# NEWS FROM TH

# MESSAGE FROM THE CHAIR



The summer has seemed to **L** fly by, and, amazingly, we will be entering September. I hope everyone had some time off during the summer and enjoyed time with family and friends. There is no doubt that the past few years have taught me the value of time away and the importance of finding ways to relax and recharge. As we gear up for this academic year, we are busy defining the priorities Department the

Medicine in our clinical, research, and education missions. This year, these will be developed in conjunction with the Health System, and there will be a focus on growth in research (with the opportunity to recruit new faculty), improvement in clinical outcomes, and continued development of our educational offerings as expansion into Northern Virginia. The specifics of the plan and how they will intersect with the larger institutional strategic plan are in development, and I will share them with you as they evolve.

In this edition of Medicine Matters, we focus on the best Nephrology Division in the country, our own! I am proud to be a member of this Division, which includes national and international leaders in the field. The Division is led by Dr. Mark Okusa, who has discovered ground-breaking mechanisms in the pathogenesis of acute kidney injury, leading to the development of novel therapeutics. Other leaders in the Division are highlighted in the newsletter as well as their recent publications. In addition, the Division is the home of a leading transplant program (led by Dr. Alden Doyle) that has seen amazing growth over the past years. Please congratulate the Division members on their remarkable achievements.

With best wishes,

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



SEPTEMBER 2022

UVA Health DEPARTMENT OF MEDICINE

## MISSION

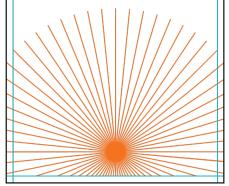
We are dedicated to preventing disease and treating illness, educating and inspiring future leaders in the field of internal medicine, and supporting innovative biomedical research.

## **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.



**DOM WEBSITE** 

**GRAND ROUNDS** 

HIGHLIGHTED DIVISION

MINDFULLNESS MATTERS



for the first time on August 12th during the annual White

Coat Ceremony and Convocation. Watch the Video...

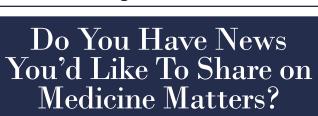
# MINDFULLNESS FOR HEALTHCARE EMPLOYEES

Mindfulness for Healthcare Employees Free Fall 2022 Course In person Fontaine Research Park Wednesdays, Sept 21 – Nov 9, 2022 6:30pm – 8:30pm Retreat: Saturday, Oct 29, 2022 Register Here

# **Welcome To The World**



Congratulations to Nick and Molly Ashur who welcomed daughter Aurelia Hope born on Friday, August 12, 2022.



Contact Kim Kelley-Wagner kak2cj@virginia.edu 434.328.0680



The Division of Hematology/Oncology welcomed new fellows in July. Meet the Class of 2025. From left: Shipra Maheshwari, Jeffrey Lantz, Jack Masur, and Jenna Schlefman



The Professional Education Team together to celebrate Leslie Stewart's retirement. (Leslie, front and center in sunglasses)



Laurie Archbald-Pannone MD



Aditya Sharma MBBS



Michael Mangrum MD



Julia Scialla MD



Jennifer Sasson MD



Jaquiline Hodges MD MPH



Corey Cavanaugh MD



Jenna Ally RN MSN AG-ACNP



Christiana Brenin MD

# **Awards and Achievements**

Congratulations to all newly tenured members of the Department of Medicine! Drs. Laurie Archbald-Pannone, Aditya Sharma, Michael Mangrum, and Christopher M. Moore.

Congratulations to **Dr. Julia Scialla** (Division of Nephrology)on research linking chronic kidney disease to eating fewer fruits and vegetables. The research "Patterns of Fruit and Vegetable Intake in Adults with and without Chronic Kidney Disease in the United States" has been published in Journal of Renal Nutrition and gained national attention and coverage. Learn more.

Congratulations to **Dr. Jennifer Sasson** (Division of Infectious Diseases Fellow) whose study finds that a monoclonal antibody used to treat asthma and eczema can improve survival for patients with moderate to severe COVID-19. <u>Learn more.</u> The findings, "Safety and Efficacy of Dupilumab for the Treatment of Hospitalized Patients With Moderate to Severe Coronavirus <u>Disease 2019: A Phase 2a Trial"</u> have been published in the journal Open Forum of Infectious Diseases.

Congratulations to **Dr. Jaquiline Hodges** on the renewal of her NIH LRP award from NIAID Funding. The NIH program helps promote careers in research by paying student loans. <u>Learn more</u>.

Congratulations to **Dr. Laurie Archbald-Pannone** who has been recognized by the Rosalind Franklin Society for her outstanding publication in the Journal of Telemedicine and eHealth and been presented a 2021 Rosalind Franklin Award in Science. <u>View press release</u>.

Congratulations to **Dr. Corey Cavanaugh** (Division of Nephrology) who has been was appointed to serve on the 2023 American Society of Nephrology (ASN) Kidney Week Education Committee. This committee plans the educational content for ASN's annual meeting which is attended by 14,000 nephrologists from around the world.

Congratulations to Advance Practice Provider, Jenna Ally, celebrates ten years of service with the Division of Hematology/ Oncology in September.

Congratulations to **Dr. Christiana Brenin** who celebrates twenty years of service with the Division of Hematology/Oncology in September.

The Department of Medicine and Division of Hematology/Oncology welcomes **Dr. Paul Viscuse** and **Dr. Paul Skelton** who joined GU Oncology in August, 2022. Dr. Viscuse was a senior fellow at MD Anderson and the recipient of the JCO Young Investigator Award. Dr. Skelton comes to us from the Moffitt Cancer Center as a senior fellow.



# **Follow DOM on Twitter**

# Dr. Petri answers your COVID-19, monkeypox and polio questions infections (Daily Progress)

University of Virginia immunologist and COVID-19 researcher Dr. William Petri continues to answer reader questions about COVID-19 and, now, monkeypox.





# You're Probably Better at Hydrating Than You Think (VeryWellHealth)

Water drinking guidelines can be hugely variable and imprecise, Mitchell Rosner, MD, a nephrologist and professor with a focus on fluid and electrolyte disorders at the University of Virginia, told Verywell.

# Taison D. Bell, MD, Discusses the Four Main COVID-19 Treatments on Podcast (In The Bubble)

Assistant Professor Taison D. Bell, MD discussed the four main treatments for COVID-19 on the podcast In the Bubble with Andy Slavitt.



# UVA infectious disease expert says to take 'monkeypox quite seriously' (NPR)

Dr. Patrick Jackson, an infectious disease expert at the University of Virginia said that "people who are in these risk groups should take monkeypox quite seriously. They should be aware of their health, their partner's health [and] get tested, if there are any concerns."



# Dr. Petri explains a Neanderthal connection to COVID-19, and rebound infections (Daily Progress)

University of Virginia immunologist and COVID-19 researcher Dr. William Petri continues to answer reader questions about COVID-19 and, now, monkeypox.



# How I treat and prevent COVID-19 in patients with hematologic malignancies and recipients of cellular therapies (Blood Journal)



Using 3 illustrative cases, El Chaer et al discuss the options for the prevention and therapy of COVID-19 infection in patients with hematologic malignancies and recipients of cellular therapies. The authors provide useful practical recommendations and algorithms for current treatment.

Standard vs high-dose anthracycline vs anthracycline + gemtuzumab ozogamicin in favorable risk AML

(Video Journal of Hematological Oncology)



# Covid Case Increase Prompts the Return of Masks (NBC News)

Dr. Taison Bell speaks with NBC Nightly News about the BA-5 sub-variant. New numbers show the rapid increase in covid cases spreading across the U.S.



# Mobile Health Platform for People with HIV Lauded as "Best Care Practice' (UVAToday)

A UVA-created smartphone app called PositiveLinks connects people with HIV to a digital support community.



# More Thank 7,500 People Infected with Monkeypox in the U.S. (MSNBC - Zerlina)

Dr. Ebony Hilton discusses the addition of another virus and its spread to the US population.



# **Positions Available on NIDDK**

Positions available on NIDDK sponsored T32 postdoctoral training grant in Neuroendocrinology and Metabolism

Qualified post-doctoral trainees are eligible to apply for a two-year fellowship (with possibility of a 3rd year if progress warrants) for advanced training in the broad area of neuroendocrinology and metabolism. Focal areas of research include diabetes, obesity, circadian biology, feeding behavior, reproductive biology and related areas.

Applicants must be either a permanent resident or citizen of the US and have completed their MD, PhD, DO, or DVM degree. It is expected that most trainees will qualify for two years of support at NIH postdoctoral stipend scale. Items needed to evaluate a fellowship applicant are trainee NIH Biosketch, copy of the mentor's NIH other support page, and a one or two page outline of the planned research project. We ask that the trainee do this in an NIH format with a short section on aims, significance, innovation, and approach, with several sentences indicating his/her longer-term career plans.

Trainees would conduct their research in the laboratory of a training grant mentor. Current mentors are listed below in the

URLor QR code provided. For questions about the training grant program or the application process please click <u>this link</u> and go down to the T32 Training Program section.

Qualified applicants should contact Amanda Powell, T32 Program Administrator at ahp9q@hscmail.mcc. virginia.edu.



**NEWPUBLICATIONS: "MRD in ALL: Optimization and Innovations"** 

## New studies opened since July 01, 2022

## LCM: Lymphoma/CLL/Myeloma

IRB # Pembrolizumab-based adaptive therapy for classical Hodgkin lymphoma in patients age 60 and above

HSR210534 CT. Gov. ID: NCT05404945

Sponsor Protocol CHL001 Sponsor: University of Virginia

Principal Investigator: Portell, Craig

Study Contact: Cara Hanby clh5ke@virginia.edu 434-243-9900

IRB # A phase Ib open-label study to evaluate the safety and anti-cancer activity of loncastuximab terisine in combination with other anti-cancer

agents in patients with relapsed ore refractory B-cell non-Hodgkin lymphoma HSR220009

CT. Gov. ID: NCT04970901

Sponsor Protocol ADCT-402-105 Sponsor: ADC Therapeutics S.A.

