College at St. Michael's Medical Center Medical School: University of New England Fun fact: I met Buzz Aldrin, the second man to walk on the moon, during one of my clinical rotations.



Nam Ha, MD

Residency:York Hospital
Medical School:St. George's University
School of Medicine
Fun facts: I got scuba certified during
medical school, and
during my time living in NYC, on a very
cold and windy winter day, I made the
Starbucks employees bring out the
Frappuccino machine because I like
cold drinks.



Parker Hughes, DO

Residency: Norton Community Hospital Medical School: DeBusk College of Osteopathic Medicine Fun fact: I'm a soccer fanatic. I love my coffee black and my whiskey neat.



Varsha Pothula Venkata, MBBS

Residency:Augusta University, Augusta, Georgia.

Medical School: Guntur medical college, Guntur, India
Fun facts: I love cooking and I'm passionate about it. My watch history in any media platform is full of cooking videos, from home cooks, to professional chefs.

And I'm a trained Indian classical dancer. My school teachers thought I would make a career in the arts and everyone was surprised when I got into medical school.



Maggie Spolnik, MD

Residency and medical school at Indiana University School of Medicine Fun fact: I love hiking/backpacking and my longest hike so far has been 70 mi in Sweden! Only thing that was missing on the hike was my dog Olive who is also an avid hiker.



Transplant Nephrology Fellow Sarah Mouawad, MD

Residency:Hotel Dieu de France Hospital,
Beirut, Lebanon.

Medical School:Saint Joseph University,
Beirut, Lebanon
Fun Facts: I'm a huge Harry Potter fan
and
I have partial heterochromia.

#### **Publications**

Abdel-Rahman EM, Turgut F, Gautam JK, Gautam SC. Determinants of Outcomes of Acute Kidney Injury: Clinical Predictors and Beyond. J ClinMed. 10(6):1175, 2021.

Metzger M, Yoder J, Fitzgibbon K, Blackhall L, Abdel-Rahman EM. Nephrology and Palliative Care Collaboration in the Care of Patients with Advanced Kidney Disease: Results of a Clinician Survey. Kidney Med 2021.

Hassan MO, Owoyemi IM, **Abdel-Rahman EM**, Ma JZ, **Balogun RA**. <u>Association of Race with In-Hospital and Post-Hospitalization</u> <u>Mortality in Patients with AKI</u>. Nephron. 2021 Mar 3:1-11. PMID: 33657572. Online ahead of print.

Metzger M, Abdel-Rahman EM, Boykin H, Song M. A Narrative Review of Management Strategies for Common Symptoms in Advanced CKD. Kidney Int Rep. 2021 Feb 10;6(4):894-904. doi: 10.1016/j.ekir.2021.01.038. eCollection 2021 Apr. PMID: 33912741 Accepted. KI Reports. 2021.

Abdel-Rahman, EM, Metzger M, Blackhall L, Asif M, Mamdouhi P, MacIntyre K, Casimir E, Ma JZ, Balogun RA. Association between Palliative Care Consultation and Advance Palliative Care Rates: A Descriptive Cohort Study in Patients at Various Stages in the Continuum of Chronic Kidney Disease. J Palliat Med. 2021 Apr;24(4):536-544. doi: 10.1089/jpm.2020.0153. Epub 2020 Sep 30. PMID: 32996797 https://doi.org/10.1089/jpm.2020.0153. Online ahead of print.

Lobo B, Abdel-Rahman E, Brown D, Dunn L, Bowman B. <u>A recurrent neural network approach to predicting hemoglobin trajectories</u> in patients with End-Stage Renal Disease. (electronic publication) Artif Intell Med. 2020 Apr; 104:101823. PMID: 32499002

Shankman LS, Fleury ST, Evans WB, Penberthy KK, Arandjelovic S, Blumberg RS, Agaisse H, Ravichandran KS. Efferocytosis by Paneth cells within the intestine. Curr Biol: 31(11):2469-2476, 2021.

Medina, C.B., Mehrotra, P., Arandjelovic, S. et al. Metabolites released from apoptotic cells act as tissue messengers. Nature 580: 130–135 2020.

**Arandjelovic S**, Perry JSA, Zhou M, Ceroi A, Smirnov I, Walk SF, Shankman LS, Cambre I, Onengut-Gumuscu S, Elewaut D, Conrads TP, Ravichandran KS, <u>ELMO1 signaling is a promoter of osteoclast function and bone loss</u>. Nature Communications (2021)12:4974.

Walsh M, Merkel PA, Peh CA, Szpirt WM, Puéchal X, Fujimoto S, Hawley CM, Khalidi N, Floßmann O, Wald R, Girard LP, Levin A, Gregorini G, Harper L, Clark WF, Pagnoux C, Specks U, Smyth L, Tesar V, Ito-Ihara T, de Zoysa JR, Szczeklik W, Flores-Suárez LF, Carette S, Guillevin L, Pusey CD, Casian AL, Brezina B, Mazzetti A, McAlear CA, Broadhurst E, Reidlinger D, Mehta S, Ives N, Jayne DRW; PEXIVAS Investigators. *Plasma Exchange and Glucocorticoids in Severe ANCA-Associated Vasculitis*. [RA Balogun] N Engl J Med. 13;382(7):622-631. 2020.

Arogundade FA, Omotoso BA, Adelakun A, Bamikefa T, Ezeugonwa R, Omosule B, Sanusi AA, **Balogun RA**. Burden of endstage renal disease in sub-Saharan Africa. Clin Nephrol. Supplement-Jan;93(1):3-7, 2020.

Arogundade FA, Omotoso BA, Sanusi AA, **Balogun RA**. Burden and etiopathogenesis of acute kidney injury in the tropics. Clin Nephrol. Supplement-Jan;93(1):8-16. 2020.

Balogun RA, Arogundade FA, Popoola J, Bamgboye EL, Kadiri S. n memoriam: emeritus professor Oladipo Olujimi Akinkugbe, DPhil, FRCP, CON, CFR, FAS (1933-2020). Kidney Int 98(4):800-801, 2020.

Balogun RA, Sanchez AP, Klingel R, Witt V, Aqui N, Meyer E, Padmanabhan A, Pham HP, Schneiderman J, Schwartz J, Wu Y, Zantek ND, Connelly-Smith L, Dunbar NM. J Clin Apher. *Update to the ASFA guidelines on the use of therapeutic apheresis in ANCA-associated vasculitis*. 35(5):493-499, 2020.

