

# MEDICINE

## NEWS FROM THE DEPARTMENT OF MEDICINE

# MATTERS

### MESSAGE FROM THE CHAIR

MAY 2023



This month we bring in two new Department of Medicine traditions. First, the Department hosted the first retreat focused on mid-to-later-career faculty, where we discussed key issues such as wellness, financial planning, and retirement. A highlight of the retreat was hearing from some recently retired faculty and learning about their journeys and perspectives. Thanks to Taison Bell, Stewart Babbott, and Terri Washington for organizing this special event. In addition, this issue of Medicine Matters

features a new section where members of the Department can share a tradition or celebration and offers us a chance to learn more about each other and other cultures. Thanks to Dana Schalk for sharing her special Easter celebration. Lastly, a word of thanks to our Department of Medicine webmaster and newsletter editor, Kim Kelley-Wagner, who compiles the huge amount of material highlighting the events in the DOM month after month. I am sure you will agree that the newsletter is amazing.

Enjoy reading this month's edition highlighting the Division of Asthma, Allergy and Immunology led by Dr. Michael Nelson. This group of faculty and staff leads impressive developments. Some of these highlights: Dr. Emily McGowan and colleagues were awarded an R01 grant to study eosinophilic esophagitis, and Dr. Monica Lawrence was selected as a counselor to the executive committee of the Clinical Immunology Society. The list is extensive; please read all about this world-class group.

It is also time to recognize one of our faculty who just received her first R01 NIH grant, Dr. Kate McManus. Her grant is entitled: "Viral Suppression for People with HIV with Low Incomes: Study of Disparities, Health Equity, and Best Practices." Congratulations to Kate on this fantastic work!

Lastly, enjoy the beautiful weather. Relax and recharge.

With best wishes,

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

 **UVA Health** | DEPARTMENT OF MEDICINE

#### MISSION

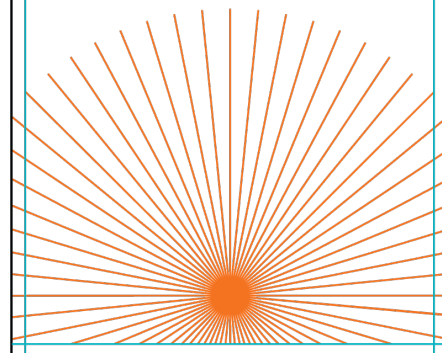
We are dedicated to preventing disease and treating illness, educating and inspiring future leaders in the field of internal medicine, and supporting innovative biomedical research.

#### 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** . . . ▶

**MINDFULNESS MATTERS** . . . ▶

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# UVA Health

# DOM UPDATES & NOTES

## DOM Financial Update

### Department of Medicine Summary of Consolidated Financials FY21 as of March, 2023

	Budget YTD	Actual YTD	\$ Variance YTD
Work RVUs	912,808	890,134	(22,674)
Clinical Receipts (NPSR)	60,060,352	56,903,218	(3,157,133)
Total Revenues	160,422,221	163,511,002	3,088,781
Total Expenditures	158,956,499	159,992,104	(1,035,605)
<b>Net Income</b>	<b>1,465,722</b>	<b>3,518,898</b>	<b>2,053,176</b>

#### Summary Explanation of Variance:

For the fiscal year through March 2023 DOM reported a consolidated net gain of \$3.5M and a favorable variance to YTD net income budget of \$2.0M. Clinical receipts underperformed budget by \$3.7M due to unfilled positions, delayed starts, reduced bed capacity open and unsigned encounters and unplanned leave. Total revenues include \$961K deficit support revenue accrual, \$1.6M unbudgeted MOU support and \$2.0M unbudgeted gifts and \$1.2M Endowment revenue recorded for April through June. Total expenditures variance is impacted by savings in personnel charges due to unfilled faculty countered by spending on unbudgeted new grant awards and faster spending on existing research studies.



Eric Hendrickson PhD



Jie Sun PhD



Randall Moorman, MD



Emily McGowan MD PhD



Monica Lawrence MD



Josh Colston PhD



Silas Culver MD



Katie Love MD



Faeq Husain-Syed PhD

## Awards and Achievements

Congratulations to **Dr. Eric Hendrickson** (Division of Hematology and Oncology), who has been awarded a five-year, \$2.3 million grant from the NCI to study A-NHEJ Gene Pathways that regulate cell proliferation causing cancer. [Read more...](#)

Congratulations to **Dr. Jie Sun** (Division of Infectious Diseases) and colleagues on the publication of *"Tissue-resident Memory T Cells and Lung Immunopathology."*

Congratulations to **Dr. Randall Moorman** (Division of Cardiovascular Medicine) along with primary co-investigator Ishan Williams who will be supported by a new \$5.9 million National Institutes of Health grant. The two UVA researchers will explore ways to improve the use of artificial intelligence in health care for a wider diversity of patient populations. [Read more...](#)

Congratulations to **Dr. Emily C. McGowan** (Division of Asthma, Allergy and Immunology), and colleagues who have been awarded a \$4M NIH RO1 Grant to Study IgG4 in Eosinophilic Esophagitis (EoE). Ultimately, this work will provide novel insights into the mechanisms of food-induced inflammation in EoE and could lead to novel diagnostic assays and therapies. Collaborators on the project include **Bryan Sauer, MD MHS, Shyam Raghavan, MD, Sarah Ewald, PhD, Larry Borish, MD, and Judith Woodfolk, PhD.**

Congratulations to **Dr. Monica Lawrence** (Division of Asthma, Allergy & Immunology) on her selection to the Clinical Immunology Society (CIS) Executive Committee as Councilor. Her 3-year term starts in May.

Congratulations to **Drs. Josh Colston** (Division of Infectious Diseases), **Silas Culver** (Division of Endocrinology and Metabolism), and **Kaitlin Love** (Division of Endocrinology and Metabolism) who have obtained K awards for their research in fiscal year 2023! [Read more...](#)

Congratulations to **Dr. Faeq Husain-Syed** (visiting research faculty, Division of Nephrology) on the publication of *"Associations Between eGFR and Albuminuria with Right Ventricular Measures: the MESA-Right Ventricle Study"* in Oxford University Press. Dr. Julia Scialla, co-author.



# DOM UPDATES & NOTES

## 2023 Mid-Career and Senior Faculty Retreat

The DOM recently held a mid-career and senior faculty retreat at Morven Farm. The weather was beautiful, and the speakers were exceptional. Here are some highlights.