Principal Investigator: Ayers, Emily

## **Thoracic**

IRB # Real-time Monitoring and Modeling of Symptoms and Adverse Events in Lung Cancer Patients Receiving Oral Targeted Therapies for Tumors with EGFR mutations or ALK Rearrangements

HSR210257 CT. Gov. ID: NCT05370469

Sponsor Protocol LUNG001 Sponsor: University of Virginia

Principal Investigator: Gentzler, Ryan

# UVAHS VOLUNTEERS NEEDED FOR UVA COVID-19 COMMUNITY TESTING PROGRAM SIGN UP HERE

# Save the Date!

2022 Michael J. Weber Symposium

The second annual Michael J. Weber Symposium to honor Dr. Weber's life and achievements will be held on October 14, 2022. The central theme will be "Multi-Omics Precision Oncology"

> More information here: 2022 Michael J. Weber Symposium



# SAVE THE DATE!

Friday, April 14, 2023



Updates in Hematology and Hematologic Malignancies 2023

Fri, April 14, 2023 8am-3:30pm Omni Hotel, Charlottesville

Course Directors: Firas El Chaer, MD and Hillary Maitland, MD, MS

This program will explore research and advances in the diagnosis and management of benign hematologic conditions and hematologic malignancies, including indications for novel therapies, Aimed at community hematologists and oncologists, as well as advanced practice providers, nurses, and pharmacists. This meeting will use case-based presentations to highlight recommendations for treatment of common hematologic diagnoses

For more information, visit the UVA CE learning portal at www.cmevillage.com or our event page here

Questions? Please contact:

Elizabeth Patterson <u>epatterson@virginia.edu</u> or 434-982-3687



Please join us for the

Women In Medicine Network (WIMN)

> In-person Gathering Liaht Refreshments Served



Claude Moore Bldg Patio 200 Jeanette Lancaster Way Charlottesville VA

# Mark Okusa MD, Chief, Division of Nephrology; Center for Immunity, Inflammation & Regenerative Medicine



Mark Okusa, MD

Simply put, we have a phenomenal Nephrology team! As we cautiously ride the unpredictable wake of COVID-19, our remarkable team continues to be incredibly productive. This year we would like to highlight a number of faculty, fellows, researchers, and staff, for award-winning activities, national recognition, new grants, papers, and achievements. We have also been experiencing a refreshing return to in-person normalcy. Hybrid seminars and conferences; in-person

meetings are becoming more frequent. We welcomed Renal Grand Round speakers back to UVA and hosted two successful endowed lectureships. Dr. Anupam Agarwal, the Executive Vice Dean of the University of Alabama, Birmingham, was our Philip C. Liverman Distinguished Lecturer. We had the bonus of his wife, Dr. Lisa Curtis as our Renal Grand

Rounds speaker. The Phillip C. Liverman Distinguished Lectureship at Medical Grand Rounds was held on April 29, 2022. This lectureship was named after one of our fellows who died in 1984. His family established this lectureship which has been running since 1986. This year we had our inaugural W. Kline Bolton Distinguished Lectureship, and our guest speaker was the eminent nephrologist Dr. Richard Glassock, from the University of California, Los Angeles. Travel to international and national meetings has returned as another signal that we are returning to where we were pre-COVID.

We were pleased to finally host the W. Kline Bolton Distinguished Lectureship on May 13,2022. Although initially planned for the year before, we decided that we could not possibly have a virtual inaugural lectureship; hence we postponed the event for a year. As many of you know, Dr. Bolton was the Division Chief of Nephrology from 1998 for 20 years, and made many contributions to the University of Virginia and the field of Nephrology. An endowment was established to host renowned nephrologists to the University of Virginia as visiting professors. This year Dr. Richard Glassock was our distinguished lecturer. He was past president of the American Society of Nephrology, and former Chair of the Departments



of Medicine at the University of Kentucky and Harbor-UCLA Medical Center.



# **Clinical Update**



Anubhav Kumar, MD

The Division continues to have a thriving clinical practice, from patient activities to outreach clinics. Clinical performance continues to remain strong post-COVID-19. Our sub-subspecialty clinics continue to grow. Although we previously highlighted Dr. Amanda Renaghan, our onconephrologist, who staffs an Onconephrology Clinic, as well as Corey Cavanaugh, who heads up our glomerulonephritis clinic, we would also like to recognize **Dr. Anubhav Kumar**, who is newly appointed Director of the Acute Hemodialysis Unit. Dr. Kumar was appointed interim director last year, and because he has done an excellent job, he was unanimously appointed full-time medical director of the unit. Dr. Kumar was a nephrology and ultrasound fellow at the University of Pennsylvania before his recruitment to the University of Virginia in 2019. Dr. Kumar is an expert in ultrasound as he is shown here instructing one of our former fellows in

the technique of point of care ultrasound. In his role as acute HD Unit Director, Dr. Kumar has established

new protocols, and refined existing ones for using CRRT in the operating room.

# Transplant Program

The Kidney and Pancreas transplant programs at UVA continue to thrive under the direction of Dr. Alden Doyle. The volumes of referrals, evaluations, and transplants have approximately doubled over the last seven years, projecting an additional 25% increase this fiscal year. The transplant team, leading some of the Health System's efforts, has set up outreach clinics across the Commonwealth, with approximately 100 full-day clinics set up at five distal sites, to provide greater access to lifesaving organ transplantation. Notable accomplishments have recently included the



early adoption of hepatitis C + donors, COVID + donors; ABO mismatched donors, living donor chains, robotic transplants for obese recipients, multimodal strategies to protect against COVID in this highly vulnerable population, and the development of innovative immunosuppression strategies. This academic year, the team welcomes three new surgeons, is hoping to add two new transplant nephrologists, inaugurate a new HLA lab, expand the inpatient transplant unit, and move to an expanded dedicated outpatient space in the West Complex that adds significant on-site treatment and infusion capabilities.

# UVA Nephrology in Culpeper

The Culpeper unit serves patients in the Culpeper, Orange, and Northern VA area, and provides support for in-center self-care dialysis on Tablo dialysis machines. The home program growth has continued with an anticipated 1-2 additional PD patients to start transitioning from other UVA units this summer. We have hired Bobak Sharifi, MD, a former UVA nephrology fellow who will begin full-time work in the Culpeper/Orange area. He will open a CKD clinic in Culpeper and provide inpatient and outpatient services in Culpeper.

# Augusta Hospital

Augusta Hospital team led by Adam Campbell continues to have a strong performance. Daphne Knicely and Anita Vincent-Johnson have been excellent additions to Augusta. Pinnacle Clinic volumes continue to expand with more referrals from the Harrisonburg region.

# **Clinical Update**

# UVA Nephrology in Farmville/Lynchburg

Our Farmville CKD Clinic has finally opened and will provide care for CKD patients in that region. Dr. Catarina Regis continues to service the Farmville area, and Dr. Hanna Zaraket continues to service the Lynchburg region.

Our outreach program for general and transplant nephrology is advancing into specific areas of strategic growth. Our specialty care has made for a strong Centra Lynchburg relationship, while North Virginia is identified as another area that shows great promise. This is evidenced by our Culpeper Dialysis station, Augusta Hospital, and our new Dialysis units in Lynchburg and Farmville. Dr. Bobak Sharifi will open a CKD clinic in Culpeper, and provide inpatient and outpatient services.

# **Advancing American Kidney Health**

Advancing American Kidney Health Initiative was announced by the White House in 2019, and aimed to produce improved outcomes at a lower cost for our 37 million people in the US with chronic kidney disease. Although kidney transplantation is a significant focus and offers the best clinical outcomes at the lowest cost, not every person is eligible for a transplant. Thus, many individuals will receive some form of dialysis and home therapies. Home therapies offer similar outcomes to in-center dialysis at a lower cost. It is the hope of this effort to provide more "person-centered care." Dr. Rasheed Balogun, our Director of the Regional Dialysis Program, is leading the value-based care effort. We applied and received an acceptance letter from the Center for Medicare & Medicaid Innovation (CMMI) into the alternative payment model, Kidney Care First (KCF). The KCF option is open to participation by nephrology practices and nephrologists only. Implementation will take place at the beginning of 2023.

# **Educational Update - Fellowship Program**

Under the guidance of our new Program Director, Dr. Tushar Chopra, and Associate Program Director, Dr. Corey Cavanaugh, we had a remarkable fellowship recruitment effort. They are employing the use of surveys, and other methods, to continuously improve the fellowship program. We have also initiated several programs that will enhance our future pipeline. Our Nephrology Interest Group drew considerable interest among students and residents, and Dr. Chopra will begin a Kidney Disease Screening and Awareness Program (KDSAP) program in the fall. We were successful in recruiting four outstanding fellows starting July 1, 2022.



Ayman Alghamdi, MBBS

Residency: Ochsner Medical Center

Fun Fact: I enjoy cooking, and I spend quite some time learning to cook new things from different cultures



Lalida Kunaprayoon, MD

Residency: Hurley Medical Center, Michigan State University

Fun Fact: I am a foodie. I've tried all kinds of food, the good, the bad, and the weird.



**Monarch Shah, MBBS** 

Residency: Saint Peter's University Hospital

Fun Fact: I love watching, and playing soccer. I used to be a DJ as a teenager, but I still mix music and play percussion instruments. It's the best stress buster.



Benjamin Silverberg, MD

Residency: University of Virginia

Fun Fact: During my free time, I enjoy kayak fishing and trying new restaurants. I host the best (and probably only) crawfish boils in Charlottesville.

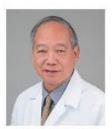
# **Research Update**

The Division of Nephrology and the Center for Immunity, Inflammation and Regenerative Medicine (CIIR) continue to advance the research from clinical to the bench. Despite COVID, our faculty and trainees never waivered and continued to work under the restrictive guidelines established by the institution. New grants were awarded totaling nearly \$6 M, of which almost 90% is from NIH. Our efforts also focus on training the next-generation of investigators as we reach out to postdoctoral and predoctoral fellows, and college and high school students through our training grants. Members of the CIIR are shown below.