Shah A, Jassal V, Bowman BT, <u>Accuracy of Hemodialysis Blood Stream Infection Pathogen Reporting to the National Healthcare Safety Network: Results of an Academic Dialysis Program Audit, Kidney Medicine (2021).</u>

Kumar A, Nishio Lucar A, Rao S, **Doyle A**. Timing of rejection, presence of T cell mediated rejection (TCMR) and change in Donor specific antibodies all play role in graft survival after the treatment of antibody mediated rejection of kidney transplantation. AST Cutting Edge of Transplantation (CEoT). February 25, 2021.

#### **Publications**

Erdbrügger U, Blijdorp CJ, Bijnsdorp IV, Borràs FE, Burger D, Bussolati B, et al. *Urinary extracellular vesicles: A position paper by the Urine Task Force of the International Society for Extracellular Vesicles.* J. Extracell Vesicles. 10(7):e12093, 2021 doi: 10.1002/jev2.12093. Epub 2021 May 21.

La Salvia S, Musante L, Lannigan J, Gigliotti JC, Le TH, Erdbrügger U. T cell-derived extracellular vesicles are elevated in essential HTN. Am J Physiol Renal Physiol. 319 (5):F868-F875, 2020.

La Salvia S, Gunasekaran PM, Byrd JB, Erdbrügger U. Extracellular Vesicles in Essential Hypertension: Hidden Messengers. Curr Hypertens Rep. 22(10):76, 2020.

Musante L, Bontha SV, La Salvia S, Fernandez-Pineros A, Lannigan J, Le TH, Mas V, Erdbrügger U#. Rigorous characterization of urinary extracellular vesicles (uEVs) in the low centrifugation pellet – a neglected source for uEVs. Sci Rep. 2020 Feb 28; 10(1):3701. doi: 10.1038/s41598-020-60619-w.

Khairallah P, Kamal J, Crew RJ, Serban G, Vasilescu ER, Dube GK, Batal I. The Association Between Post-Kidney Transplant De Novo Glomerulonephritis and Alloimmunity. Kidney Int Rep. 6(3):813-816, 2021.

**Leeds J**, Scindia Y, Loi V, Wlazlo E, Ghias E, Cechova S, Portilla D, Ledesma J, Swaminathan S. Protective role of DJ-1 in endotoxin-induced acute kidney injury. Am J Physiol Renal Physiol. 319(4):F654-F663, 2020.

Chen S, Akdemir I, Fan J, Linden J, Zhang B, Cekic C. The Expression of Adenosine A2B Receptor on Antigen-Presenting Cells Suppresses CD8+ T-cell Responses and Promotes Tumor Growth. Cancer Immunol Res. 8(8):1064-1074, 2020.

Lau CL, Beller JP, Boys JA, Zhao Y, Phillips J, Cosner M, Conaway MR, Petroni G, Charles EJ, Mehaffey JH, Mannem HC, Kron IL, Krupnick AS, Linden J. Adenosine A2A receptor agonist (regadenoson) in human lung transplantation. J Heart Lung Transplant. 39(6):563-570, 2020.

Miki H, Pei H, Gracias DT, Linden J, Croft M. Clearance of apoptotic cells by lung alveolar macrophages prevents development of house dust mite-induced asthmatic lung inflammation. J Allergy Clin Immunol. 147(3):1087-1092, 2021.

Wang L, Londono LM, Cowell J, Saatci O, Aras M, Ersan PG, Serra S, Pei H, Clift R, Zhao Q, Phan KHuang L, LaBarre MJ, Li X, Shepard HM, Deaglio S, Linden J, Thanos CD, Sahin O, Cekic C. *Targeting Adenosine with Adenosine Deaminase 2 to Inhibit Growth of Solid Tumors*. Cancer Res.;81(12):3319-3332, 2021.

Arai Y, Yamaoka Y, Morioka S. Sweeping Up Dying Cells during Tissue Injury. Nephron. Jul 20:1-4, 2021.

Liu, K., S.L. Goldstein, A. Vijayan, C.R. Parikh, K. Kashani, M.D. Okusa, A. Agarwal. and J. Cerda, on behalf of the AKI! Now Initiative of the American Society of Nephrology: Recommendations for Awareness, Recognition and Management of AKI. C J Am Soc Nephrol 15: 1838-1847, 2020.

Cavanaugh, C. and M.D. Okusa An update on the clinical use of select glomerular biomarkers: A Narrative Review. Am J Kidney Dis 77:122-131, 2021.

Poudel, N., S. Zheng, C. M. Schinderle, N. Sun, S. Hu, and M.D. Okusa. Pertibular Capillary Oxygen Consumption: Photoacoustic Microscopy. Nephron 144(12):621-625, 2020.

Watanabe, H., R.L. Paxton, M.R. Tolerico, V.K. Nagalakshmi, S. Tanaka, M.D. Okusa, S. Goto, I. Narita, S. Watanabe, M.L.S. Sequeira-Lopez, R. A. Gomez, Am J *Physiol Renal Physiol*. 319(4):F603-F611, 2020.

Vijayan A, E. Abdel-Rahman, K.D. Liu, S. Goldstein, A. Agarwal, M.D. Okusa, J. Cerda for the AKI!NOW Steering Committee. Recovery after Critical Illness and Acute Kidney injury. C J Am Soc Nephrol 2021, In Press.

Tanaka, S., A. Chikara, S.B.G. Abbott, S.Zheng, Y.Yamaoka, J.E. Lipsey, N.I. Skrypnyk, J.Yao, T. Inoue, W.T. Nash, D.S. Stornetta, D.L. Rosin, R.L. Stornetta, P.G. Guyenet, M.D. Okusa. Vagus nerve stimulation activates two distinct neuro-immune circuits converging in the spleen to protect mice from kidney injury. Proc Natl Acad Sci U S A, Mar 23;118(12):e2021758118, 2021.

#### **Publications**

Tanaka, S. and M.D. Okusa. Crosstalk between the nervous system and the kidney. Kidney Int. 97: 466-476, 2020. PMCID: PMC7039752.

Cai, J., W.T. Nash, and M.D. Okusa. Pulsed Ultrasound Therapy in Systemic Inflammatory Diseases. Invited Review, In press Am J Physiol Renal Physiol. 319:F125-F13, 2020. PMCID: PMC7468827.

