MESSAGE FROM THE CHAIR

Welcome to this month’s issue of Medicine Matters where we focus on the Division of Allergy and Immunology. The Division has a rich history of excellence in research, clinical care and education. Faculty have made ground breaking contributions to our understanding of allergic disorders and the immune system and they continue to be the leaders in food allergies worldwide. Most recently, the Division, under the leadership of Dr. Monica Lawrence and Larry Borish, has expanded their clinical services to immune deficiencies and just recently was selected by the Modell Foundation for support of their regional clinic in Adult and Pediatric Primary Immunodeficiency. This places UVA in elite company of select centers with this expertise. I would encourage you to read about the exciting and highly clinically relevant research being performed by the Division.

In other news, we are getting ready to launch the DOM Faculty Leadership Council (FLC). The FLC will work with my leadership team to help us guide and communicate decisions to the faculty and staff. In addition, the FLC will be critical in helping us decide what areas of improvement we need to focus on. My hope is that this will be another mechanism to engage all of you in helping determine our priorities and ensure that we are communicating effectively. Terms on the committee will be either 1 or 2 years (to ensure some continuity but at the same time encouraging broad participation.) I am excited to work with this committee to continue our journey of constant improvement.

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

Department of Medicine
Summary of Consolidated Financials
FY19 as of March 31, 2019

<table>
<thead>
<tr>
<th>Budget YTD</th>
<th>Actual YTD</th>
<th>Variance YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work RVUs</td>
<td>674,082</td>
<td>670,176</td>
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<tr>
<td>Clinical Receipts (NPSR)</td>
<td>41,208,854</td>
<td>43,093,669</td>
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<tr>
<td>Total Revenues</td>
<td>132,505,899</td>
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<tr>
<td>Total Expenditures</td>
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<td>Net Income</td>
<td>(866,130)</td>
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Summary Explanation of Variance:
For the nine months ending March 31, 2019 DoM posted a consolidated net surplus of $1.6M and a favorable variance to net budget surplus of $2.5M. Faculty clinical effort performance and higher collections per Work RVU drove net patient service revenue to outperform budget by $1.9M. Sponsored program revenue underperformed budget by $3.5M mostly due to the timing of anticipated NIH awards. The department realized non-personnel cost savings of $7.1M driven by lower than expected grant expenditures.

BILLING TEAM SPOTLIGHT PROFILE

Lisa Madison
Tell us a little bit about yourself.
In 2003 I worked at a CD/I’ve loved the medical field since I was in middle school. After a few months of working for a local dermatology office I decided medical coding was the career path I wanted to follow. I’ve been with UPG for a little over year, coding inpatient for the Department of Medicine.

Why billing/coding in healthcare?
I enjoy investigating things, to be a coder you need to be somewhat investigative. Some codes aren’t as easy to figure out.

What brought you to Charlottesville?
I’ve lived just outside of Charlottesville my whole life.

What excites you about your work?
Working with good people that don’t mind all of my questions.

Proudest/greatest achievement outside the professional realm?
Raising my daughter to be a strong, independent woman.

Next life?
I’d be a criminal investigator.

What are you usually doing on the weekend?
I enjoy hiking, spending time with family and friends. Floating or kayaking on the river in the summer time.

Favorite vacation/activity spot?
Visiting my family in WV, going ATV riding in the mountains and coal mines.

Most admired person, and why?
My daughter Gracie, because no matter what is thrown at her she doesn’t change. She is strong willed and strives to be the best. She doesn’t let anything others do or say sway her from her dreams.

Best advice anyone ever gave you?
Be yourself, people will love you or hate you no matter what.
Tell us a little bit about yourself.
I started my career in healthcare 40 years ago working for a Neurologist in West Virginia. I found that I enjoyed interacting with clients seeing their situation improve with their medical conditions. I moved to Virginia in 1986 and worked a variety of jobs including a temp position with the Adolescent Autonomy Program where I met Dr. Sharon Hostler, she renewed my interest in health care. In 1988, I co-founded On Call Health Services in Dillwyn, we provided home health and personal care to Buckingham and the surrounding counties, we employed 16 nurses and 43 personal care aides. Even though the business was successful, it was consumed all of my time and my kids were entering high school then, so in 2004 I chose to close the business.

In 2005, I started in the Department of Medicine working as an administrate assistant and since that time I have worked in five different positions and am now a Fiscal Tech Senior, providing support to the Department and the Divisions of Allergy, Cardiology, and Gastroenterology. I work with the finance team and enjoy coming to work every day. I believe I have the best supervisor at UVA, Kim Blowe.