# **Center for Immunity, Inflammation, and Regenerative Medicine**







Shu Man Fu, M



Michael G. Brown, PhD



ho Morioka, PhD



Rahul Sharma, PhD



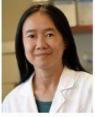
Uta Erdbrügger, MD



Mark Okusa, MD



Sanja Arandjelovic, PhD



Junian Yao, PhD



Peter Lobo, MD



Didier Portilla, MD



Jitendra K. Gautam, PhD



Sun-Sang J. Sung, PhD



Joel Linden, PhD

Along with their dedicated research efforts, CIIR members always find ways to enjoy themselves as shown by the montage below.



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# **Research Highlights - Basic Science**

Dr. Rahul Sharma

Dr. Sharma studies autoimmunity and inflammation, primarily focusing on the role of the anti-inflammatory T-regulatory cells (Tregs). The central theme of his laboratory is to understand the role of alarmins in the pathophysiology of these disorders. Utilizing these pathways, he has generated novel biologics, such as a bispecific hybrid-cytokine IL233 bearing the activities of IL-2 and IL-33. This novel therapeutic agent, via T-regulatory cells, innate lymphoid cells, and macrophages, suppresses ongoing inflammation in autoimmunity (lupus, type-1 diabetes), acute kidney injury, and metabolic syndrome by inhibiting diabetes and converting white adipose into brown adipose tissue. Dr. Sharma's work has generated two US (and international) patents for treating autoimmune and inflammatory diseases. His technology was among the top 11 of 130 participants in a global "Science to Startup" competition, a forum for top scientists from around the world to present their ideas and interact with leading investors and executives in the Boston biotechnology hub licensed to Slate Bio Inc. In this biotech start-up, Dr. Sharma is a co-founder. In July 2022, Dr. Sharma received

Rahul Sharma, PhD

a new 1.5-year \$575,000 research award from the Virginia Catalyst to support IND-enabling research-based technology in collaboration with Virginia Commonwealth University (VCU), Virginia Tech, and Slate Bio Inc. The project is titled "Bifunctional Fusion Cytokine Therapy for Autoimmune Diseases." Lastly, Dr. Sharma was awarded a new 3-year national Discovery and Development Partnership grant (\$150,000/yr) from Juvenile Diabetes Research Foundation to perform translational studies in type-1 diabetes utilizing his work showing that a new immunomodulatory therapy developed by his laboratory can induce regeneration in pancreatic islets in T1D. This has been quite a year for Dr. Sharma!

# **Research Highlights - Clinical Science**



Julia Scialla, MD

Dr. Julia Scialla

Recently July 27, 2022, Dr. Julie Scialla, Associate Professor, and Shirin Pourafshar (former fellow in nephrology) had their important research highlighted in UVA Today as well as across 200 news media outlets. I want to bring your attention once again to this critical study. Using the National Health and Nutrition Examination Survey conducted between 1988 and 2018, Dr. Scialla and coworkers analyzed data on eating patterns of fruits and vegetables. They found that patients with chronic kidney disease included fewer fruits and vegetables in their diets, implying that consuming fruits and vegetables is strongly linked to good health. Their findings were published in the Journal of Renal Nutrition and have received widespread national news coverage. "Consuming more fruits and vegetables is strongly linked to health in many different diseases," UVA Health kidney specialist Dr. Julia J. Scialla said. "We worry about overall health effects when we see patients with chronic kidney disease consuming low levels of fruits and vegetables." blood pressure, heart disease, and stroke. "We hope that through this study and similar studies, we will be able to encourage both healthy individuals

and patients with chronic kidney disease to reconsider their intake of fruits and vegetables by incorporating greater varieties and amounts of unprocessed or minimally processed fruits and vegetables into their everyday diets," said Shirin Pourafshar, a nutritionist and dietitian who was co-author of the study.

The Nephrology Clinical Research Center (NCRC), which is led by Dr. Julie Scialla (Medical Director) and Dr. Igor Shumilin (Operational Director), continues to make significant progress. The NCRC is onboarding new trials in hypertension, lupus nephritis, focal segmental glomerulosclerosis, transplant immunosuppression, and polycystic kidney disease. The team leads investigator-initiated studies in ultrasound and the ketogenic diet and numerous data science projects on bone and mineral metabolism, nephrotic syndrome, and COVID treatments.

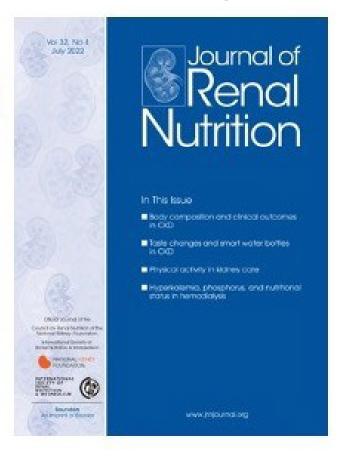
# **Eating More Fruits and Veggies Could Benefit Your Kidneys**











# **Research Highlights - Collaborative Science**

# Dr. Michael Brown

Research success depends on developing strong collaborations in other disciplines. A new Commonwealth Health Research Board (CHRB) Grant Award was made to Michael Brown, Medicine, Nephrology, Coleen McNamara (Medicine, Cardiovascular), and Vineela Bontha (Medicine, Cardiovascular) for their research on 'Risky variants in human cardiovascular disease.' The research project will investigate whether genetic variation in the glucocorticoid-induced tumor necrosis factor receptor-related protein (GITR) expressed by NK cells and other lymphocytes may affect the development or progression of atherosclerosis, a major cause of cardiovascular disease and a significant contributor to disability and death in Virginia. Congratulations to Mike, Coleen, and Vineela!

Michael Brown, PhD

# **Research Highlights - Training Focus**

Our program in nephrology focuses on reaching out to earlier trainees from high school to postdoctoral fellows to engage trainees in meaningful kidney research with the hope that this will be an enduring opportunity. We have trained high school students during the summer with students from as far away as New York to conduct research in Nephrology at UVA. We have two additional programs: 1) VA K Tutor geared toward undergraduate students and 2) IGNITE KUH, which targets pre and postdoctoral fellows.

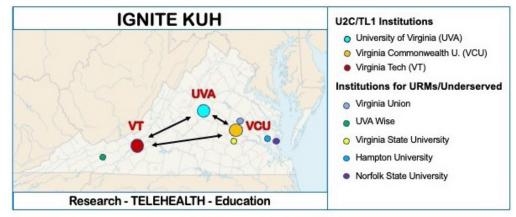
# VA K Tutor

The VA K Tutor (Virginia Kidney Technology Development Research Education Program), Nephrology undergraduate training program (NIH1 R25 DK124918: PI Sharma, Okusa, Gifford), now in its second year, provides an immersive research and education experience for technology-oriented undergraduate students to participate in cutting-edge research in kidney diseases, to generate innovative solutions for promoting kidney health. Four were from UVA, and one came from VCU. They enthusiastically immersed themselves in basic research and clinical rotations for ten weeks and were a wonderful addition to the Division. This NIH-sponsored training grant also allows for 6-12 months of additional research, and we welcome their continued participation and investigation of their Next Generation NIH VA K-TUTOR - Kidney Researchers from UVA, chosen areas of interest.



MIT, and Virginia Tech

# **IGNITE KUH**



A State-Wide Progarm to Train Next Generation KUH Researchers

We have recently completed our first year of a newly funded collaborative training grant (UVA PI's Okusa, Portilla, Brown). The NIH-funded Integrated Virginia Research Training Centers in Kidney Urology and Hematology (IGNITE KUH; 1U2C) DK129500/1TL1DK132771) collaborative based on a partnership involving three main research training centers in the Commonwealth of Virginia and is committed to developing the next generation 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 (VT). Unique IGNITE KUH Programs will foster a growing community of trainees with extensive networking opportunities across the Commonwealth while also providing professional development resources to ensure our trainees acquire the skills needed to pursue research as a career. Integral to IGNITE KUH is our outreach to undergraduate students throughout the Commonwealth, including Historically Black Colleges and Universities (Virginia Union, Virginia State U., Hampton University, and Norfolk State U.) and rural universities (UVA-Wise).

The program promotes interdisciplinary research that includes fundamental and translational research, as well as patient-oriented clinical research, and is targeted to highly-motivated predoctoral students and postdoctoral fellows (MD DO PhD or their equivalent). The IGNITE mentoring team includes outstanding physician-scientists and basic science investigators from the Departments and Centers of the three institutions. The program provides basic/fundamental training and didactic instruction in multiple disciplines, including molecular, cellular, and transgenic technologies, immunology, functional genomics, and novel imaging technologies, focusing on kidney, urology, and hematology. The patient-oriented clinical research program provides clinical investigation, epidemiology, biostatistics and data sciences training.

# **Research Paper Highlights**

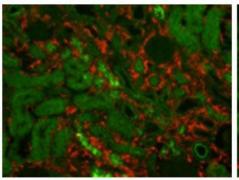
Former postdoctoral fellow Shinji Tanaka in Mark Okusa's laboratory has published a significant discovery in Science Translational Medicine on a signaling pathway that may play a crucial role in kidney fibrosis. Here Shinji and co-workers demonstrate that perivascular sphingosine 1- phosphate (S1P) signaling promotes kidney inflammation and fibrosis, which can be reversed by inhibiting the S1P transporter, spinster homolog-2 (Spns2), suggesting a different approach to treating kidney disease progression.