Braden, G.L., A. Chapman, D.H. Ellison, C. A. Gadegbeku, S. B. Gurley, P. I. Igarashi, E. Kelepouris, M. M.Moxey-Mims, M.D. Okusa, T. J. Plumb, S. E. Quaggin, David J.S Salant, M. S. Segal, S. J. Shankland and S. Somlo. *Advancing Nephrology: Division Leaders Advise ASN*. Clin J Am Soc Nephrol 16(2):319-327, 2021.

Yan B, Freiwald T, Chauss D, Wang L, West E, Mirabelli C, Zhang CJ, Nichols EM, Malik N, Gregory R, Bantscheff M, Ghidelli-Disse S, Kolev M, Frum T, Spence JR, Sexton JZ, Alysandratos KD, Kotton DN, Pittaluga S, Bibby J, Niyonzima N, Olson MR, Kordasti S, **Portilla D**, Wobus CE, Laurence A, Lionakis MS, Kemper C, Afzali B, Kazemian M. SARS-CoV-2 drives JAK1/2-dependent local complement hyperactivation. Sci Immunol. 2021 Apr 7;6(58):eabg0833. doi: 10.1126/sciimmunol.abg0833.

Portilla D, Xavier S. Role of intracellular complement activation in kidney fibrosis. Br J Pharmacol. 178(14):2880-2891, 2021.

McGregor R, Chauss D, Freiwald T, Yan B, Wang L, Nova-Lamperti E, Zhang Z, Teague H, West EE, Bibby J, Kelly A, Malik A, Freeman AF, Schwartz D, Portilla D, John S, Lavender P, Lionakis MS, Mehta NN, Kemper C, Cooper N, Lombardi G, Laurence A, Kazemian M, Afzali B. An autocrine *Vitamin D-driven Th1 shutdown program can be exploited for COVID-19*. bioRxiv [Preprint]. 2020 Jul 19:2020.07.18.210161. doi: 10.1101/2020.07.18.210161.

Yan B, Freiwald T, Chauss D, Wang L, West E, Bibby J, Olson M, Kordasti S, **Portilla D**, Laurence A, Lionakis MS, Kemper C, Afzali B, Kazemian M. SARS-CoV2 drives JAK1/2-dependent local and systemic complement hyper-activation. Res Sq [Preprint]. 2020 Jun 9:rs.3.rs-33390. doi: 10.21203/rs.3.rs-33390/v1. Update in: Sci Immunol. 2021 Apr 7;6(58): PMID: 32702726; PMCID: PMC7336704.

Punnoose LR, Rao S, Ghanta MM, Karhadkar SS, Alvarez R. Outcomes of Older Patients in the Recent Era of Heart Kidney Transplantation. Transplant Proc. 53(1):341-347, 2021.

Vasquez CR, Gupta S, Miano TA, Roche M, Hsu J, Yang W, Holena DN, Reilly JP, Schrauben SJ, Leaf DE, Shashaty MGS; [A Renaghan] STOP-COVID Investigators. *Identification of Distinct Clinical Subphenotypes in Critically Ill Patients With COVID-19*. Chest. S0012-3692(21)00874-6, 2021.

Mathews KS, Soh H, Shaefi S, Wang W, Bose S, Coca S, Gupta S, Hayek SS, Srivastava A, Brenner SK, Radbel J, Green A, Sutherland A, Leonberg-Yoo A, Shehata A, Schenck EJ, Short SAP, Hernán MA, Chan L, Leaf DE; [A Renaghan] STOP-COVID Investigators. Prone Positioning and Survival in Mechanically Ventilated Patients With Coronavirus Disease 2019-Related Respiratory Failure. Crit Care Med. 49(7):1026-1037, 2021.

Short SAP, Gupta S, Brenner SK, Hayek SS, Srivastava A, Shaefi S, Singh H, Wu B, Bagchi A, Al-Samkari H, Dy R, Wilkinson K, Zakai NA, Leaf DE; [A Renaghan] STOP-COVID Investigators. d-dimer and Death in Critically Ill Patients With Coronavirus Disease 2019. Crit Care Med. 49(5):e500-e511, 2021.

Shaefi S, Brenner SK, Gupta S, O'Gara BP, Krajewski ML, Charytan DM, Chaudhry S, Mirza SH, Peev V, Anderson M, Bansal A, Hayek SS, Srivastava A, Mathews KS, Johns TS, Leonberg-Yoo A, Green A, Arunthamakun J, Wille KM, Shaukat T, Singh H, Admon AJ, Semler MW, Hernán MA, Mueller AL, Wang W, Leaf DE; [A Renaghan] STOP-COVID Investigators. Extracorporeal membrane oxygenation in patients with severe respiratory failure from COVID-19. Intensive Care Med. 47(2):208-221, 2021.

Al-Samkari H, Gupta S, Leaf RK, Wang W, Rosovsky RP, Brenner SK, Hayek SS, Berlin H, Kapoor R, Shaefi S, Melamed ML, Sutherland A, Radbel J, Green A, Garibaldi BT, Srivastava A, Leonberg-Yoo A, Shehata AM, Flythe JE, Rashidi A, Goyal N, Chan L, Mathews KS, Hedayati SS, Dy R, Toth-Manikowski SM, Zhang J, Mallappallil M, Redfern RE, Bansal AD, Short SAP, Vangel MG, Admon AJ, Semler MW, Bauer KA, Hernán MA, Leaf DE; [A Renaghan] STOP-COVID Investigators. Thrombosis, Bleeding, and the Observational Effect of Early Therapeutic Anticoagulation on Survival in Critically Ill Patients With COVID-19. Ann Intern Med. 174(5):622-632, 2021.

Gupta S, Wang W, Hayek SS, Chan L, Mathews KS, Melamed ML, Brenner SK, Leonberg-Yoo A, Schenck EJ, Radbel J, Reiser J, Bansal A, Srivastava A, Zhou Y, Finkel D, Green A, Mallappallil M, Faugno AJ, Zhang J, Velez JCQ, Shaefi S, Parikh CR, Charytan DM, Athavale AM, Friedman AN, Redfern RE, Short SAP, Correa S, Pokharel KK, Admon AJ, Donnelly JP, Gershengorn HB, Douin DJ, Semler MW, Hernán MA, Leaf DE; [A Renaghan] STOP-COVID Investigators. Association Between Early Treatment With Tocilizumab and Mortality Among Critically Ill Patients With COVID-19. JAMA Intern Med. 181(1):41-51, 2021.