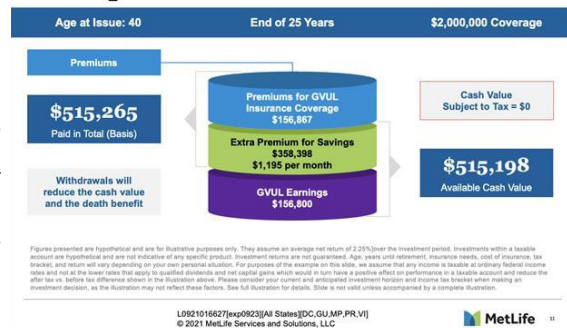
Kim Penberthy, PhD, ABBP, from the Clinician Wellness Program, spoke to us about wellness in the workplace. A theme of her talk was avoiding the “Zone of Delusion” on the continuum of Performance versus Pressure at work. The Zone of Delusion is where stress levels are so high that we become less effective and mentally trick ourselves into rationalizing that it’s ok. We shouldn’t normalize this feeling. This session was fantastic, and Kim is available to meet with providers to begin to unpack these concepts. I recently met with her after a tough MICU rotation and found her counsel invaluable. Please consider using her as a resource!

Next, we held a benefits and finances workshop with Christine Rudge from UPG, Jonathan Roman from MetLife, and Jeff Burton from UPG. These sessions were great because they exposed a lot of knowledge gaps that we still have when it comes to understanding our benefits package. The

takeaway is that it’s nice to be provided with great benefits and financial vehicles, but it can also be complicated, and we can become overwhelmed. So, unless you fully understand everything on the slide below, I suggest you meet with Christine to discuss your benefits. You may find a better way to use your policy or save towards your goals!

Our highlight event was a panel of recently retired faculty, including John Dent (Cardiology), Dan Becker (Primary Care), Madaline Harrison (Neurology), Jerry Donowitz (Infectious Diseases), and John Voss (Primary Care). A few memorable quotes and reflections:

### Tax-treatment of GVUL premiums – Example



“Always do the right thing.” Dr. Donowitz said this in the context of staying faithful to your calling despite the many sources of pressure we encounter.

“I wish I had been more comfortable with change.” Dr. Voss said this when asked what was the one thing he wished he had known at the mid and later stages of his career. All the panelists spoke about how their careers evolved unexpectedly and how we shouldn’t be afraid of self-reflection and reinvention. Our takeaway from the event was to expect it instead.

“I retired from EPIC.” Dr. Becker said this when explaining to his colleagues why he returned to part-time work despite retiring with

the intention to step away. What’s interesting is that absolutely everyone understood what he meant, and it highlighted how improving the EHR workflow needs to be an absolute priority for the Department moving forward.

Our last event was a feedback session with faculty to discuss how the Department can better serve your needs. We received lots of helpful feedback from faculty on ways to improve the work environment, balance work with our personal lives, and continue building our sense of community within the DOM. Overall it was a wonderful day, and I want to thank Stewart Babbott for helping to lay the vision and coordinating much of the programming.

We aim to make the Department of Medicine the best place to work and build a successful career. To do that, we welcome more of your input and feedback on how we can improve. Link to more photos from the retreat are [here](#).



~ Taison Bell, MD



## DOM UPDATES & NOTES

### Fellowship Education Update

#### AAIM Spring Conference 2023

The rising Chief Residents for the 2023-2024 academic year, and members of the education administrative team traveled to Austin, Texas to attend the Alliance for Academic Internal Medicine (AAIM) spring conference in April.



23-24 Chief Residents from left: Joe Mort, Margo Tanner, Kara Harrison, John Popovich

Team members participated in multiple workshops, plenary, and networking sessions and got in time to enjoy some fine Texas grub!

Shout out to Joy Hilton, Brittany Davis, and Terry Bennett, who led a workshop and presentation on "Milestones for Program Administrators 2.0."



Admin Team members from left: Joy Hilton, Brittany Davis, Terry Bennett, and Karen Ward

Finally, congratulations to Karen Ward, named the Chair-Elect for AAIM's clerkship administrators' advisory council.  
~Dr. Brian Uthlaut, Vice Chair for Education and Residency Program Director

# EXCELLENCE EXCELLENCE EXCELLENCE

## Congratulations to US ALL!

For the EIGHTH straight year, the Department of Medicine has been honored by the graduating medical students with the **Mulholland Department Teaching Award!** This marks 16 of the last 20 years for Medicine & stands as a phenomenal testimony to the quality and commitment of teaching and mentorship provided by our Department. Each year, your role working with our students is one of the most, if not THE MOST, impactful mentoring that they receive during the clerkship year.



# DOM UPDATES & NOTES

## Traditions and Celebrations



Dana and family

Welcome to our very first “Traditions and Celebrations” feature, where Dana Schalk (Cellular Therapy Laboratory Manager, Cancer Center, Division of Hematology/Oncology) shares with us two Polish traditions her family includes in their Easter time celebrations; “pisanki” and “paczki.”

Dana tells us, “I come from a fairly strong Polish heritage, and many people who populate my hometown (north of Detroit) are descended from Polish immigrants. An Easter tradition commonly practiced in Poland and Ukraine is the decoration of eggs called “pisanki.” In my hometown, you can find these for sale at the numerous Catholic church bazaars in the region. My Polish grandmother had several she brought out to display every Easter.”



The eggs are carefully drained of their contents (usually by blowing out the raw egg through a small pinhole), then beautifully painted by hand or dyed sequentially, using wax to create exquisite designs.”

The word ‘pisanki’ comes from the Polish verb pisac, meaning to write or paint. As in many other cultures, eggs symbolize rebirth and life; decorating them this way has been a traditional part of Polish and Ukrainian culture for centuries. The oldest historical record of pisanki dates back to Poland in the 10th century AD, and archaeologists occasionally find fragments of them in medieval sites.

Traditionally, pisanki have been decorated by women during the Lenten season. A time of fasting and spiritual purification, so the ornate eggs, with their bright colors and designs, are symbolic of this particular time of year,

To learn more about pisanki and how to make them visit: [Beginner attempts at Pysanky](#)

Dana continues, “Another Polish Lenten tradition is the consumption of paczki. Paczki is a deep-fried doughnut with a sweet filling made using ingredients traditionally forbidden during the Lenten fasting period. They have been a known tradition in Poland since the middle ages.