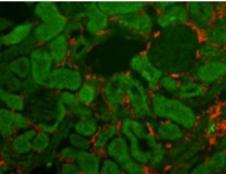
## SCIENCE TRANSLATIONAL MEDICINE | RESEARCH ARTICLE

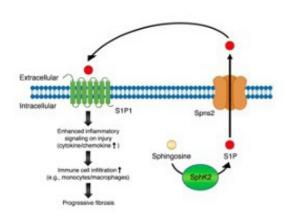
## KIDNEY DISEASE

# Sphingosine 1-phosphate signaling in perivascular cells enhances inflammation and fibrosis in the kidney

Shinji Tanaka<sup>1,2</sup>, Shuqiu Zheng<sup>1</sup>, Yugesh Kharel<sup>3</sup>, Russell G. Fritzemeier<sup>4</sup>, Tao Huang<sup>3</sup>, Daniel Foster<sup>4</sup>, Nabin Poudel<sup>1</sup>, Eibhlin Goggins<sup>1</sup>, Yusuke Yamaoka<sup>1</sup>, Kinga P. Rudnicka<sup>1</sup>, Jonathan E. Lipsey<sup>1</sup>, Hope V. Radel<sup>1</sup>, Sophia M. Ryuh<sup>1</sup>, Tsuyoshi Inoue<sup>1</sup>, Junlan Yao<sup>1</sup>, Diane L. Rosin<sup>3</sup>, Susan R. Schwab<sup>5</sup>, Webster L. Santos<sup>4</sup>, Kevin R. Lynch<sup>3</sup>, Mark D. Okusa<sup>1</sup>\*







# Research Trainee Highlights

Congratulations to the following winners at this year's Research Scholar's Day which was in May.

# Carey, Marshall, Thorner Scholar's Day

Jessica Annis (Poster) from Mike Brown's Lab

Aspen Robinson (Poster): from Sanja Arandjelovic's lab

# Immunology Research Day

Shuhei Kuwabara (Oral presentation): Okusa lab

Nabin Poudel (Poster): Okusa lab

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# **Awards and Recognition**

Our faculty and staff continue to achieve excellence in their respective areas. This is a testimony to their hard work and effort despite COVID barriers. This year several individuals were recipients of the *Department of Medicine Excellence Awards*, including:

Daphne Knicely, MD, recipient of the Clinical Excellence Award

Uta Erdbrügger, MD, recipient of the Educator Excellence Award

Mary Lenahan, recipient of the Outstanding Staff Contributor Award

Robert Young, recipient of the Administration Excellence Award

Jitendra Gautam, PhD, recipient of the Outstanding Staff Contributor Award

Amanda Renaghan, MD, recipient of the Award for Excellence in Clinical Care



University of Virginia Academy of Distinguished Educators in 2005, and selected to be one of our four foundation College Deans. As part of the Next Generation medical education curriculum initiated by the School of Medicine in 2010. He served in this role for five years; together with three other deans, Rasheed contributed significantly to our undergraduate medical education mission by taking on the dean of student affairs role. He has created a first-of-its-kind independent Therapeutic Apheresis Academy. This multidisciplinary focused annual educational conference attracts an international audience. It has since been emulated by others, writing clinical guidelines used in treatment decisions internationally and authoring chapters, and editing textbooks in this niche field. The endowed chair is a

Rasheed Balogun, MBBS, was appointed Harrison Distinguished Teaching Professor of Nephrology. This is a tremendous honor and well deserved. Rasheed was elected to the

Rasheed Balogun, MBBS well-deserved honor!

Corey Cavanaugh, **DO**, has been appointed a member of the 2023 ASN Kidney Week Education Committee (a.k.a. Program Committee) in Philadelphia. This committee is responsible for the educational content (sessions and abstracts) of Kidney Week. This is a great honor and a testimony to Corey's emerging reputation and impact in the field of glomerular disease. Congratulations Corey!

Karen M. Warburton, MD, received a Distinguished Mentor Award from the American Society of Nephrology for 2022. This is a highly competitive award hosted by the American Society of Nephrology with over 20,000 members. Dr. Warburton has had a lifelong commitment to mentorship and faculty development. She has impacted many trainees and faculty members locally and nationally through direct interactions, or her faculty/trainee program development. She is a stalwart advocate for all faculty, especially women faculty. Congratulations Karen!

Alden Doyle, MD, who has been appointed Chair of UNOS Operations and Safety Committee effective July.

Uta Erdbrûgger, MD, who will co-chair the annual meeting of the *International Society for Extracellular Vesicles* in May, 2023.

Congratulations to **Mitch Rosner**, **MD** who was a recipient of the Thomas Jefferson Award, the highest honor given to a member of the University of Virginia community. He is credited with developing strategic programs as Chair of the Department and his unparalleled work in navigating the entire university safely during the COVID pandemic by establishing testing management and policy.

"Mitch led the infrastructure changes necessary to care for COVID patients, organized and managed for surge capacity, quickly launched a telehealth initiative, and led the creation of community-based testing and vaccination centers," ~President Jim Ryan

"What he did and how he did it drove the effectiveness of this University's response to a once-in-a-lifetime challenge....He is thoughtful, level-headed, good-humored, invaluable, wise, even-keeled, humane, and humble. A consummate servant leader."  $\sim$ Provost Liz Magill

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

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Emaad M. Abdel-Rahman	LabCorp Drug Development, Inc.	Clinical Evaluation of HemoCare Hemodialysis System for Home Nocturnal Hemodialysis
Emaad M. Abdel-Rahman	Outset Medical, Inc.	Prospective, multicenter, post-market study of the Tablo Hemodialysis System for the treatment of participants with end stage renal disease in the home setting
Sanja Arandjelovic	Arthritis National Research Foundation	Removal of Apoptotic Cells in Inflammatory Arthritis
Rasheed A Balogun	International Society of Nephrology	ISN Sister Renal Support Center
Michael G Brown	Commonwealth Health Research Board	Risky variants in human cardiovascular disease
Tushar Chopra	CinCor Pharma, Inc	A Randomized, Double-Blind, Placebo-Controlled, Multicenter, Parallel-Group, Dose-Ranging Study to Evaluate CIN-107 for the Treatment of Patients With Uncontrolled Hypertension and Chronic Kidney Disease
Alden Michael Doyle	Joslin Diabetes Center Inc.	Kidney Transplant Outcomes and Apol1 Consortium
Alden Michael Doyle	Drexel University	Identifying Healthy and High-Risk Weight Loss Phenotypes to Optimize Obesity Management in End Stage Kidney Disease
Uta Erdbruegger	University Of Maryland, Baltimore	Dissecting the role of dynamic epigenome prompting pathways leading to kidney allograft fibrosis
Uta Erdbruegger	American Diabetes Association	Urinary extracellular vesicles characterize early diabetic kidney disease phenotypes
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
Sho Morioka	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases	Removal of apoptotic cells during acute kidney injuries- Travel
Sho Morioka	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases: P&F Grant University of Alabama at Birmingham	Boosting Removal of Apoptotic Cells During Acute Kidney Injury
Sho Morioka	Yamada Bee Company, Inc.	Establishment of new methods for improving human health using propolis and phagocytosis promotion model
Mark D Okusa	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases	Integrated Virginia Research Training Centers in KUH (IGNITE KUH)
Mark D Okusa	The Bower Foundation	Nephrology Visiting Professor and Invited Speaker Exchange Program
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 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)
Didier Portilla Michael Brown	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases.	Integrated Virginia Research Training Centers in KUH (IGNITE KUH) - TL1
Didier Portilla	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases	Role of intracellular complement activation in kidney fibrosis
Swati Rao	NATERA, INC.	Use of dd-cfDNA in Multi-Organ Transplant Rejection Detection (MOTR)

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

Julia Scialla	Duke University	Predictive Analytics in Hemodialysis: Enabling Precision Care for Patient with ESKD
Julia Scialla	University Of Pennsylvania	Transformative Research in Diabetic Nephropathy (TRIDENT) Clinical Trial
Julia Scialla	U.S. NIH Institute of Diabetes & Digestive & Kidney Diseases	Integrated Mineral Metabolism Treatment Strategies in Patients on Dialysis
Julia Scialla	Virginia Department Of Health	InnoVAte: Telehealth for Prevention and Management of Chronic Diseases
Rahul Sharma	Slate Bio, Inc.	Slate Bio IL233 Variants
Rahul Sharma	Juvenile Diabetes Research Foundation International	Novel Therapeutic Cytokine for T1D
Rahul Sharma	Virginia Biosciences Health Research Corporation	Development of a First-in-Class Bifunctional Fusion Cytokine Therapy that Targets Tregs and Tissue Resident Tregs for the Treatment of Lupus and other Autoimmune Diseases
Rahul Sharma	Manning Fund for COVID-19	Immune and glycemic dysregulation from COVID 19 in Diabetes
Karen Warburton	William and Sandra Bennett Clinical Scholars Program – mentor to the PI -	Development and validation of tools to assess and coach nephrology fellows' clinical reasoning

# **New Faculty**



Korshie Dumor, MD MPH, will join the Division of Nephrology on September 1, 2022, as an Assistant Professor of medicine. He was previously Assistant Clinical Professor of Medicine in the Division of Pulmonary, Critical Care, and Environmental Medicine at the University of Missouri. He received his Bachelor of Medicine and Bachelor of Surgery (MBChB) in 2002, MPH at Harvard School of Public Health, Harvard U. Boston, Mass in 2005, Residency training in Medicine at Harlem Hospital, Columbia University College of Physicians and Surgeons 2010, Fellowship Training in Nephrology and Hypertension, University of Missouri, Columbia, MO, 2018 and Pulmonary Critical Care fellowship training in the Division of Pulmonary, Critical Care and Environmental Medicine, University of Missouri. He is Board Certified in IM, Nephrology, and Critical Care. He also worked in an internal medicine practice at Mercy Clinic and Phelps Health, Rolla, MO, from 2010-2016. We are excited that he will help build ICU Nephrology at UVA and contribute to research and education.

Bobak Sharifi, MD, is no stranger to all of you. Bobak was chief fellow in the Division of Nephrology at UVA. Bobak will join the Division of Nephrology as an Assistant Professor of Medicine. Bobak received his medical degree from Xavier University School of Medicine, Oranjestad, Aruba, followed by residency training at Virginia Tech Carillion System. He joined our program as a clinical fellow, and because of his outstanding performance, he was appointed Chief Fellow. Dr. Sharifi's primary responsibility will be to develop a robust clinical nephrology practice in the Culpeper region. He will care for ESRD patients in UVA HS dialysis units and CKD patients in outpatient CKD clinics in Orange and Culpeper. We are excited about the growth potential up the 29 corridors, and we are thrilled and confident that Bobak is the right person to spearhead this initiative. We are delighted that Dr. Sharifi will be joining our Division.