#### **Publications**

Gupta S, Coca SG, Chan L, Melamed ML, Brenner SK, Hayek SS, Sutherland A, Puri S, Srivastava A, Leonberg-Yoo A, Shehata AM, Flythe JE, Rashidi A, Schenck EJ, Goyal N, Hedayati SS, Dy R, Bansal A, Athavale A, Nguyen HB, Vijayan A, Charytan DM, Schulze CE, Joo MJ, Friedman AN, Zhang J, Sosa MA, Judd E, Velez JCQ, Mallappallil M, Redfern RE, Bansal AD, Neyra JA, Liu KD, Renaghan AD, Christov M, Molnar MZ, Sharma S, Kamal O, Boateng JO, Short SAP, Admon AJ, Sise ME, Wang W, Parikh CR, Leaf DE; STOP-COVID Investigators. *AKI Treated with Renal Replacement Therapy in Critically Ill Patients with COVID-19*. J Am Soc Nephrol. 32(1):161-176, 2021.

Hayek SS, Brenner SK, Azam TU, Shadid HR, Anderson E, Berlin H, Pan M, Meloche C, Feroz R, O'Hayer P, Kaakati R, Bitar A, Padalia K, Perry D, Blakely P, Gupta S, Shaefi S, Srivastava A, Charytan DM, Bansal A, Mallappallil M, Melamed ML, Shehata AM, Sunderram J, Mathews KS, Sutherland AK, Nallamothu BK, Leaf DE; [A Renaghan] STOP-COVID Investigators. In-hospital cardiac arrest in critically ill patients with covid-19: multicenter cohort study. BMJ. 371:m3513, 2020.

Flythe JE, Assimon MM, Tugman MJ, Chang EH, Gupta S, Shah J, Sosa MA, Renaghan AD, Melamed ML, Wilson FP, Neyra JA, Rashidi A, Boyle SM, Anand S, Christov M, Thomas LF, Edmonston D, Leaf DE; STOP-COVID Investigators. Characteristics and Outcomes of Individuals With Pre-existing Kidney Disease and COVID-19 Admitted to Intensive Care Units in the United States. Am J Kidney Dis. 77(2):190-203.e1, 2021.

Molnar MZ, Bhalla A, Azhar A, Tsujita M, Talwar M, Balaraman V, Sodhi A, Kadaria D, Eason JD, Hayek SS, Coca SG, Shaefi S, Neyra JA, Gupta S, Leaf DE, Kovesdy CP; [A Renaghan] STOP-COVID Investigators. *Outcomes of critically ill solid organ transplant patients with COVID-19 in the United States*. Am J Transplant. 20(11):3061-3071, 2020.

Gupta S, Hayek SS, Wang W, Chan L, Mathews KS, Melamed ML, Brenner SK, Leonberg-Yoo A, Schenck EJ, Radbel J, Reiser J, Bansal A, Srivastava A, Zhou Y, Sutherland A, Green A, Shehata AM, Goyal N, Vijayan A, Velez JCQ, Shaefi S, Parikh CR, Arunthamakun J, Athavale AM, Friedman AN, Short SAP, Kibbelaar ZA, Abu Omar S, Admon AJ, Donnelly JP, Gershengorn HB, Hernán MA, Semler MW, Leaf DE; [A Renaghan] STOP-COVID Investigators. Factors Associated With Death in Critically Ill Patients With Coronavirus Disease 2019 in the US. JAMA Internal Med. 180(11):1-12, 2020.

Gupta S, Wang W, Hayek SS, Chan L, Mathews KS, Melamed ML, Brenner SK, Leonberg-Yoo A, Schenck EJ, Radbel J, Reiser J, Bansal A, Srivastava A, Zhou Y, Finkel D, Green A, Mallappallil M, Faugno AJ, Zhang J, Velez JCQ, Shaefi S, Parikh CR, Charytan DM, Athavale AM, Friedman AN, Redfern RE, Short SAP, Correa S, Pokharel KK, Admon AJ, Donnelly JP, Gershengorn HB, Douin DJ, Semler MW, Hernán MA, Leaf DE; [A Renaghan] STOP-COVID Investigators. Association Between Early Treatment With Tocilizumab and Mortality Among Critically Ill Patients With COVID-19. JAMA Intern Med. e206252, 2020.

Rosner MH, Jhaveri KD, McMahon BA, Perazella MA. Onconephrology: The intersections between the kidney and cancer. CA Cancer J Clin. 71(1):47-77, 2021.

Côté JM, Murray PT, Rosner MH. New drugs for acute kidney injury. Curr Opin Crit Care. 26(6):525-535, 2020.

Husain-Syed F, Rosner MH, Ronco C. Distant organ dysfunction in acute kidney injury. Acta Physiol (Oxf). 2020 Feb;228(2):e13357. doi: 10.1111/apha.13357. Epub 2019 Sep 3. PMID: 31379123.

Rosner MH, Falk RJ. Understanding Work: Moving beyond the RVU. Clin J Am Soc Nephrol. 15(7):1053-1055, 2020

Kramer H, Joseph J, Rosner MH, Perazella MA. In Case of a Pandemic, Pivot: Moving the National Kidney Foundation Spring Clinical Meeting Online. Am J Kidney Dis. 2021 Jan;77(1):1-3, 2021.

Sprangers B, Sandhu G, Rosner MH, Tesarova P, Stadler WM, Malyszko J. Drug dosing in cancer patients with decreased kidney function: A practical approach. Cancer Treat Rev. 2021 Feb;93:102139. doi: 10.1016/j.ctrv.2020.102139. Epub 2020 Dec 16. PMID: 33370636.

Liu KD, Forni LG, Heung M, Wu VC, Kellum JA, Mehta RL, Ronco C, Kashani K, Rosner MH, Haase M, Koyner JL; Acute Disease Quality Initiative Investigators. Quality of Care for Acute Kidney Disease: Current Knowledge Gaps and Future Directions. Kidney Int Rep. 5(10):1634-1642, 2020.