In America, we eat these on ‘Fat Tuesday.’ But in Poland, they eat them on ‘Fat Thursday,’ the Thursday preceding Ash Wednesday, which is the start of Lent. The best paczki come from traditional Polish bakeries, which were numerous in my hometown and several areas of the Detroit region. But Kroger also sells an Americanized version every year.” Here is a [recipe for paczki](#) if you want to try making this sweet treat.”



Trinity, age 3, eating her first paczki on Fat Tuesday a few years ago. Regrettably, it was 2020 - so we couldn’t travel home to go to a Polish bakery and had to settle for the Kroger paczki that year.

Thank you very much, Dana, for sharing two wonderful holiday family traditions with us! If you have a celebration, custom, special food or recipe you would like to share, please get in touch with Kim Kelley-Wagner at: [kak2j@uvahealth.org](mailto:kak2j@uvahealth.org)



# DOM UPDATES & NOTES

## Welcome to the World!



Congratulations to **Dr. Chelsea Lau** (current chief resident) and husband Buzz (Becker) who welcomed daughter Thea Adalyn on April 17, 2023.



**FOLLOW  
DOM**

## Research in Motion

**Research in Motion  
Video: Tom Loughran, MD,  
Professor of Medicine,  
Division of Hematology &  
Oncology**

In our new School of Medicine Research in Motion video series, we asked our researchers three questions: What do you do? What do you love about your research? How will it impact human health?

**WATCH VIDEO**

## COME SEE HOOS RUNNING WITH GIM!

'Run with GIM' (General Internal Medicine) would love for all interested to join us at 5pm every Wednesday across from the South garage on the corner of Jeanette Lancaster and Crispell Dr.

Run with GIM is a non-competitive, all-inclusive running group focused on building wellness and growing camaraderie.

**Do You Have  
News You'd  
Like To Share  
on Medicine  
Matters?**

**Contact Kim Kelley-Wagner  
kak2cj@virginia.edu  
434.328.0680**



## MINDFULNESS FOR HEALTHCARE EMPLOYEES

Mindfulness for Healthcare Employees  
Free 2023 Course  
Live online via Zoom  
Mondays, May 1 – June 19, 2023  
6:30pm – 8:30pm  
Retreat: Saturday, June 10, 2023

**REGISTER**

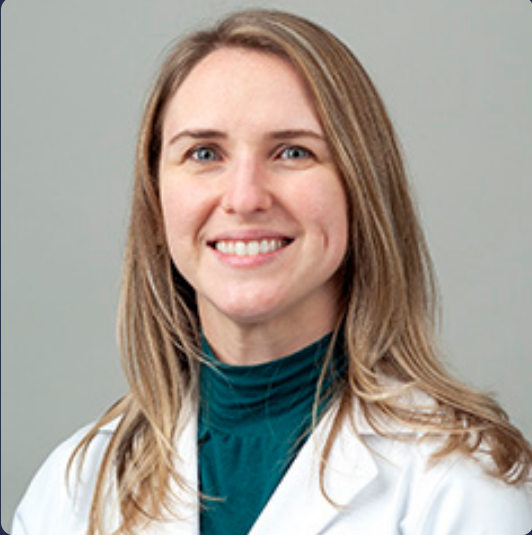


**Mindfulness Matters  
A Newsletter from the UVA  
Mindfulness Center**



## In the Media

### Better Than Any Drug An Interview with Dr. Katie Love (UVA School of Medicine News)



In order to better understand the barriers people with type 1 diabetes face when beginning or sticking with an exercise program, some questions and answers with Dr. Katie Love, a UVA Endocrinologist and Principal Investigator for HSR210198-Therapeutic Strategies for Microvascular Dysfunction in Type 1 Diabetes.

[READ MORE](#)

### Episodes of the Podcast, “This Medicine Life” with Dr. Taison Bell

Check out a podcast called “This Medicine Life,” with DoM host Taison Bell, MD

Episode 6 of This Medicine Life is up! Dr. Bell sits down again with Dr. Kat Egressy from the University of Virginia Department of Medicine to discuss her trip to Ukraine. We cover providing care in a conflict zone, cultural identity, and much more.

[CLICK TO LISTEN](#)



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## Research in Motion

### Research in Motion Video: Coleen McNamara, MD, Professor of Medicine, Division of Cardiovascular Medicine

In our new School of Medicine Research in Motion video series, we asked our researchers three questions: What do you do? What do you love about your research? How will it impact human health?

[WATCH VIDEO](#)



UVA WOMEN IN INTERNAL  
MEDICINE NETWORK TWITTER

## Research in Motion

### Research in Motion Video: Mitchell H. Rosner, MD, Chair, Division of Nephrology

In our new School of Medicine Research in Motion video series, we asked our researchers three questions: What do you do? What do you love about your research? How will it impact human health?

[WATCH VIDEO](#)

DEPARTMENT OF MEDICINE  
**MEDICINE GRAND ROUNDS**  
UNIVERSITY OF VIRGINIA

# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## Message from Michael Nelson, MD PhD, Asthma, Allergy & Immunology, Division Chief



**Michael Nelson, MD PhD**

This year, I want to highlight just how much the University of Virginia Asthma, Allergy, and Immunology Division is defined by its people. We are finding new and exciting ways to contribute to UVA Health's new mission of transforming health and inspiring hope for all Virginians and beyond.

Highlights of this past year abound, beginning with Swineford 2023. It's hard to top last year's 60th anniversary, but by all accounts, we did. This event is one of UVA's longest-running and most successful CME events that is led by Dr. Platts-Mills. Distinguished invited extramural speakers included Drs. Esther Florsheim (Arizona State University), Jonathan Hourhane (Royal College of Surgeons in Ireland), Amy Klion (NIH), Parameswaran Nair (McMaster University), Whitney Stevens (Northwestern), Cosby Stone (Vanderbilt) and Kelli Williams (Medical University of South Carolina). In keeping with Swineford tradition, talks were cutting edge and immediately applicable to the care of patients spanning the future of biologics to neurobiology of food aversion, genetic testing for inborn errors of immunity, and vaccine allergic reactions, among many others, including IL-33 in Asthma presented by Dr. Anne Sperling from the Pulmonary

and Critical Care Division. The event pleasantly concluded with a reception in the Rotunda. Join us next year for Swineford 2024 on April 12-13.