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# **Faculty and Staff Departures**

**Dr.** Anjushree Kumar left the University of Virginia on June 19, 2022; she has accepted a Transplant Faculty position at the University of Missouri (St Luke's Health System) beginning August 2022.



Robert Young will be leaving us after more than 16 years of outstanding contributions to our Division. Though we are sad to see him go, we wish him well as he pursues new opportunities. Bob has accepted an appointment as a Department Administrator for Family Medicine & Population Health, Virginia Commonwealth University, Richmond, VA. Bob will continue to manage operations and finance in his new position, as he had done in our Division at UVA. Still, the patient care, research, and education volume will be considerably larger. The Department at VCU also is responsible for a residency program at INOVA and a new one in South Hill, VA, and it houses a graduate-level MPH program. Bob has overseen and managed the growth of the Division and clinical programs, which have doubled in size. He has led and managed the addition of the Center for Immunity, Inflammation and Regenerative Medicine and a significant increase in our NIH grants portfolio. He was instrumental in acquiring a new stateof-the-art research space in Pinn Hall. Bob was awarded the Department of Medicine's Administrative Excellence Award for his outstanding contributions in 2008, 2012, and 2022. We will miss his "can-do attitude" and his guidance and support of the Division over the last 16 years. The Department at VCU is very lucky to have recruited such a talented individual. We wish Bob and his family the best of luck in the future. He will proudly hang the picture of the Rotunda on his wall at Virginia Commonwealth University.

# Remembrance - Amber Lanter

We are saddened that Amber Lanter died July 9, 2022. Many of you know her well and worked with her in the acute and chronic HD unit. Some of you have worked with her for many years. Please see the thoughtful remembrance written by Christy Hodge below. She will be missed.

Amber is survived by her son, Jacob Tolman, and sister Nikki Brookman. Amber maintained very close relationships with both of them. She had recently celebrated her birthday at the beach with her sister. She was immensely proud of Jacob, who had just graduated from college, bought a home, and started his new career.

Her nursing career began in 1996 as she graduated with her BSN from the University of Virginia School of Nursing. For the past eleven years, she has worked with renal patients in the inpatient acute dialysis center and recently celebrated two years as a Post Kidney Transplant Coordinator. Amber was deeply admired and respected by her patients, peers, leadership, and physician colleagues. She was best known for the hours of on-the-phone support she offered to her patients and her infectious and slightly mischief laugh. Her laugh was simply the best.

As a transplant family, we will honor her in memorial in days to come and infinitely celebrate the person she was, her life's work, and her selfless contribution to so many patients over her 26 years of nursing. We are so thankful to have known her and for the fond memories that will carry us through this difficult time. You may read her obituary <u>here</u>.

# **Welcome To The World**



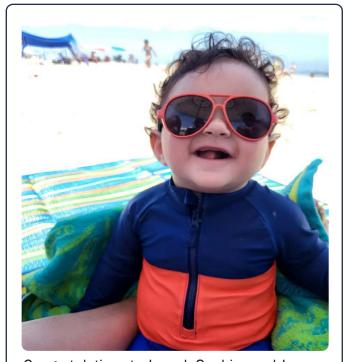
Congratulations to Nabin Poudel and Binu Sharma who welcomed son Neerav Poudel who was born on June 13, 2022. He likes being cozy in his parents' arms, enjoys music, and follows movement and tries to lift his head while on his tummy.



Congratulations to Amanda and Sean Renaghan who welcomed daughter Bridget Madeline Renaghan who was born on December 20, 2021. She is an absolute joy, and she is already her brother Ryan's best friend.



Congratulations to Corey and Brittany Cavanaugh who welcomed son Maxwell Harrison Cavanaugh who was born on February 21, 2022. He has his mother's eyes and his father's enthusiasm for swimming.



Congratulations to Joseph Saabiye and Jeanne Kamal who welcomed son Oliver George Saabiye who was born on November 28, 2021. He's already saying his first word "Baba" (Arabic for daddy) and will always make sure to greet you with a big smile.

# **SELECT PUBLICATIONS**

Abdel-Rahman EM, Casimir E, Lyons GR, Ma JZ, Gautam JK. Association of Intradialytic Hypotension and Ultrafiltration with AKI-D Outcomes in the Outpatient Dialysis Setting. J Clin Med. 2022 Jun 1;11(11):3147. doi: 10.3390/jcm11113147. PMID: 35683534; PMCID: PMC9181220.

Vijayan A, Abdel-Rahman EM, Liu KD, Goldstein SL, Agarwal A, Okusa MD, Cerda J; AKI!NOW Steering Committee. Recovery after Critical Illness and Acute Kidney Injury. Clin J Am Soc Nephrol. 2021 Oct;16(10):1601-1609. doi: 10.2215/CJN.19601220. Epub 2021 Aug 30. PMID: 34462285; PMCID: PMC8499012.

Murea M, Flythe JE, Anjay R, Abdel-Rahman, EM Gupta N, Kovach C, Vachharajani TJ, Kalantar-Zadeh K, Casino FG, Basile C. Kidney dysfunction requiring dialysis is a heterogeneous syndrome: we should treat it like one. Curr Opin Nephrol Hypertens. 2022 Jan 1;31(1):92-99. doi: 10.1097/MNH.000000000000754. PMID: 34846314.

Lucas CD, Medina CB, Bruton FA, Dorward DA, Raymond MH, Tufan T, Etchegaray JI, Barron B, Oremek MEM, Arandjelovic S, Farber E, Onngut-Gumuscu S, Ke E, Whyte MKB, Rossi AG, Ravichandran KS. Pannexin 1 drives efficient epithelial repair after tissue injury. Sci Immunol. 2022 May 13;7(71):eabm4032. doi: 10.1126/sciimmunol.abm4032. Epub 2022 May 13. PMID: 35559667; PMCID: PMC7612772.

Arandjelovic S, Perry JSA, Zhou M, Ceroi A, Smirnov I, Walk SF, Shankman LS, Cambré I, Onengut-Gumuscu S, Elewaut D, Conrads TP, Ravichandran KS. ELMO1 signaling is a promoter of osteoclast function and bone loss. Nat Commun. 2021 Aug 17;12(1):4974. doi: 10.1038/s41467-021-25239-6. PMID: 34404802; PMCID: PMC8371122.

Owoyemi I, Balogun RA. Frontiers in chronic kidney disease management. J Natl Med Assoc. 2022 Jun;114(3 Suppl 2):S1-S2. doi: 10.1016/j.jnma.2022.05.009. Epub 2022 May 25. PMID: 35643830.

M. Tang, G. Dong, J. Zoellner, **B. Bowman**, E. Abel-Rahman and M. Boukhechba, "Using Ubiquitous Mobile Sensing and Temporal Sensor-Relation Graph Neural Network to Predict Fluid Intake of End Stage Kidney Patients," 2022 21st ACM/IEEE International Conference on Information Processing in Sensor Networks (IPSN), 2022, pp. 298-309, doi: 10.1109/IPSN54338.2022.00031.

Cronk JM, Fafoutis E, Brown MG. Licensing Natural Killers for Antiviral Immunity. Pathogens. 2021 Jul 19;10(7):908. doi: 10.3390/pathogens10070908. PMID: 34358058; PMCID: PMC8308748.

Nozaki K, Maltez VI, Rayamajhi M, Tubbs AL, Mitchell JE, Lacey CA, Harvest CK, Li L, Nash WT, Larson HN, McGlaughon BD, Moorman NJ, Brown MG, Whitmire JK, Miao EA. Caspase-7 activates ASM to repair gasdermin and perforin pores. Nature. 2022 Jun;606(7916):960-967. doi: 10.1038/s41586-022-04825-8. Epub 2022 Jun 15. PMID: 35705808; PMCID: PMC9247046.

HOPE in Action Investigators including Doyle AM. HOPE in action: A prospective multicenter pilot study of liver transplantation from donors with HIV to recipients with HIV. Am J Transplant. 2022 Mar: 22(3): 853-864. doi: 10.1111/ajt.16886. Epub 2021 Nov 25. PMID: 34741800

Blijdorp CJ, Burger D, Llorente A Martens-Uzunova ES, Erdbrügger U. Extracellular Vesicles as Novel Players in Kidney Disease. J Am Soc Nephrol. 2022 Mar;33(3):467-471. doi: 10.1681/ASN.2021091232. Epub 2022 Feb 7. PMID: 35131841; PMCID: PMC8975061.

Kentley J, Allawh R, Rao S, **Doyle A**, Ahmad A, Nadhan K, Proby C, Harwood CA, Chung CL. The burden of cutaneous disease in solid organ transplant recipients of color. Am J Transplant. 2021 Mar;21(3):1215-1226. doi: 10.1111/ajt.16210. Epub 2020 Sep 5.PMID: 32659869.

Heiston EM, Ballantyne A, La Salvia S, Musante L, Erdbrügger U, Malin SK. Acute exercise decreases insulin-stimulated extracellular vesicles in conjunction with augmentation index in adults with obesity. J Physiol. 2022 Jan 26:10.1113/JP282274. doi: 10.1113/JP282274. Epub ahead of print. PMID: 35081660; PMCID: PMC9314457.

Yates AG, Pink RC, Erdbrügger U, Siljander PR, Dellar ER, Pantazi P, Akbar N, Cooke WR, Vatish M, Dias-Neto E, Anthony DC, Couch Y. In sickness and in health: The functional role of extracellular vesicles in physiology and pathology in vivo: Part II: Pathology: Part II: Pathology. J Extracell Vesicles. 2022 Jan;11(1):e12190. doi: 10.1002/jev2.12190. PMID: 35041301; PMCID: PMC8765328.

Martens-Uzunova ES, Blijdorp CJ, Burger D, Erdbrügger U, Llorente A. Urinary Extracellular Vesicles in Urology: Current Successes and Challenges Ahead. Eur Urol. 2022 Jan;81(1):127-128. doi: 10.1016/j.eururo.2021.09.025. Epub 2021 Oct 6. PMID: 34625312.