Da Luz LG, Ankawi G, Digvijay K, Rosner MH, Ronco C. Technique Failure in Peritoneal Dialysis: Etiologies and Risk Assessment. Blood Purif. 50(1):42-49, 2021.

Silver SA, Nadim MK, O'Donoghue DJ, Wilson FP, Kellum JA, Mehta RL, Ronco C, Kashani K, Rosner MH, Haase M, Lewington AJP. Community Health Care Quality Standards to Prevent Acute Kidney Injury and Its Consequences. Am J Med. 133(5):552-560, 2020.

 $(\overline{15})$ 

#### **Publications**

**Rosner MH**. Cancer Screening in Patients Undergoing Maintenance Dialysis: Who, What, and When. Am J Kidney Dis. 76(4):558-566, 2020.

Bennett BL, Hew-Butler T, Rosner MH, Myers T, Lipman GS. Wilderness Medical Society Clinical Practice Guidelines for the Management of Exercise-Associated Hyponatremia: 2019 Update. Wilderness Environ Med. 31(1):50-62, 2020.

Macedo E, Bihorac A, Siew ED, Palevsky PM, Kellum JA, Ronco C, Mehta RL, Rosner MH, Haase M, Kashani KB, Barreto EF. Quality of care after AKI development in the hospital: Consensus from the 22nd Acute Disease Quality Initiative (ADQI) conference. Eur J Intern Med. 2020 Oct;80:45-53. doi: 10.1016/j.ejim.2020.04.056. Epub 2020 Jun 30. PMID: 32616340; PMCID: PMC7553709.

Floris M, Lepori N, Angioi A, Cabiddu G, Piras D, Loi V, Swaminathan S, Rosner MH, Pani A. Chronic Kidney Disease of Undetermined Etiology around the World. Kidney Blood Press Res. 46(2):142-151, 2021.

Malik J, Valerianova A, Tuka V, Trachta P, Bednarova V, Hruskova Z, Slavikova M, Rosner MH, Tesar V. The effect of high-flow arteriovenous fistulas on systemic haemodynamics and brain oxygenation. ESC Heart Fail. 8(3):2165-2171, 2021.

Yessayan LT, Szamosfalvi B, Rosner MH. Management of dysnatremias with continuous renal replacement therapy. Semin Dial. 2021 Jul 3. doi: 10.1111/sdi.12983. Epub ahead of print. PMID: 34218456.

Caprara C, Corradi V, Scalzotto E, Frigo AC, Proglio M, Sharma R\*, Ronco C. Differential effects of peritoneal and hemodialysis on circulating regulatory T cells one month post initiation of renal replacement therapy. Clinical Nephrology 95(1):37-44, 2021.

Venkatadri R, Sabapathy V, Dogan M, Sharma R, Mohammad S, Via CS, **Sharma R**. *Hybrid cytokine IL233 renders protection in murine acute graft vs host disease (aGVHD)*. Cellular Immunology, 2021, June; 364:104345 doi: 10.1016/j.cellimm.2021.104345. Epub 2021 Mar 23.

Vikram Sabapathy, Gabrielle Costlow, Rajkumar Venkatadri, Murat Dogan, Sanjay Kumar, and **Rahul Sharma**. Advances and Challenges in Kidney Organoids. Current Stem Cell Research and Therapy. In review at Current Stem Cell Research and Therapy. In press 2021.

Hall RK, Morton S, Wilson J, Ephraim P, Boulware LE, St. Peter W, Colón-Emeric C, Pendergast J, Scialla J. Risks Associated with Continuation of Potentially Inappropriate Antihypertensive Medications in Older Adults Receiving Hemodialysis. BMC Nephrology 2021, 22(1):232.

Pourafshar S, Nicchitta M, Tyson CT, Svetkey LP, Corcoran D, Bain J, Muehlbauer MJ, Ilkayeva O, O'Connell TM, Lin P-H, Scialla JJ. Urine and Plasma Metabolome of Healthy Adults Consuming The Dietary Approaches To Stop Hypertension Diet: A Randomized Pilot Feeding Study. Nutrients 2021, 13(6):1768.

Hein AM, Scialla JJ, Sun J-L, Greene SJ, Shaw LK, Chiswell K, Pun PH, and Mentz, RJ. The Association of eGFR Variability in Patients with Heart Failure and Chronic Kidney Disease. Journal of Cardiac Failure 2021, S1071-9164(21)00159-7.

Schrauben SJ, Chen S, Lin E, Jepson C, Yang W, Scialla JJ, Fischer M, Lash JP, Fink JC, Hamm LL, Kanthety R, Rahman M, Feldman HI, Anderson AH. Hospitalization Experience of Adults with Chronic Kidney Disease: Findings from the Chronic Renal Insufficiency Cohort (CRIC) Study. PLOS Medicine 2020; 17(12):e1003470. doi: 10.1371/journal.pmed.1003470.

Lunyera J, Clare R, Chiswell K, Scialla J, Pun P, Thomas K, Starks M, Diamantidis CJ. Racial differences in AKI incidence following percutaneous coronary intervention. J Am Soc Nephrol 2021, 32(3):654-662.

Grams ME, Surapaneni A, Appel LJ, Lash JP, Hsu J, Diamantidis CJ, Rosas SE, Fink JC, Scialla JJ, Sondheimer J, Hsu C-Y, Cheung AK, Jaar BG, Navaneethan S, Cohen DL, Schrauben S, Xie D, Rao P, Feldman HI. Clinical events and patient-reported outcome measures during CKD progression: Findings from the CRIC Study. Nephrol Dial Transplant 2020. Epub ahead of print.

Tyson CC, Luciano A, Modliszewski JL, Corcoran DL, Bain JR, Muehlbauer M, Ilkayeva O, Pourafshar S, Allen J, Bowman C, Gung J, Asplin JR, Pendergast J, Svetkey LP, Lin P-H, Scialla JJ. Effect of bicarbonate on net acid excretion, blood pressure and metabolism in patients with and without CKD: the Acid Base Compensation in CKD Study. Am J Kidney Dis 2020. 78(1):38-47.

Anderson AH, Xie D, Wang X, Baudier RL, Orlandi P, Appel LJ, Dember LM, He J, Kusek JW, Lash JP, Navaneethan SD, Ojo A, Rahman M, Roy J, Scialla JJ, Sondheimer JH, Steigerwalt SP, Wilson FP, Wolf M, Feldman HI. Novel risk factors for progression of diabetic and non-diabetic chronic kidney disease: The CRIC Study. Am J Kidney Dis 2021, 77(1):56-73.e1. doi: 10.1053/j. ajkd.2020.07.011.