We are indeed transforming health through research. The Platts-Mills and Wilson labs continued their impressive work on alpha-gal hypersensitivity, including generating preliminary challenge data with genetically modified pig meat. The Borish, Woodfolk, and Lawrence labs received new funding to further their work on rhinovirus-induced asthma pathogenesis. They resumed their exciting Viral Infection in Asthma (VIA) Study paused by the pandemic. The Woodfolk lab expanded its work and collaborations on the UVA COVID-19 Recovery Cohort and biorepository. The McGowan lab has newly identified a role for IgG4 in eosinophilic esophagitis and expanded research on minimally invasive procedures advancing EoE diagnostics and clinical investigation. Congratulations on the initial NIH "R" award funding for Dr. McGowan (R01) and Dr. Wilson (R21)!

Our Division team members continue to be recognized for their excellence in all areas. At the 2022 American College of Asthma, Allergy, and Immunology, Dr. Kelly Boyd, 2nd-year allergy-immunology fellow, received the 1st Place Clemons von Pirquet national research award, and Dr. Will Eschenbacher, 2021 fellowship graduate, received 1st Place in the inaugural journal fellow in training award. Dr. Judith Woodfolk and her COVID-19 Biorepository and Recovery Cohort team received the Dean's School of Medicine Team Science Award. Monte Parsons was awarded the Leonard W. Sandridge Outstanding Contributor Award for his longstanding contributions to GME and healthcare administration extending well beyond our Division's walls. Dr. Anna Smith, Dr. Jeff Wilson, and Dr. Emily McGowan received the Department of Medicine Excellence Awards this year. Dr. Monica Lawrence was awarded the 2022 DOM Dr. Diane Snustad Award. Drs. Glenda Canderan and Lyndsey Meuhling were recognized with the Shyr-Te Ju Award during the 2022 Carey Marshall Thorner Scholars' Day for their work on long COVID. Dr. Anna Smith was selected as faculty for the pre-clerkship at the School of Medicine's Foundations of Clinical Medicine. Dr. Tim Kyin expertly led our community and regional outreach identifying new means of meeting Virginia patient needs closer to where they live. Dr. Kyin and Rebecca Wade lead an awe-inspiring clinic team enabling care for more patients than ever at our Northridge outpatient clinic.

We said farewell and extended many thanks to Dr. Behnam Keshavarz, Bob Young, and Sandra Arcoraci. (Chief's Message continued next page)



# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

We are delighted to welcome Dr. Lindsey Muehling as our new Research Assistant Professor and Mutinta Bulanda as our new Division Administrator. Finally, 2022 presented our first opportunity to come together as an entire Division with family and clinic personnel since the onset of the pandemic.

This next year provides new opportunities to contribute even more to UVA Health and the School of Medicine's strategic initiatives and the University's Great and Good strategic plan. In his iconic book *Good to Great*, Jim Collins reminds us that the key to success is getting the right people on the bus. "The old adage 'People are your most important asset' is wrong. People are not your most important asset. The right people are." I couldn't be more proud of our team, overflowing with the right people, dedicated and visionary leaders who continue to reach new heights each year.

~ Michael Nelson MD PhD, Division Chief

## Research Updates

### PLATTS-MILLS LAB



Thomas Platts-Mills, MD

The Platts-Mills lab has a long-standing interest in understanding environmental and immunologic contributions to allergic disease. A significant focus of the lab is related to understanding how dust mites and cat allergens are causally related to asthma. More recently, our lab has been a primary driver in understanding a novel form of allergic reactions to red meat (alpha-gal-syndrome or AGS) caused by tick bites. In 2018, we published a paper on the relationship between sIgE to alpha-gal and evidence of coronary artery disease (CAD), which was obtained by Angela Taylor, MD (UVA Heart and Vascular Center) using intravascular ultrasound (IVUS). In 2022, an influential cardiology group in Sydney, Australia, confirmed our results on the positive association between IgGE to alpha-gal and CAD. Most recently, we saw a female in her forties who had been seen initially 8-10 years prior for a severe episode of anaphylaxis and was diagnosed with AGC. Before her recent visit, she had two myocardial infarctions and five stents in her main cardiac

arteries. Between her initial visit and these cardiac events, she maintained a strict diet avoiding mammalian meat and organs; however, she continued to consume dairy products derived from *Bos domesticus*.

Cases like this emphasize two questions: firstly, should all subjects with positive IgE to alpha-gal be advised to avoid all products derived from mammals; secondly, do we need markers other than IgE to alpha-gal that would help to identify patients who are at high risk for CAD, even though dairy products do not induce clinically apparent allergic reactions?

The most promising candidate for another marker is antibodies to alpha-gal of the IgG3 isotype. IgG3 is an inflammatory immunoglobulin and has recently been reported to 'increase after porcine or bovine aortic valve implantation.' We are currently arranging to adapt the ImmunoCap 250 machine to assay IgG3-specific antibodies using reagents provided by Dr. Robert Moverare from PHADIA Thermo-Fisher in Sweden. We expect to have the assay running within the next couple of months.

### Studies on TH2 antibody responses and Asthma

We have recently carried out detailed studies on specific IgE and IgG4 antibodies to component allergens of cat and dust mites in sera from six-hundred teenagers participating in the VIVA birth cohort in Boston. The primary evidence on these children shows that dust mites and cats are the primary sources of asthma-related indoor allergens. However, analysis of the data on the two major allergens Der p 1 and Fel d 1 has revealed a striking difference in IgG4 compared to the responses to more recently identified allergens, such as Der p 23, Fel d 4, and Fel d 7. As expected, the primary contributor to specific IgG4 for cat allergens was Fel d 1. However, the surprise is that the other cat allergens show no significant effect on sIgG4 related to living in a home with a cat. The most likely, relevant feature of these secondary allergens is that they are present in extracts in significantly lower quantities. The results imply that IgG4 responses require a higher quantitative exposure than IgE responses. In addition, the results suggest that some of the allergens other than Der p 1 and Fel d 1 have greater relevance to asthma because they induce less IgG4 relative to IgE antibodies.

# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## Research Updates

### WOODFOLK LAB



Judith Woodfolk, MD PhD

It's been an exciting year for the Woodfolk lab. Dr. Judith Woodfolk's lab continues to study adaptive immunity to respiratory viruses and allergens in man and how this goes awry in patients with chronic respiratory and allergic diseases. The lab uses an interdisciplinary approach to collect and analyze large cellular datasets (or expansive cell data sets) to gain insight into the immune response and its relation to clinical disease. This year also saw the completion of the COVID Biorepository project just as it hit its third anniversary. Thanks to all involved in the success of this collaborative, institution-wide venture.

### BORISH LAB



Larry Borish, MD

The Larry Borish, MD laboratory's primary focus remains the role of rhinovirus (RV) in precipitating asthma exacerbations. These NIH-funded studies are designed to define the role of innate immune responses, including anti-viral and T2-promoting immune responses, by infected airway epithelial cells as they might distinguish the consequences of RV infections in asthmatics, allergic rhinitis, and healthy control subjects. The Borish lab recently received an R56 grant to generate preliminary data supporting the concept that RV infections produce long-term remodeling in the airway, including expanded populations of IL-25-producing chemosensory cells. In addition, for the next two years, the Borish laboratory will be the co-lead sponsor of a Regeneron-funded investigator-initiated study entitled "Viral Infection in Asthma (VIA) Study." This randomized, placebo-controlled study assesses cellular and molecular markers related to experimental RV infection in asthmatics and the effect of dupilumab in preventing exacerbations in this investigational model.

This study will aim to assess the molecular and cellular basis by which dupilumab prevents the development of an RV-induced asthma exacerbation. Unrelated to the RV studies, the Borish lab collaborates closely with Dr. Gerry Teague in pediatrics as co-PI for studies addressing the role of mast cells and mononuclear phagocytic cells in the immune response to viral respiratory infections in children and adolescents with problematic wheeze. We are also enrolling patients in a Regeneron-sponsored study to demonstrate the ability of dupilumab to attenuate staphylococcus aureus infection in chronic sinusitis and ameliorate the dysbiotic state, including restoration of a healthier antimicrobial state.

### LAWRENCE LAB



Monica Lawrence, MD

In collaboration with Dr. Larry Borish, Dr. Monica Lawrence is works with Dr. Gerry Teague in Pediatrics to continue studies on severe treatment-refractory asthma in children. Dr. Lawrence also continues as head of the Rhinovirus Core Laboratory. She is working with Dr. Borish and Dr. Judith Woodfolk in ongoing investigations of rhinovirus-induced asthma exacerbations. Along with Dr. Borish and Allergy/Immunology fellow Dr. Thomas Makin, she continues researching the role of a low IgE as a sentinel biomarker for evolving humoral immunodeficiency (research sponsored by the Jeffrey Modell Foundation and CSL Behring).



# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## Research Updates

### MCGOWAN LAB



**Emily McGowan, MD**

Dr. Emily McGowan and her group continue to expand their research on eosinophilic esophagitis (EoE), an emerging form of food allergy. EoE is an allergic condition of the esophagus that affects patients of all ages and, when untreated, leads to esophageal fibrosis and difficulty swallowing. Through her NIH/NIAID K23 Award, Dr. McGowan established the University of Virginia EoE Cohort with her collaborators, Drs. Bryan Sauer (Adult Gastroenterology) and Barrett Barnes (Pediatric Gastroenterology). This cohort longitudinally follows over 350 patients with EoE and has been used to examine the immunologic drivers of this disease. In particular, her team found that immunoglobulin G4 (IgG4) may play an important role in the inflammatory response in EoE. They are examining whether this could be used to help identify food triggers in EoE patients. Dr. McGowan's group is also studying the epidemiology of EoE and found that children who live far away from a pediatric gastroenterologist, and those who live in more impoverished areas are less likely to be diagnosed with EoE. In addition, they found that EoE is often underdiagnosed among patients with other allergic conditions. They plan to investigate this further with a large-scale screening study using a novel minimally-invasive device called the Cytosponge. This work has been funded by the American College of Gastroenterology (PIs McGowan and Sauer) and the NIH/NIAID (K23 and R21). Dr. McGowan also received the 2022 McCausland Fellowship, which supports her ongoing research.

Dr. McGowan was awarded a 5-year, \$3.9 million R01 grant from the NIH to study the role of immunoglobulin G4 (IgG4) antibodies to milk proteins in EoE. Foods primarily trigger EoE, but how foods drive the inflammatory response in EoE is still unclear. Dr. McGowan's group previously found that IgG4 binds to food proteins in the esophageal tissue of patients with active EoE, which suggests immune complex formation. This grant will further this work to examine whether these IgG4-food complexes contribute to the inflammatory response in EoE. Ultimately, this work will provide novel insights into the mechanisms of food-induced inflammation in EoE and could lead to novel diagnostic assays and therapies. Collaborators on the project include Bryan Sauer, MD MHS, Shyam Raghavan, MD, Sarah Ewald, PhD, Larry Borish, MD, Thomas Platts-Mills, MD PhD, and Judith Woodfolk, PhD.

### WILSON LAB



**Jeffrey Wilson, MD PhD**

Dr. Jeffrey Wilson has a major clinical and research focus on the alpha-Gal syndrome. Working with Dr. Platts-Mills and colleagues, his lab has been involved in studies to better understand alpha-gal epidemiology locally and across the USA. This work involved a UVA employee cohort recruited to study COVID-19 vaccine antibody responses and a DoD-funded project of 3000 military recruits in collaboration with Dr. Cade Nylund at the Uniformed Services University of the Health Sciences. The lab also studies links between tick bites and alpha-gal sensitization and has recently received an NIH R21 to recruit and follow individuals who have had recent tick bites. Based on a prior observation that alpha-gal sensitization was associated with heart disease, the lab has been involved with the NHLBI-sponsored Multi-Ethnic Study of Atherosclerosis. The goal has been to understand better whether IgE sensitization to alpha-gal is a risk factor for early coronary artery disease development. As part of these investigations, Dr. Wilson has ongoing collaborations with Dr. Coleen McNamara (Cardiology/Beirne Carter Immunology Center) and Prof. Loren Erickson (Microbiology/Beirne Carter Immunology Center) is also studying whether IgE sensitization to more common food allergens also has links with cardiovascular disease. Collaborators in studies investigating antibody responses to COVID-19 include Dr. Judith Woodfolk, Dr. Gerry Teague, Prof. Jie Sun, and others in the Divisions of Hematology/Oncology and Pulmonary/Critical Care.

# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## Education Update

### FELLOWSHIP/TRAINEE PROGRAM

Our long-standing fellowship program continues to celebrate the many achievements of our fellows-in-training. In July 2022, we welcomed two new fellows into the program: Dr. Charlene Dunaway Altamirano (Cleveland Clinic, Internal Medicine) and Dr. Marc Breidenbaugh (University of Virginia, Pediatrics). We congratulate our 2023 graduating fellows, Dr. Kelly Boyd, who will enter private practice in Charlotte, North Carolina, and Dr. Thomas Makin, who will join a private practice in Suffolk, Virginia. We also completed a very successful virtual recruitment season and are excited to welcome two new incoming fellows in July 2023: Dr. Samantha Nguyen (Wake Forest University, Internal Medicine) and Dr. Thomas Offerle (Emory University, Pediatrics).

Our fellows have continued to participate in research projects on preschool asthma actively (Dr. Boyd; mentors Dr. Borish and Dr. Teague), selective IgE deficiency (Dr. Makin; mentors Dr. Borish, Dr. Lawrence and Dr. Wilson), the prevalence of food allergy in Honduras (Dr. Dunaway Altamirano; mentors Dr. Nelson, Dr. Platts-Mills, and Dr. Wilson), and GI-predominant alpha-gal syndrome (Dr. Breidenbaugh; mentors Dr. McGowan and Dr. Wilson). They have presented their work at the American Academy of Asthma, Allergy and Immunology (AAAAI) and the American College of Asthma, Allergy, and Immunology (ACAAI) national meetings. The Annual Swineford Allergy Conference was held on Grounds in April 2023. Dr. Boyd was recognized for her outstanding abstract with the first-place Clemens von Pirquet award at this year's ACAAI meeting. We commend our fellows for their academic scholarship and research achievements on top of a growing inpatient consultation service and busy outpatient clinics.

## Learn More About the Asthma, Allergy, and Immunology Fellowship Program

### Awards, Recognitions, and Presentations

**Drs. Glenda Canderan** and **Lyndsey Muehling** were joint recipients of the *Shyr-Te Ju Award* for their work on T-cell mechanisms governing long-haul respiratory symptoms in survivors of severe COVID-19, which was presented at the *2022 Carey-Marshall-Thorner Research and Scholars Day*. The same work was awarded an oral presentation as a late-breaking abstract at the 2023 AAAAI meeting.

**Dr. Muehling** was invited to give a symposium presentation at the 2023 AAAAI meeting entitled: “*Viral-bacterial-allergen interactions at the respiratory mucosa.*”

**Naomi Bryant**, a 4th-year graduate student, was awarded a *PhD Travel Scholarship* to attend the 2023 AAAAI meeting. She gave an oral presentation on a novel method to assess T-cell responses to allergen variants.

### Faculty Appointments

**Dr. Muehling** was appointed to the *Research Assistant Professor of Medicine* position after completing her post-doctoral fellowship in the Woodfolk lab.

### Grants

As Faculty Director of the *UVA Flow Cytometry Core Facility*, **Dr. Woodfolk** partnered with **Michael Solga MS** (Director of the Core) to purchase a Cytex Aurora Cell Sorter through the *NIH Shared Instrumentation Grant Program* (S10). Dr. Woodfolk's expertise in studying pathogenic T cells in allergic disease was also integral to an NIH/NIAID administrative supplement (PI: T. Platts-Mills, R37 AI020565) and a new NIH/NIAID R01 grant (PI: E. McGowan, R01 AI 175232).



# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## Swineford Conference 2023



On April 14th and 15th, the Division of Asthma, Allergy, and Immunology held its 61st Annual Swineford Allergy Conference at Pinn Hall. It's the longest-running academic Allergy meeting in the United States and longest running CME event in Virginia. The Division continues to host this conference as a scientific gathering dedicated to educating physicians caring for patients with allergic disorders and for the scientists who work with them to develop a novel understanding of and treatments for allergic disease.

Traditionally an in-person meeting, we were very excited to welcome to the University of Virginia and Charlottesville experts in our field who traveled from great distances to share their knowledge and insight. This year's faculty included two international speakers (Professor Jonathan Hourihane from the Royal College of Surgeons in Ireland and Parameswaran Nair, MD, PhD, who is the Staff Respiriologist at McMaster University in Hamilton, Ontario) and five speakers from within the US (Esther Borges, PhD from Arizona State University; Amy Klion, MD from the NIH; Whitney Stevens, MD, PhD from Northwestern University; Cosby Stone, MD, MPH, from Vanderbilt; and Kelli Williams, MD, MPH from MUSC). In keeping with the traditions of this meeting, there were excellent discussions of multiple topics, including the future of biologics in asthma, genetic testing for inborn errors of immunity, the study of antibodies to PEG, and the importance of lipids in maintaining the protective role of the skin of infants.

Not to be outdone by our external Conference Faculty, UVA was well represented by our internal colleagues who gave talks: Jeffrey Wilson, MD, PhD, and Emily McGowan, MD, PhD, as well as Anne Sperling, PhD from Pulmonary and Critical Care Medicine. In keeping with a long-standing tradition, we had two presentations by our trainees: second-year fellows Kelly Boyd, MD, and Thomas Makin, MD.

We have already started to plan for next year's edition, our 62nd Swineford, which will take place on APRIL 12th and 13th of 2024. Be on the lookout for the information in the Fall!



From left: Pram Nair, MD, Kenneth Berger, MD, PhD, Esther B. Florsheim, PhD, William Busse, MD, Amy Klion, MD, Thomas Makin, MD, Larry Borish, MD, Kelli Williams, MD, MPH, Emily McGowan, MD, PhD, Tom Platts-Mills, FRS, Jonathan Hourihane, MD, Anne Sperling, PhD, Cosby Stone, MD, MPH, Kelly Boyd, MD, Jeffrey Wilson MD, PhD, Whitney Stevens, MD, PhD



# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## Swineford Conference 2023



UVA A/I Fellowship Program: Anna Smith, MD (APD), Monica Lawrence, MD (PD), Charlene Dunaway, MD, PhD (1st year fellow), Thomas Makin, MD (2nd year fellow), Kelly Boyd, MD (2nd year fellow), Marc Breidenbaugh, MD (1st year fellow), Samantha Minniccozzi, MD (APD)