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. 2021 Jan 13;6(3):813-816. doi: 10.1016/j. ekir.2020.12.028. PMID: 33732995; PMCID: PMC7938067.

# **SELECT PUBLICATIONS**

Kavanagh CR, Zanoni F, Leal R, Jain NG, Stack MN, Vasilescu ER, Serban G, Shaut C, **Kamal J**, Kudose S, Martinho A, Alves R, Santoriello D, Canetta PA, Cohen D, Radhakrishnan J, Appel GB, Stokes MB, Markowitz GS, D'Agati VD, Kiryluk K, Andeen NK, Batal I. Clinical Predictors and Prognosis of Recurrent IgA Nephropathy in the Kidney Allograft. Glomerular Dis. 2022 Jan;2(1):42-53. doi: 10.1159/000519834. Epub 2021 Sep 24. PMID: 35450416; PMCID: PMC9017582.

Kamal J, Doyle A. Immunosuppression and Kidney Transplantation. Handb Exp Pharmacol. 2022;272:165-179. doi: 10.1007/164\_2021\_546. PMID: 34697664.

Knicely DH, Rinaldi K, Snow S, Cervantes CE, Choi MJ, Jaar BG, Thavarajah S. The ABCs of Kidney Disease: Knowledge Retention and Healthcare Involvement. J Patient Exp. 2021 Dec 8;8:23743735211065285. doi: 10.1177/23743735211065285. PMID: 34901415; PMCID: PMC8664299.

Knicely DH\*, Okusa MD. Pathophysiology, Prevention, and Nondialytic Treatment of ATN in Hospitalized Patients. Nephrology Self-Assessment Program. April 2022;21(1):12-28.

Alvarado F, Cervantes CE, Tackett S, Jaar BG, Choi MJ, Thavarajah S, Knicely DH\*. An Interactive Education Program for Advanced CKD: The ABCs of Kidney Disease Program. Kidney Med. 2021 Nov-Dec;3(6):1116-1118.

Wang L, Londono LM, Cowell J, Saatci O, Aras M, Ersan PG, Serra S, Pei H, Clift R, Zhao Q, Phan KB, Huang 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. 2021 Jun 15;81(12):3319-3332. doi: 10.1158/0008-5472.CAN-21-0340. Epub 2021 Apr 16. PMID: 33863778.

Granade ME, Hargett SR, Lank DS, Lemke MC, Luse MA, Isakson BE, Bochkis IM, Linden J, Harris TE. Feeding desensitizes A1 adenosine receptors in adipose through FOXO1-mediated transcriptional regulation. Mol Metab. 2022 Jul 7;63:101543. doi: 10.1016/j.molmet.2022.101543. Epub ahead of print. PMID: 35811051; PMCID: PMC9304768.

Vlachodimou A, de Vries H, Pasoli M, Goudswaard M, Kim SA, Kim YC, Scortichini M, Marshall M, Linden J, Heitman LH, Jacobson KA, IJzerman AP. Kinetic profiling and functional characterization of 8-phenylxanthine derivatives as A2B adenosine receptor antagonists. Biochem Pharmacol. 2022 Jun;200:115027. doi: 10.1016/j.bcp.2022.115027. Epub 2022 Apr 6. PMID: 35395239.

Dolina JS, Lee J, Moore EL, Hope JL, Gracias DT, Matsutani T, Chawla A, Greenbaum JA, Linden J, Schoenberger SP. Developmentally distinct CD4+ Treg lineages shape the CD8+ T cell response to acute Listeria infection. Proc Natl Acad Sci U S A. 2022 Mar 8;119(10):e2113329119. doi: 10.1073/pnas.2113329119. Epub 2022 Mar 3. PMID: 35239442; PMCID: PMC8915796.

Rosin, D.L., J. P. Hall, S. Zheng, L.Huang, S.Campos-Bilderback, R.Sandoval, A. Bree, K. Beaumont, E. Miller, J. Larsen, G. Hariri, N. Kaila, I. M. Encarnacion, J. D. Gale, A. van Elsas, B. A. Molitoris and M. D. Okusa. Human recombinant alkaline phosphatase (Ilofotase Alfa) protects against kidney ischemia-reperfusion injury in mice and rats through adenosine receptors. Front Med. 2022. In Press.

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 2021,16(10):1601-1609, 2021. PMCID: PMC8499012.

Nash, W.T. and M.D. Okusa. Chess not checkers: Complexities within the myeloid response to the acute kidney injury syndrome. Front Med 2021. May 26;8:676688. doi: 10.3389/fmed.2021.676688.

Sun, N, S. Zheng, D.L. Rosin, N. Poudel, J. Yao, H.M. Perry, R.Cao, M.D. Okusa, S. Hu. Development of a photoacoustic microscopy technique to assess peritubular capillary function and oxygen metabolism in the mouse kidney. Kidney Int 100:613-620, 2021

C. Zoccali, A. Ortiz, I.A. Blumbyte, S. Rudolf, A.G. Beck-Sickinger, J. Malyszko, G. Spasowsky, S. Carriazo, D. Viggiano, J. Kurganaite, V. Sarkeviciene, D. Rastenyte, A. Figurek, M. Rroji, M. Christopher, M. Arici, G. Martino, G. Tedeschi, A. Bruchfeld, I. Rychlik, A. Wiecek, M.D. Okusa, G. Remuzzi F. Mallamaci. Neuropeptide Y as a risk factor for cardiorenal disease and cognitive dysfunction in CKD: translational. Nephrol Dial and Transplant. Nephrol Dial Transplant. 37(Suppl 2):ii14-ii23, 2021. PMCID: PMC8713155.

# **SELECT PUBLICATIONS**

Kuwabara, S, E. Goggins and M.D. Okusa. Invited Review: Pathophysiology of Sepsis Associated Acute kidney Injury. Clin J Am Soc Nephrol 17:1050-1069, 2022.

Tanaka, S, S. Zheng, Y. Kharel, R.G. Fritzemeier, T. Huang, D. Foster, N. Poudel, Y. Yamaoka, K.P. Rudnickal J.E. Lipsey, H. V. Radel, S. M. Ryuh, T. Inoue, J. Yao, D.L. Rosin, S.R. Schwab, W.L. Santos, K. R. Lynch, and **M.D. Okusa**. Autocrine signaling of S1P in perivascular cells enhances inflammation and fibrosis in the kidney. In press Sci Trans Med 2022.

Parikh, S.M., A. Agarwal, A. Bajwa, S. Kumar, S.G. Mansour, **M.D. Okusa** and J. Cerda on behalf of the AKINow Initiative of the American Society of Nephrology. Fostering Scientific Innovation to Impact AKI: A Roadmap from ASN's AKINow Basic Science Workgroup, Kidney360 2022. In press.

Nash, W.T., M.S. Yee and M.D. Okusa. Myeloid Response to Acute Kidney Injury. Nephron Clin Practice 2022 in press.

Sun J, Cao Z, Schnackenberg L, Pence L, Yu LR, Choudhury D, Palevsky PM, Portilla D, Beger RD. Serum metabolite profiles predict outcomes in critically ill patients receiving renal replacement therapy. J Chromatogr B Analyt Technol Biomed Life Sci. 2021 Dec 15;1187:123024. doi: 10.1016/j.jchromb.2021.123024. Epub 2021 Nov 6. PMID: 34815179.

Chauss D, Freiwald T, McGregor R, Yan B, Wang L, Nova-Lamperti E, Kumar D, Zhang Z, Teague H, West EE, Vannella KM, Ramos-Benitez MJ, Bibby J, Kelly A, Malik A, Freeman AF, Schwartz DM, Portilla D, Chertow DS, John S, Lavender P, Kemper C, Lombardi G, Mehta NN, Cooper N, Lionakis MS, Laurence A, Kazemian M, Afzali B. Autocrine vitamin D signaling switches off pro-inflammatory programs of TH1 cells. Nat Immunol. 2022 Jan;23(1):62-74. doi: 10.1038/s41590-021-01080-3. Epub 2021 Nov 11. PMID: 34764490; PMCID: PMC7612139.

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. PMID: 33827897; PMCID: PMC8139422.

**Portilla D**, Xavier S. Role of intracellular complement activation in kidney fibrosis. Br J Pharmacol. 2021 Jul;178(14):2880-2891. doi: 10.1111/bph.15408. Epub 2021 Feb 27. PMID: 33555070.

Sahu RK, Xavier S, Chauss D, Wang L, Chew C, Taylor R, Stallcup WB, Ma JZ, Kazemian M, Afzali B, Köhl J, Portilla D. Folic acid-mediated fibrosis is driven by C5a receptor 1-mediated activation of kidney myeloid cells. Am J Physiol Renal Physiol. 2022 Jun 1;322(6):F597-F610. doi: 10.1152/ajprenal.00404.2021. Epub 2022 Apr 4. PMID: 35379003; PMCID: PMC9054266.

Daniels JR, Ma JZ, Cao Z, Beger RD, Sun J, Schnackenberg L, Pence L, Choudhury D, Palevsky PM, Portilla D, Yu LR. Discovery of Novel Proteomic Biomarkers for the Prediction of Kidney Recovery from Dialysis-Dependent AKI Patients. Kidney360. 2021 Nov 25;2(11):1716-1727. doi: 10.34067/kid.0002642021. PMID: 34913041; PMCID: PMC8670726.

Parsons RF, Matar A, Lentine KL, Woodside KJ, Singh N, Alhamad T, Basu A, Cabeza Rivera FH, Cheungpasitporn W, Romeo G, Rao S, Kensinger CD, Parajuli S, Sultan S, Tantisattamo E, Pavlakis M, Cooper M. Pancreas transplantation perceptions and practice: Results from a national US survey. Clin Transplant. 2021 Oct;35(10):e14432. doi: 10.1111/ctr.14432. Epub 2021 Aug 6. PMID: 34291503.