#### **Publications**

Hu EA, Coresh J, Anderson CAM, Appel LJ, Grams ME, Crews DC, Mills KT, He J, Scialla J, Rahman M, Navaneethan SD, Lash JP, Ricardo AC, Feldman HI, Weir MR, Shou H, Rebholz CM, on behalf of the CRIC Study Investigators. Adherence to healthy dietary patterns and risk of CKD progression and all-cause mortality: Findings from the CRIC study. Am J Kidney Dis 2021, 77(2):235-244.

Sun-sang J. Sung and Shu Man Fu. <u>Interactions among Glomerulus Infiltrating macrophages and Intrinsic Cells via Cytokines in Chronic Lupus Glomerulonephritis</u>. J. Autoimmunity, 106: 102331, 2020.

Joseph C. Gigliotti, Adrienne Tin, Shirin Pourafshar, Sylvia Cechova, Sun-sang J. Sung, Gabor Bodonyi-Kovacs, Janet Cross, Guang Yang, Nhu Nguyen, Fang Chan, Casey Rebholz, Bing Yu, Megan L. Grove, Dan Arking, Morgan E. Grams, Anna Köttgen, Robert Scharpf, Phillip Ruiz, MD, Eric Boerwinkle, Josef Coresh, and Thu H. Le. <u>GSTM1 deletion exaggerates kidney injury in experimental mouse models yet confers the protective effect of cruciferous vegetables in mice and humans</u>. J. Am. Soc. Nephrol., 31: 102-116, 2020.

Lin, Christine Maylyn, Abdullah Alrbiaan, John Odackal, Zhimin Zhang, Yogesh Scindia, Sun-Sang J. Sung, Marie D. Burdick, Borna Mehrad. <u>Circulating fibrocytes traffic to the lung in murine acute lung injury and predict outcomes in human acute respiratory distress syndrome: A pilot study</u>. Molecular Medicine, 26:52, 2020.

Sung, Sun-sang J. *Coimmunostaining of ICAM-1, ICAM-2, and CD31 in mouse kidney glomeruli*. Bio-protocol 10 (13): e3663, 2020. PMCID: PMC7842284.

#### Sun-sang J. Sung and Shu Man Fu.

Zhenhuan Zhao, Hui Qiao, Y. Ge, C.C. Kannapel, Sun-Sang J. Sung, Felicia Gaskin, Kenneth S.K. Tung, Shu Man Fu. <u>Autoimmune experimental orchitis and chronic glomerulonephritis with end stage renal disease are controlled by Cgnz1 for susceptibility to end organ damage</u>. Clin. Immunol., in the press, 2021.

Parsons AS, Clancy CB, Rencic JJ, Warburton KM. Targeted Strategies to Remediate Diagnostic Reasoning Deficits. Acad Med. 2021 Jul 13. doi: 10.1097/ACM.000000000004244. Epub ahead of print. PMID: 34261865.

Parsons AS, Warburton KM, Martindale J, Rosenberg I. Characterization of clinical skills remediation: A national survey of medical schools. Accepted for publication, Southern Med J 2021.

**Warburton KM**, Shahane A. Mental health conditions among struggling graduate medical learners: Results from a single-center remediation program. J Grad Med Educ 12(6):773-77, 2020.

#### **Book Chapters.**

Arogundade FA....Balogun RA...Bamgboye, EL. Nephrology in Nigeria (Chapter 5) of Nephrology Worldwide. Editors: Moura-Neto, José A., Divino-Filho, José Carolino, Ronco, Claudio (Eds.) Springer 2021.

Sanchez A and Balogun RA, Therapeutic Apheresis in Renal, Rheumatologic and Endocrine Disorders. In Dunbar NM, ed. Apheresis: Principles and Practice, 4th Ed, Volume 1: Therapeutic Apheresis. Bethesda, MD: AABB Press, 2020.

Balogun RA, Sumner K, Harris R, and Sanchez AP. Chapters 52-55. In Wu Y, Snr Ed. Apheresis Standard Operating Procedures Manual – 1st Edition. American Society for Apheresis. Vancouver, BC Canada 2019.

- Connecting Therapeutic Plasma Exchange (TPE) Circuit to an Extracorporeal Membrane Oxygenation (ECMO) Circuit
- Combined Continuous Renal Replacement (CRRT) and Therapeutic Plasma Exchange (TPE) in Parallel
- Combined Continuous Renal Replacement (CRRT) and Therapeutic Plasma Exchange (TPE) in Series.
- Simultaneous Plasma Exchange and Hemodialysisz

Bali A, Erdbrugger U and Carey R: Lerma, Hypertension Secrets, 9780323758529, 2e.

Portilla, D. and M.D. Okusa. Pathophysiology of Acute Kidney Injury. In: Editors, A.S.L. Yu, G. M. Chertow, V. A. Luyckx, P. A. Marsden, K. Skorecki, M. W. Taal. Brenner & Rector's The Kidney. 11th edition. Elsevier Saunders. 2020.

Li L., D. Haber and M.D. Okusa. T Cells in Kidney Injury and Regeneration. In: Editor: Michael S. Goligorsky, Regenerative Nephrology. Academic Press, London, UK. 2022.

Scialla J. "Vitamin D in Kidney Disease." In Nutritional Management of Kidney Disease, 4th Edition. Edited by Kopple J, Massry SG, Kalantar-Zadeh K, and Fouque D. Elsevier, San Diego, CA. [In Press]

#### **FACULTY PROFILE - Tushar Chopra**



🔉 Tell us a little bit about yourself.

I joined UVA after completing my nephrology fellowship at Vanderbilt University. After six years of clinical service, I am excited to assume the role of Program Director for the Nephrology fellowship training program. I live just outside of town in a cabin home surrounded by walking trails and lush green trees.

#### Why Charlottesville?

Charlottesville is a beautiful quaint town with good schools and colleges. What I love most about the place is that Charlottesville reminds me of New Zealand without the sheep! My love for nature and the academic village of Mr. Thomas Jefferson, UVA, attracted me here.