Monica Lawrence, MD, Jaimin Patel, DO, Kelly Boyd, MD, Marc Breidenbaugh, MD, Anna Smith, MD, Thomas Makin, MD, Jeff Wilson, MD, Devon Preston, MD, Thomas Platts-Mills, MD, Peter Heymann, MD, Lawrence Gelber, MD, Robert Call, MD, and Tina Merritt, MD



Emily McGowan, MD, PhD Sabina Demarchi, PharmD, Amy Klion, MD (NIH), Kelli Williams, MD (Northwestern), Monica Lawrence, MD



Jeff Wilson, MD, Kelly Boyd, MD, and Thomas Platts-Mills, MD with family and friends



Peter Heymann, MD, Michael Nelson, MD, PhD, and Michael Minniccozzi, MD (NIH)



Timothy Kyin, MD, Samantha Minniccozzi, MD, Devon Preston, MD (Cleveland Clinic), Anna Smith, MD



# UVA Health



# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## Swineford Conference 2023



From left: Monica Lawrence, MD, Marc Breidenbaugh, MD, Karen Braden, RN, Monte Parsons, Samantha Minnicozzi, MD, Pram Nair, MD, Judith Woodfolk, MBChB, PhD, Anna Smith, MD, Kenneth Berger, MD, Esther B. Florsheim, PhD, William Busse, MD, Amy Klion, MD, Thomas Makin, MD, Kelli Williams, MD, MPH, Larry Borish, MD, Thomas Platts-Mills, MD, Emily McGowan, MD, PhD, Jonathan Hourihane, MD, Anne Sperling, PhD, Cosby Stone, MD, MPH, Kelly Boyd, MD, Jeffrey Wilson, MD, PhD, Timothy Kyin, MD, Whitney Stevens, MD, PhD, Michael Nelson, MD, PhD



Claus Helbing, MD, Mendi Bajoghli, MD, Pram Nair, MD, and Paull Shapero, MD



Paul Dell, Naomi Bryant, and Lyndsey Muehling, PhD

# View More Photos



# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## STAFF PROFILE - Rebecca Wade



*Tell us a little bit about yourself.*

I've been at the University of Virginia for six years; I have been in my current role with the Allergy Division since the fall of 2021 as the UVA Allergy, Asthma & Immunology Clinic Manager.

*Why Healthcare?*

I chose a career in healthcare because I loved the idea of being part of a profession that would allow entry into multiple specialties and settings. It is an environment that embraces continued education and professional growth and will enable you to impact the lives of those you serve positively.

*What brought you to Charlottesville?*

I was born and raised in Staunton, Virginia, and recently moved to a "mini-farm" in Louisa County, so Charlottesville has always been within reach.

*What excites you about your work?*

I embrace process improvement and working with a team to improve patient outcomes. I love that I can learn something new regularly as I work alongside excellent Medical, Clinical, and Access team members.

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

I am a mother to two great sons and married to my best friend. I have always rescued animals which has been a wonderfully rewarding pastime.



*What do you enjoy doing on the weekend?*

Spending time with my family, mainly engaging in outdoor activities such as hiking, gardening, and traveling, I love animals and most recently acquired chicks, ducklings, and bees.

*Are you a hunter or a gatherer?*

Most definitely a gatherer. We grow berries and veggies every year, and I eat very little meat.

*Who is the person you admire most, and why?*

My husband is the yin to my yang and easily balances life's stresses. He is able to find and create joy for those around him.

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

"Everyone you meet has fought or is fighting a battle you may know nothing about, be kind." Getting lost in the day-to-day shuffle can pose many challenges; this advice always helps pull things into perspective.

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

I have always admired those who can speak two or more languages, especially in the US, where our educational system does not require it. My sons share the desire for this skill, with one learning French and the other Japanese.

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

When I was 15, Baskin Robbins was such a happy job that included making people smile every day; who doesn't feel happier with a scoop of delicious ice cream in front of them?





# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## FELLOW PROFILE - Charlene Dunaway Altamirano



*Tell us a little bit about yourself.*

I've been at the University of Virginia for nine months after completing my Internal Medicine residency at the Cleveland Clinic. I was born and raised in San Pedro Sula, Honduras, and came to the U.S. for college as an international student. I attended Vanderbilt University and later pursued a PhD at Albert Einstein in NYC. New York wasn't cold enough, so I moved further north to Hanover, NH, for medical school. Now, I'm excited to be training at UVA as an Allergy and Immunology fellow.

*Why Healthcare?*

I have always enjoyed science, and as a Honduran, I feel incredibly fortunate to have had the chance to learn and train at great institutions. In Healthcare, I found a career that allowed me to apply scientific knowledge to make a difference in people's lives, especially for those who haven't had the same opportunities I've had.

*What brought you to Charlottesville?*

My husband and I knew we were looking for an academic medical center with strong training programs in a setting with good quality of life and easy outdoor access. UVA and Charlottesville offer all of that and more.

*What excites you about your work?*

I love connecting with my patients and learning something new every day.

*What do you enjoy doing on the weekend?*

Spending time with my family and exploring the outdoors.

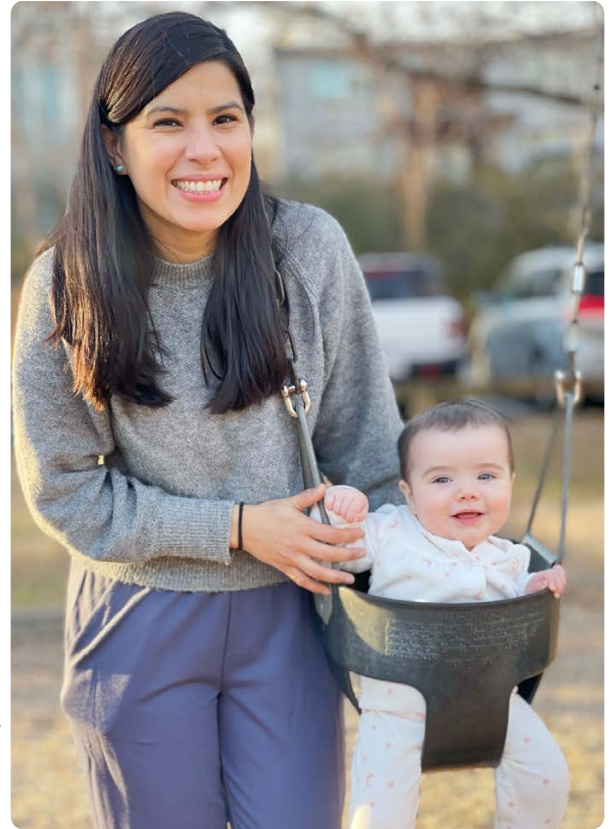
*How did you meet your partner?*

My husband and I met in medical school at Dartmouth College. We couples-matched for residency and fellowship, and he's now a first-year fellow in Infectious Diseases here at UVA. We have a 10-month-old daughter who we adore.