Villard O, Breton MD, Rao S, Voelmle MK, Fuller MR, Myers HE, McFadden RK, Luke ZS, Wakeman CA, Clancy-Oliveri M, Basu A, Stumpf MM. Accuracy of a Factory-Calibrated Continuous Glucose Monitor in Individuals With Diabetes on Hemodialysis. Diabetes Care. 2022 Jul 7;45(7):1666-1669. doi: 10.2337/dc22-0073. PMID: 35485908.

Ricardo AC, Chen J, Toth-Manikowski SM, Meza N, Joo M, Gupta S, Lazarous DG, Leaf DE, Lash JP; STOP-COVID Investigators. Hispanic ethnicity and mortality among critically ill patients with COVID-19. PLoS One. 2022 May 18;17(5):e0268022. doi: 10.1371/journal.pone.0268022. PMID: 35584148; PMCID: PMC9116663.

Elghawy O, Wang JS, Hafey AC, Renaghan AD, Whitehair RM, Kindwall-Keller TL. Minimal Change Disease Secondary to Graft-versus-Host Disease after Allogeneic Hematopoietic Cell Transplant for Myelodysplastic Syndrome. Case Rep Nephrol Dial. 2022 Mar 14;12(1):31-37. doi: 10.1159/000522333. PMID: 35433844; PMCID: PMC8958591.

# **SELECT PUBLICATIONS**

Burnham P, Chen F, Cheng AP, Srivatana V, Zhang LT, Edusei E, Albakry S, Botticelli B, Guo X, Renaghan A, Silberzweig J, Dadhania DM, Lenz JS, Heyang M, Iliev ID, Hayden JA, Westblade LF, De Vlaminck I, Lee JR. Peritoneal Effluent Cell-Free DNA Sequencing in Peritoneal Dialysis Patients With and Without Peritonitis. Kidney Med. 2021 Oct 28;4(1):100383. doi: 10.1016/j.xkme.2021.08.017. PMID: 35072047; PMCID: PMC8767090.

Dougherty SC, Desai N, Cathro HP, Renaghan A. IgA Nephropathy Secondary to Ipilimumab Use. Case Rep Nephrol Dial. 2021 Nov 15;11(3):327-333. doi: 10.1159/000519169. PMID: 34950709; PMCID: PMC8647129.

Hsu CM, Gupta S, Tighiouart H, Goyal N, Faugno AJ, Tariq A, Raichoudhury R, Sharma JH, Meyer L, Kshirsagar RK, Jose A, Leaf DE, Weiner DE; STOP-COVID Investigators. Kidney Recovery and Death in Critically Ill Patients With COVID-19-Associated Acute Kidney Injury Treated With Dialysis: The STOP-COVID Cohort Study. Am J Kidney Dis. 2022 Mar;79(3):404-416.el. doi: 10.1053/j.ajkd.2021.11.004. Epub 2021 Dec 4. PMID: 34871701; PMCID: PMC8641974.

Gupta S, Short SAP, Sise ME, Prosek JM, Madhavan SM, Soler MJ, Ostermann M, Herrmann SM, Abudayyeh A, Anand S, Glezerman I, Motwani SS, Murakami N, Wanchoo R, Ortiz-Melo DI, Rashidi A, Sprangers B, Aggarwal V, Malik AB, Loew S, Carlos CA, Chang WT, Beckerman P, Mithani Z, Shah CV, Renaghan AD, Seigneux S, Campedel L, Kitchlu A, Shin DS, Rangarajan S, Deshpande P, Coppock G, Eijgelsheim M, Seethapathy H, Lee MD, Strohbehn IA, Owen DH, Husain M, Garcia-Carro C, Bermejo S, Lumlertgul N, Seylanova N, Flanders L, Isik B, Mamlouk O, Lin JS, Garcia P, Kaghazchi A, Khanin Y, Kansal SK, Wauters E, Chandra S, Schmidt-Ott KM, Hsu RK, Tio MC, Sarvode Mothi S, Singh H, Schrag D, Jhaveri KD, Reynolds KL, Cortazar FB, Leaf DE; ICPi-AKI Consortium Investigators. Acute kidney injury in patients treated with immune checkpoint inhibitors. J Immunother Cancer. 2021 Oct;9(10):e003467. doi: 10.1136/jitc-2021-003467. PMID: 34625513; PMCID: PMC8496384.

Churpek MM, Gupta S, Spicer AB, Hayek SS, Srivastava A, Chan L, Melamed ML, Brenner SK, Radbel J, Madhani-Lovely F, Bhatraju PK, Bansal A, Green A, Goyal N, Shaefi S, Parikh CR, Semler MW, Leaf DE; STOP-COVID Investigators. Machine Learning Prediction of Death in Critically Ill Patients With Coronavirus Disease 2019. Crit Care Explor. 2021 Aug 19;3(8):e0515. doi: 10.1097/CCE.000000000000515. PMID: 34476402; PMCID: PMC8378790.

Jezmir JL, Bharadwaj M, Chaitoff A, Diephuis B, Crowley CP, Kishore SP, Goralnick E, Merriam LT, Milliken A, Rhee C, Sadovnikoff N, Shah SB, Gupta S, Leaf DE, Feldman WB, Kim EY; STOP-COVID Investigators. Performance of crisis standards of care guidelines in a cohort of critically ill COVID-19 patients in the United States. Cell Rep Med. 2021 Sep 21;2(9):100376. doi: 10.1016/j.xcrm.2021.100376. Epub 2021 Jul 28. PMID: 34337554; PMCID: PMC8316067.

Friedman AN, Guirguis J, Kapoor R, Gupta S, Leaf DE, Timsina LR; STOP-COVID Investigators. Obesity, inflammatory and thrombotic markers, and major clinical outcomes in critically ill patients with COVID-19 in the US. Obesity (Silver Spring). 2021 Oct;29(10):1719-1730. doi: 10.1002/oby.23245. Epub 2021 Aug 6. PMID: 34109768.

Perazella MA, Rosner MH. Drug-Induced Acute Kidney Injury. Clin J Am Soc Nephrol. 2022 Mar 10:CJN.11290821. doi: 10.2215/CJN.11290821. Epub ahead of print. PMID: 35273009.

Rosner MH, DeMauro Renaghan A. Disorders of Divalent Ions (Magnesium, Calcium, and Phosphorous) in Patients With Cancer. Adv Chronic Kidney Dis. 2021 Sep;28(5):447-459.e1. doi: 10.1053/j.ackd.2021.09.005. PMID: 35190111.

Rosner MH, Husain-Syed F, Reis T, Ronco C, Vanholder R. Uremic encephalopathy. Kidney Int. 2022 Feb;101(2):227-241. doi: 10.1016/j.kint.2021.09.025. Epub 2021 Nov 1. PMID: 34736971.

Kalantari K, Rosner MH. Recent advances in the pharmacological management of sepsis-associated acute kidney injury. Expert Rev Clin Pharmacol. 2021 Nov;14(11):1401-1411. doi: 10.1080/17512433.2021.1978287. Epub 2021 Sep 14. PMID: 34493146.

Rosner MH, Reis T, Husain-Syed F, Vanholder R, Hutchison C, Stenvinkel P, Blankestijn PJ, Cozzolino M, Juillard L, Kashani K, Kaushik M, Kawanishi H, Massy Z, Sirich TL, Zuo L, Ronco C. Classification of Uremic Toxins and Their Role in Kidney Failure. Clin J Am Soc Nephrol. 2021 Jul 7;16(12):1918–28. doi: 10.2215/CJN.02660221. Epub ahead of print. PMID: 34233920; PMCID: PMC8729494.

Yessayan LT, Szamosfalvi B, Rosner MH. Management of dysnatremias with continuous renal replacement therapy. Semin Dial. 2021 Nov;34(6):472-479. doi: 10.1111/sdi.12983. Epub 2021 Jul 3. PMID: 34218456.

# **SELECT PUBLICATIONS**

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. 2021;46(2):142-151. Doi: 10.1159/000513014. Epub 2021 Apr 12. PMID: 33845480.

Hall R, Morton S, Wilson J, Kim D, Colón-Emeric C, Scialla J, Platt A, Ephraim P, Boulware L, Pendergast J. Development of an Administrative Data-based Frailty Index for Older Adults Receiving Dialysis. Kidney360. 2022;;10.34067/KID.0000032022.

Cavalier J, Zhao C, Scialla J, Bedoya A, Goldstein B. Performance of the National Early Warning Score in Hospitalized Patients With Kidney Failure on Maintenance Hemodialysis. Kidney Medicine. 2022;:100506.

Lunyera J, Diamantidis CJ, Bosworth HB, Patel UD, Bain J, Muehlbauer MJ, Ilkayeva O, Nguyen M, Sharma B, Ma JZ, Shah SH, Scialla JJ. Urine tricarboxylic acid cycle signatures of early-stage diabetic kidney disease. Metabolomics. 2021 Dec 20;18(1):5. doi: 10.1007/s11306-021-01858-4. PMID: 34928443.

Pourafshar S, Sharma B, Kranz S, Mallawaarachchi I, Kurland E, Ma JZ, Scialla JJ. Patterns of Fruit and Vegetable Intake in Adults with and without Chronic Kidney Disease in the United States. J Ren Nutr. 2022 Jul 4:S1051-2276(22)00121-2. doi: 10.1053/j.jrn.2022.06.007. Epub ahead of print. PMID: 35798188.

Duong CN, Akinlawon OJ, Gung J, Noel SE, Bigornia S, Flanagan K, Pourafshar S, Lin PH, Davenport CA, Pendergast J, Scialla JJ, Tucker KL. Bioavailability of Phosphorus and Kidney Function in the Jackson Heart Study. Am J Clin Nutr. 2022 May 2:nqac116. doi: 10.1093/ajcn/nqac116. Epub ahead of print. PMID: 35511217.

Zhang J, Fuhrer T, Ye H, Kwan B, Montemayor D, Tumova J, Darshi M, Afshinnia F, Scialla JJ, Anderson A, Porter AC, Taliercio JJ, Rincon-Choles H, Rao P, Xie D, Feldman H, Sauer U, Sharma K, Natarajan L. High-Throughput Metabolomics and Diabetic Kidney Disease Progression: Evidence from the Chronic Renal Insufficiency (CRIC) Study. Am J Nephrol. 2022;53(2-3):215-225. doi: 10.1159/000521940. Epub 2022 Feb 23. PMID: 35196658; PMCID: PMC9116599.