#### Why education?

My mom has been a high school teacher for thirty years and has been my inspiration as a clinician-educator. The most rewarding thing as an educator is seeing the growth of the learner. It's a privilege to have this opportunity to shape someone's life.

What excites me about my work?

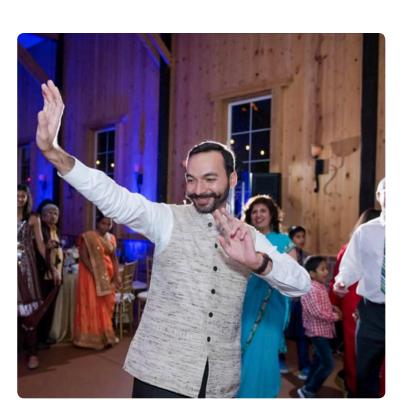
The excellent quality relationships I have with my patients and learners are meaningful for me.

What are you doing on weekends?

You would often find me hiking the beautiful trails of Shenandoah Valley taking scenic photographs, and visiting my friends and family.

What about you would surprise us?

I am a twin. I call myself the unplanned one as one of the twins is always unplanned. We are born on our mothers' birthday.





#### **FACULTY PROFILE - Anita Vincent-Johnson**



Tell us a little bit about yourself.

I grew up as an Army brat and moved multiple times until my family finally settled down in Virginia. I went to undergraduate school at James Madison University, where I majored in physics. I went to medical school at Ross University School of Medicine in Dominica, a small Caribbean island. I completed residency in Internal Medicine at VTC Carilion School of Medicine, and I recently finished my fellowship in nephrology at UVA. I am happy to be staying on as a faculty member, and I am eager to continue teaching students, residents, and fellows. I just got married to my husband Alexander Bond, who is a nurse practitioner student at UVA. We have one cat, but we are hoping to get more pets soon!

#### Why Healthcare?

I grew up with two veterinarians as parents, so I had an interest in clinical assessment and diagnostics at a young age. In high school and undergraduate training, I took several human anatomy and human physiology courses, which I greatly enjoyed. Later in life, I figured out that I wanted to interact more with people and enjoyed teaching people, and that led me to pursue a career in medicine.

#### What brought you to Charlottesville?

I have spent the majority of my life in Virginia, and I was happy when I got into the nephrology fellowship at UVA. Now that I have graduated I am extremely happy to be staying on

as a faculty member at UVA in the Fishersville and Charlottesville area.

I enjoy the small-town feel, and yet there are so many things to do in the area; I'll never get bored.

#### What excites you about your work?

I enjoy getting to teach patients as well as students, residents, and fellows. I enjoy nephrology and I am eager to continue practicing and learning more about all the different aspects of nephrology. I like acid-base and electrolyte disorders.

#### Proudest/greatest achievement outside the professional realm?

I just got married at the beginning of June 2021 to my wonderful husband, who is an NP student at UVA and before that worked as a nurse at UVA. We had a wonderful wedding despite breaking my foot relatively recently while doing a home workout. For our honeymoon, I am proud that we tried so many different bucket list things including hiking and backpacking along the Rocky Mountains and Pikes Peak (a 14,000+ feet summit), canyoning, jet-skiing, standup paddleboarding, and parasailing.

#### Next life?

I'm starting my job at UVA as an assistant professor in nephrology. I hope to do more traveling to the West Coast and outside of the US. We would also like to have kids someday (but not until we've done some traveling on our own).



#### **FACULTY PROFILE - Anita Vincent-Johnson** (continued)

What are you usually doing on the weekend?

In my free time, I enjoy jogging and trail running. We also like to go hiking and camping. Once we have our own house with a yard, my husband and I would like to get 1-2 dogs and start training them in obedience and agility. At some point, we would also like to start a garden and get some more farm animals (including but not limited to goats, chickens, and bees).

How did you meet your partner?

We met when I was in residency at the hospital gym at the end of a night float shift. He invited me to play soccer with him, and I joined his soccer team. After about a year of being friends, we finally started officially dating. Now at the end of the fellowship, we are finally married!

Most admired person, and why?

I admire my mom the most. She is my role model and someone I will always look up to. She is retired from the Army, and despite being a quiet, reserved person, she was a Lieutenant colonel in charge of many soldiers. She was a veterinarian in the Army and took care of the Secret Service and military working dogs. She was even consulted for George Bush's dog when he was in office. Despite being one of the smartest people I know, she is also the most humble and down-to-earth person I know. She knows how to have fun and balance work and life.

The best advice anyone ever gave you?

It will all turn out ok.

What about you would surprise us?

I was born in Montana but only lived there for 9 months before we moved to Germany. Sadly I don't remember too much about Germany, because we moved when I was around 3 years old.

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

I wish I could speak another language.

Favorite fictional characters?

Dr. Doolittle.

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

I would travel back to 2008, so I could go to a Michael Jackson concert when he was still alive.

What is the last book you read for pleasure?

I am currently reading "The Intruder" by Stephen King.

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

Reindeer sausage.

Do you collect anything?

Movie tickets.

What was your first job, how old were you?

A kennel attendant at 19 years old.



#### **FACULTY PROFILE - Jean Zaraket**



Why Healthcare?

Both of my parents are teachers, so I feel that education is very important. I lost a sister at a young age and that is why I have chosen healthcare as a career.

What brought you to Charlottesville?

UVA of course.

What excites you about your work?

Being able to help and make a difference in my patient's lives.

What are you usually doing on the weekend?

Playing Music.

How did you meet your partner?

We met In Fellowship while studying for the boards.



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

Peaches.

Favorite vacation/activity spot?

Boracay Island in the Philippines.

Best advice anyone ever gave you?

Keep your words to a minimum, as I have done throughout these questions.



Most admired person

Abraham Lincoln. He was self-educated and had a motivating personality. He is proof of the French philosopher Jean de la Bruyere's concept, that "Out of diffculties grow miracles"

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

Painting.

What about you would surprise us?

I enjoy biking.

What is the last book you read for pleasure?

"Le petite prince" by Antoine de Saint-Exupéry

#### **FACULTY PROFILE - Joe Leeds**



Tell us a little bit about yourself.

I've been at UVA for five years as a Nephrology Clinical and Research Fellow, and then a Transplant Nephrology Fellow. My wife and I have 2 children, Caiden and Emma, and a dog; Duke.

Why Healthcare?