*What is your favorite vacation/activity spot?*



I love spending time at the beach, especially snorkeling among the Caribbean coral reefs of Honduras.





# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## FELLOW PROFILE - Marc Breidenbaugh



*Tell us a little bit about yourself.*

I've been at the University of Virginia for almost eight years, which I've spent in medical school, pediatric residency, and allergy and immunology fellowship.

*Why Healthcare?*

I grew up in a medical family. My mother is a nurse, and my father is a physical therapist. I knew I wanted to do something in healthcare from an early age. Still, it wasn't until my senior year of high school, after doing a mentorship with a community doctor, that I started to develop my dream of becoming a physician. My interest in medicine and science grew throughout college after working in a free clinic and getting involved in basic science research. By the end of medical school, I discovered my passion for caring for pediatric patients, and during residency, I found the field of allergy and immunology through my rotations. I have always been interested in the immune system's complexity and how much more there is still to learn about it.

*What brought you to Charlottesville?*

I came to Charlottesville initially for medical school. I grew up in the Richmond area and wanted to come to UVA because it was close to home and because of its excellent reputation as a place for medical education. Since living here, I've grown to love the natural beauty surrounding us, the wonderful trail systems for running and hiking, and the eclectic restaurants that make Charlottesville such a great place to live.



*What excites you about your work?*

Trying to uncover the answers to puzzling patient cases, getting to know patients and their families over time, working with excellent mentors and researchers, and being a part of the UVA Allergy and Immunology Department family. I work with so many great colleagues who are always interested in how I am doing and how they can help me succeed.

*What do you enjoy doing on the weekend?*

I enjoy going to the gym, playing tennis, playing spike ball, or running on the Rivanna trail, Biscuit Run trail, or trails around the Ragged Mountain Reservoir. On Saturdays, sometimes I will go with my fiancé to the farmer's

market, where we like to try local food and sometimes buy plants for our garden. We enjoy hiking or kayaking down the Rivanna River when it's warm. I also enjoy learning and creating new songs on the piano and playing chess online.

*What is your favorite vacation/activity spot?*

Growing up, we would vacation in Charleston, SC, most summers. I always enjoyed spending time at the beach with my family and exploring the city of Charleston.

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

Painting. While it wasn't an interest of mine when I was younger, as I've gotten older and grown to appreciate the beauty of nature, I've enjoyed visiting art museums like the Virginia Museum of Fine Arts. I particularly enjoy modern art. Hopefully, one day I can take some painting lessons.

*Favorite fictional characters?*

Sherlock Holmes and Albus Dumbledore.





# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## FACULTY PROFILE - Monica Lawrence



*Tell us a little bit about yourself.*

I've been at the University of Virginia for nearly ten years. I grew up in Northern Virginia and completed my undergraduate training at Duke, so I am forever a Blue Devil. After that, I moved to St. Louis, Missouri, for medical school and internal medicine residency, where I met my husband, Kevin. We moved east to Bethesda for me to complete my fellowship in Allergy/Immunology at the NIH, then moved to Charlottesville and have been here ever since!

*Why Healthcare?*

My mother is a (now retired) registered nurse in medical/oncology, and I grew up hearing her stories from the hospital and later volunteering as a candy striper. After learning that my first career choice, being a lawyer, involved more than just arguing with people (one of my favorite activities as a teenager), I decided to pursue medicine instead.

*What brought you to Charlottesville?* I'm more of a

small-city girl who grew up in Northern Virginia, but my husband is an Arkansas native and loves to drive big trucks and enjoy the great outdoors. We met in Missouri, where we were both doing our medical training. We got engaged after I had already matched for fellowship in Bethesda, MD, so he followed me to the east coast. I still remember the look on his face the day he realized his F150 wouldn't fit in most parking garages in the area (or even the garage in our house!) So, we both knew we had to move somewhere with some more open space. We came down to visit Charlottesville for a long weekend, and we both immediately fell in love with the area. It combines enough "city" for me and enough "country" for him!

*What excites you about your work?*

Although there are a lot of frustrations surrounding the practice of healthcare today, I absolutely love what I do and consider it a true privilege to see patients, do research, and help educate the next generation of physicians. I am fortunate to work with amazing colleagues who help invigorate me on even the busiest days, including bringing me "liquid energy" in the form of coffee from Higher Grounds or Starbucks!

*What do you enjoy doing on the weekend?*

My weekends are mostly spent with family, trying to keep up with my husband, seven-year-old son, ten-year-old daughter, and two very energetic dogs. I also am fortunate to have my parents, sister, and niece in the area, so we also get to spend time with them.

*How did you meet your partner?*

My husband was a pulmonary critical care fellow in the MICU when I was a second-year resident. It sounds very Grey's Anatomy, but it was pretty innocent – he waited a few more months until he had completed his fellowship training before he asked me out.





# DIVISION OF ASTHMA, ALLERGY & IMMUNOLOGY

## FACULTY PROFILE - Monica Lawrence

*What is your favorite vacation/activity spot?*

Turks and Caicos. The sand is soft and smooth, and the water is the bluest I have ever seen! I honestly love anywhere there is plenty of sunshine, though.

*What about you would surprise us?*

I have fairly eclectic musical tastes. Depending on the day, I might be listening to anything from classic rock to alt-rock to pop (one of my greatest disappointments of the past year was failing to procure Taylor Swift concert tickets successfully) or country music.

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

Singing. I am an atrocious singer. I can't even sing the birthday song well.

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

Warm, raw milk directly from a cow's teat while traveling to India. I do not recommend it.

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

I worked the night shift as a hospital operator in high school at the community hospital where my mom worked. I soon discovered that trying to answer 47 phone lines between two people is very stressful and not a job I was well suited for – I kept forgetting who I had paged overhead by the time they had called back, transferring callers to the wrong extensions, etc. I did spend a lot of time in the wee hours of the night having wheelchair races in the hallways with the security guards, though, so that was fun!