Yan G, Nee R, Scialla JJ, Greene T, Yu W, Cheung AK, Norris KC. Estimation of Black-White Disparities in CKD Outcomes: Comparison Using the 2021 Versus the 2009 CKD-EPI Creatinine Equations. Am J Kidney Dis. 2022 Jan 7:S0272-6386(21)01053-2. doi: 10.1053/j.ajkd.2021.12.004. Epub ahead of print. PMID: 35007626.

Bhavsar NA, Davenport CA, Yang LZ, Peskoe S, Scialla JJ, Hall RK, Tyson CC, Strigo T, Sims M, Pendergast J, Curtis LH, Boulware LE, Diamantidis CJ. Psychosocial determinants of cardiovascular events among black Americans with chronic kidney disease or associated risk factors in the Jackson heart study. BMC Nephrol. 2021 Nov 11;22(1):375. doi: 10.1186/s12882-021-02594-6. PMID: 34763649; PMCID: PMC8582093.

Venkatadri R, Sabapathy V, Dogan M, Mohammad S, Harvey SE, Simpson SR, Grayson JM, Yan N, Perrino FW, Sharma R. Targeting Bcl6 in the TREX1 D18N murine model ameliorates autoimmunity by modulating T-follicular helper cells and germinal center B cells. Eur J Immunol. 2022 May;52(5):825-834. doi: 10.1002/eji.202149324. Epub 2022 Feb 15. PMID: 35112355; PMCID: PMC9089306.

Venkatadri R, Sabapathy V, Dogan M, Sharma R. Targeting Regulatory T Cells for Therapy of Lupus Nephritis. Front Pharmacol. 2022 Jan 6;12:806612. doi: 10.3389/fphar.2021.806612. PMID: 35069220; PMCID: PMC8775001.

Sabapathy V, Costlow G, Venkatadri R, Dogan M, Kumar S, Sharma R. Advances and Challenges in Kidney Organoids. Curr Stem Cell Res Ther. 2022;17(3):226-236. doi: 10.2174/1574888X16666210804113626. PMID: 34348631.

Parsons AS, Clancy CB, Rencic JJ, Warburton KM. Targeted Strategies to Remediate Diagnostic Reasoning Deficits. Acad Med. 2022 Apr 1;97(4):616. doi: 10.1097/ACM.000000000004244. PMID: 34261865.

Parsons AS, Warburton KM, Martindale JR, Rosenberg IL. Characterization of Clinical Skills Remediation: A National Survey of Medical Schools. South Med J. 2022 Mar;115(3):202-207. doi: 10.14423/SMJ.000000000001361. PMID: 35237839.

**Warburton KM**. Approaching Well-Being 2.0: Nephrologists as Humans, Not Heroes. Kidney Med. 2022 Feb 4;4(3):100426. doi: 10.1016/j.xkme.2022.100426. PMID: 35386607; PMCID: PMC8978141.

Nishio-Lucar A, **Warburton KM**, Brayman KL. Donor Advocacy. Living Donor Organ Transplantation, 2nd edition. 2022 In press

# **STAFF PROFILE - Jacqueline McCauley**



Tell us a little bit about yourself.

I've been a permanent employee at UVA for two years after a long stint working in both the customer service and hospitality/tourism industry.

## Why Healthcare?

I love that my position here encompasses and exposes me to the trifecta of education, research, and healthcare. I've always been fascinated by the amount of work that goes into advancing medicine and technology. My grandmother also worked as a secretary within UCSD's Research Division of Nephrology decades ago. She loved her position and was over the moon when I told her I was offered the same position within UVA's division!

"When I worked for the division of nephrology, the nephrologists, clinical coordinators, and more were such a special bunch," she fondly reminisced. This cannot be more true for our team here at UVA.

## What brought you to Charlottesville?

I've lived in Virginia most of my life but was drawn into finally moving out of a small town and into a more metropolitan area. I also really enjoy the city's many fantastic eateries and artsy atmosphere. In addition, my husband was born and raised here and had always wanted

to return someday. We couldn't be happier.

## What excites you about your work?

I love learning not only about what is going on with various studies but also learning about myself. As someone who has had type 1 diabetes for a long time, I know the importance of taking care of your kidneys. The American Diabetes Association also does close work with our division which is extra cool!

## What are you usually doing on the weekend?

On a typical weekend, you can usually find me tending to my garden, passionately playing my piano, and laughing at reality TV with my husband.

## What about you would surprise us?

I am a quiet thrill-seeker (sorry, Mom!) who loves great heights, hot air balloon rides, and ziplining over crocodiles (something I have done before and would do again)! A special shout-out to Gatorland in Florida for giving me that last opportunity.



Do you collect anything?

I do not collect anything presently; however, I own over 200 Beanie Babies from my childhood when I did collect them on a regular basis!

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

I wish I had the ability to dance well!

What is the best advice anyone ever gave you?

The best advice anyone's ever given me is "There's no point in worrying about what cannot be changed; only focus on what you can change."



# FELLOW PROFILE - Bobak Sharifi



Tell us a little bit about yourself.

I was born and raised in VA and have been a Virginian my entire life. I've been at UVA for two years, and after completing my Nephrology Fellowship, I am pursuing a career in academic nephrology. I'm grateful for the opportunity to stay here and give back to my community. I love my family and my dog Bubba!

Why Education?

The discovery of medicine for me was personally fascinating. Early in my journey, I knew that forwarding medicine to the next generation was one of the most important aspects of being a physician. Engaging with learners is a unique experience, and as an educator, I take great responsibility for nurturing the growth of our future doctors.

What brought you to Charlottesville? My family is close by, and I love Virginia!

What excites you about your work?

Developing meaningful connections with a variety of patients, interesting physiology, and the opportunity to educate/learn.

This is why I love being a part of UVA.

What are you usually doing on the weekend? Barbecues with the family, pickup basketball, and watching MMA/boxing events.

Favorite activity spot? Tail of the Dragon.

Who is the person you admire most, and why?

My brother Sasha; seeing him overcome challenges at a young age gave me a no-excuse mentality. We've gone through our medical journey together, and I would not be here without him. He is currently training in cardiology, and we plan to cultivate a cardiorenal practice in the near future.

What is the best advice anyone ever gave you? Own your mind.



What's the most unusual thing you have ever eaten? Just this past year, the renal nurses fed me a cricket... delicious!

Do you collect anything? Basketball and baseball cards.



# **FELLOW PROFILE - Faeq Husain Syed**



Tell us a little bit about yourself.

I was born and raised in Germany as the youngest of three children. I am a Clinical Nephrologist, and Pulmonologist at the University Hospital in Giessen, a small town near Frankfurt am Main. Since 2015, I have been working as a clinician-scientist, which has broadened my horizon in many ways. The renowned research and welcoming faculty at UVA brought me to Charlottesville for one year.

Why Healthcare?

I was always interested in science and how things work, but probably seeing my late grandfather passing away from a preventable disease made me pursue a career in healthcare, and it has been one of my best life decisions. Being a physician at the bedside gives me a real-world understanding of patient's needs, and this understanding guides my research. Research also allows me to interact with people worldwide and be constantly challenged to question my premises and produce new knowledge.

What excites you about your work?

As cliché as it sounds, true privilege and honor come with caring for patients and helping them through difficult times. Working with healthcare providers and scientists creates a stimulating environment to discover, innovate, and solve patient care problems.

What do you consider to be your greatest achievement outside the professional realm? Finding the perfect wife to spend my life with and making some lifelong friends.

Next life? Open a Pâtisserie in Paris.

What are you usually doing on the weekend?
Outside work, I spend most of my time with my family and enjoy the outdoors.

What is the one thing you always have in your fridge?

Kinder-Riegel and Milch-Schnitte, both popular snacks sold in Europe – happy that they are also available in the US.

Who is the person(s) you admire most, and why?

My parents for their constant love and support; my wife for her kindness, thoughtfulness, and her caring ways.

What is the best advice anyone ever gave you?

There is a story behind every person. Listen. Be humble. Don't treat people as bad as they are; treat them as good as you are.





# **FACULTY PROFILE - Catarina Regis**

Tell us a little bit about yourself.

Before joining UVA in January 2022, I worked as a nephrologist in private practice in Richmond (seeing patients at the office and several hospitals and working as a medical director of dialysis clinics).

Why Healthcare?

I enjoy taking care of people. Being able to help patients manage their health issues brings me fulfillment and happiness.

What excites you about your work?

The opportunity to work in a major academic institution while practicing what I love.

What do you consider to be your greatest achievement outside the professional realm?

Being a full-time working mom and my daughter's best friend.

What are you usually doing on your time off?

I enjoy spending time with my family and pets at home or outdoors, listening to music, taking pictures, and traveling to different destinations.



How did you meet your partner?

In our hometown in Brazil, a couple of years before we both moved to the USA. We have been together for thirteen years now and have an 8-year-old daughter (Julia): our best creation together.

What is your favorite vacation/activity spot? Salvador, Bahia, Brazil (where I can spend time with my family and lifetime friends)

Who is the person you admire most, and why?

I admire my dad and mom equally for raising five kids and being wonderful parents (always being there for us despite working full-time). My siblings and I are always in touch with them and with each other while living on different continents. Our bond and friendship are a treasure to me.

What is the best advice anyone ever gave you? Always be true to yourself and do what you love.

What is a talent or skill you don't have that you wish you did? I would love to speak more languages and type my notes faster.

What's the most unusual thing you have ever eaten? An alligator dish in Louisiana

Do you collect anything?

Postcards from the places I have visited

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

I was a high school tutor when I was fifteen. I was able to continue this during Medical School too. Teaching has been a passion since I was young. I first found out when I was around seven that I enjoyed teaching people with little or no access to school. I taught elementary school subjects on my dad's farm during summer vacation.