I always had an interest in Science/Math, and initially went to college to obtain a biomedical engineering degree. But while doing volunteer work at the local university hospital, I began to enjoy working and helping patients.

What brought you to Charlottesville?

My wife's family lives in Charlottesville, and when we came to visit before moving, my wife and I both fell in love with the area and available outdoor activities.

What excites you about your work?
Being able to help and make a difference in my patient's lives.

Proudest/greatest achievement outside the professional realm? High School Division State Basketball Championship- New Jersey.

What are you usually doing on the weekend? Spending time with my wife and kids, listening to music, watching movies.

How did you meet your partner? During my residency in Long Island, NY.

Favorite vacation/activity spot?
My favorite vacation location is currently the Maldives.

The best advice anyone ever gave you?
Quote "Failure is success in progress" - Einstein



What is a talent or skill that you don't have that you wish you did?
To be fluent in a second language.

Favorite fictional characters? Indiana Jones

If you could go back in time, what year would you travel to?
Back to 1998 and get tickets to be able to watch Michael Jordan play in person.

What is the last book you read for pleasure? The Heart's Invisible Furies- John Boyne.

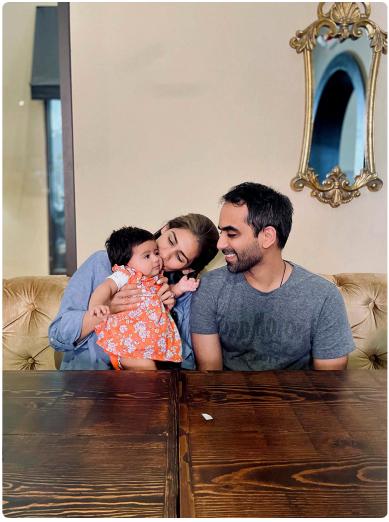
What's the most unusual thing you have ever eaten? Durian

Do you collect anything? I don't collect anything but I do enjoy listening to vinyl records.

What was your first job, how old were you? I did landscaping as a summer job in high school.



#### **FACULTY PROFILE - Waqas Memon**



Tell us a little bit about yourself.

I was born in Pakistan and came to the United States when I was four years old. I was raised in Sterling Virginia where I went to high school. I attended medical school at Liaquat University of Medical and health sciences in Pakistan. Then I completed an internal medicine residency at the University of Illinois- Urbana, Champaign followed by a nephrology fellowship at Virginia Commonwealth University in Richmond, Virginia where I served as the chief fellow. My clinical interest includes critical care nephrology, acid-base, and electrolyte management.

#### Why Healthcare?

At age twelve, my mother told me the story of my late grandmother who passed away from a preventable illness. Ever since then, I have maneuvered myself into the field of medicine.

#### What brought you to Charlottesville?

It has always been a goal of mine to work for a well-renowned university and to grow my clinical skills. The location became even more ideal as my wife Zonaira lives in a city close by. It was important to us to be close as possible with our growing family, as we welcomed our baby girl, Rehmat into this world, in early 2021.

What excites you about your work?

Solving puzzles, and finding ways to help my patients. It is rewarding to know I could be of any help.

Proudest/greatest achievement outside the professional realm?

Champion at Catan.

Next life?

Playing basketball in the NBA.

What are you usually doing on the weekend?

My weekends generally involve quality time with family and friends. Boards games! (Can get very intense) basketball and watching Movies.

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

Blackberries and sparkling water.

Favorite vacation/activity spot?

Yellowstone. Unfortunately due to recent COVID-19 circumstances my wife and I have not been able to travel. However, we have a bucket list of locations we hope to travel to soon.

Most admired person, and why?

My parents. They are the epitome of the American dream. They came to the United States with little money and a dream. My father initially worked for a company, and eventually, he built his own company. On the other hand, my mother who has stood by us through thick and thin has taught us to never give up and to always fight for our dreams.

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#### **FACULTY PROFILE - Waqas Memon (continued)**



The best advice anyone ever gave you?

"Victory will come with patience, relief will come with affliction, and hardship will come with ease."

What about you would surprise us?

I developed an iPhone app.

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

I wish I could play tennis. Growing up, that was the only sport I could not play properly.

Favorite fictional characters?

Harry potter, Santiago from the Alchemist. I'm also a big star wars fan

If you could go back in time, what year would you travel to? Early 1900s.

What is the last book you read for pleasure?

Reading through the Dune series, I mostly listen to audiobooks these days.

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

Do you collect anything?

Pens, watches, and shoes. My wife always complains that I have more shoes than her.

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

I was a cashier at Sports Authority at age 16.



#### **STAFF PROFILE - Brittany Davis**



Tell us a little bit about yourself.

I graduated from Longwood University (Go Lancers!) with a Bachelor's in Business concentrated in marketing and management, and a Master's of Business Administration. When I graduated from college, my first job was as a Technical Recruiter for an IT Staffing Firm in Glen Allen. In October 2015, I joined UVA as an Access Associate at the UVA Primary and Specialty Care Clinic at Pantops. In 2018, I moved into a role with the SOM as a Medical Education Coordinator/Program Administrator in Undergraduate Medicine Education. I have since transitioned to the Fellowship Coordinator for the Division of Nephrology. Working at UVA has revealed my true interest/passion in healthcare and for medical education.

I live in the Town of Dillwyn with my husband, Golden doodle Charlie Ann and newborn son, Wyatt.

What excites you about your work?

I really love helping people and working towards the bigger picture. During my time in Medical Education, I have been a part of a clerkship restructure and the creation of a new course. It was a great experience to work through the kinks and meet new people. I also really enjoy supporting doctors in their training, and getting to be a part of a great team!

What are you usually doing on the weekend?

I love to spend time with my family, and my golden doodle.

We enjoy finding new places to eat and relax outside. I also like binge watching a good TV show. Two of my all-time favorite TV shows are the O.C. and the Game of Thrones.



How did you meet your partner?

While in college at Longwood, I met my future-husband one night in the Walmart parking lot. My first vehicle was a lifted 2004 Toyota Tacoma Truck which usually catches most people off guard to see a 5'4" female driving. To get my attention, he profusely honked his horn and hollered. Thinking to myself "what is wrong with this person", I spoke to him and we ended up talking for hours. And here we are, 7 years later, and married. We live 20 minutes away in Farmville and still own the truck that brought us together.