What excites you about your work?
What I love about my job now is that it is ever changing and my skill set is growing every day.

Proudest / greatest achievement outside the professional realm?
There are a couple, becoming an EMT in 2005 and working with the Scouts BSA program in Buckingham. You could say I live and breathe scouting.

What are you usually doing on the weekend?
My weekends are spent running rescue squad, scouting events, church, family and then me time.

How did you meet your partner?
My husband knew who I was before I met him, ours is a “Drive-by” love story; one Friday night I was working and he kept driving by my office and waving at me. That night we ended up watching Snow White together, that was in 1994. We finally got married in 2001.

Favorite vacation/activity spot?
My favorite vacation spot is First Landing State Park at Virginia Beach where we visit the Virginia Aquarium. My other favorite activity is cruising.

Most admired person, and why?
My most admired person(s) are my kids, my son, Oatie has gone from being a Tiger in Cub Scouts obtaining his Eagle at 15 and is now a Scoutmaster running his own troop. My daughter, Hilliary - there is so much to admire; she is strong, independent, a great mom, and a Vet Tech.

Best advice anyone ever gave you?
The best advice I ever got was to never stop learning. I believe this to be true and especially with UVA providing support for educational opportunities, we should all take advantage of this. I try to take a class each semester.

What about you would surprise us?
I have an AAS degree in Human Services and will complete an AAS in Business Management in December. And I spent 8 years in the Army Reserve.
Congratulations to UVA Infectious Diseases’s Dr Amy Mathers, and Dr Eric Houpt on this important work and publication: “Mycobacterium Avium Complex Diversity within Lung Disease as Revealed by Whole Genome Sequencing” published in the American Journal of Respiratory Critical Care Medicine. This publication describes work examining 95 longitudinal respiratory isolates from 35 patients with Mycobacterium Avium Complex (MAC) lung disease. Their work revealed that MAC can be a dynamic disease with multiple infections and MAC species switching over time, even in those having “stable” disease.

Lyndsey Muehling, a graduate student in the BIMS Program, defended her PhD dissertation entitled “CD4+ T Cell Mechanisms of Cross-Protective Rhinovirus Immunity and Rhinovirus-Induced Allergic Asthma” in October 2018. Her work was selected as a featured poster at the 2019 AAAAI meeting, where she was also chosen to participate in the AAAAI Leadership Institute.

Alberta Paul, PhD has been selected for an oral presentation at the 2019 CYTO (Congress of the International Society for Advancement of Cytometry) meeting in Vancouver in June.

Congratulations to UVA Endocrinology and Metabolism’s Dr Rita Basu and Dr Ananda Basu both in the Endocrinology and Metabolism Division have published the following respectively:


Dr Robert M. Carey’s laboratory is pursuing the mechanisms of a defect in the renal proximal tubule angiotensin AT2 receptor in an animal model of human hypertension. The identified receptor defect prevents renal sodium excretion by increasing sodium reabsorption in the proximal tubule. The first paper on this topic was published in the Journal of the American Heart Association in April, 2019.

Dr Robert M. Carey was principle author of an American Heart Association Scientific Statement on resistant hypertension and also co-authored a Scientific Statement on blood pressure measurement (2019). Dr. Carey spoke on hypertension at the American College of Medical Quality in Washington, DC (April) and has been invited to speak at the Japanese Society of Hypertension in Tokyo (October).

Congratulations to Su Hee Kim, MD who will join the faculty of the Division of Endocrinology and Metabolism as an Assistant Professor of Medicine on the Clinical Faculty track, effective April 1, 2019.

Su Hee received her MD from Jefferson Medical College in Philadelphia and completed her medicine residency in 2013 and endocrinology fellowship in 2017, both here at the University of Virginia. She exemplified herself as an outstanding trainee in the past and proved herself as a highly inspiring and promising clinician investigator in the past year and half during which time she enthusiastically seeks to establish an academic program.

Congratulations to Jessica A. Lundgren, MD who will join the faculty of the Division of Endocrinology and Metabolism as an Assistant Professor of Medicine on the Clinical Faculty track, effective July 1, 2019.

Jessica received both her undergraduate degree and MD from Penn State University and completed her medicine residency in 2015 and endocrinology fellowship in 2018 here at the University of Virginia. She proved herself as an outstanding trainee during her fellowship training and is inspired to develop an academic career here at UVA.

Congratulations to Gregory Hong, MD, PhD, who has been appointed as the Associate Program Director of the UVA Endocrinology and Metabolism Fellowship Program, effective immediately.

Greg has had a long-standing and strong interest in education. Since joining the faculty in 2013, he has established a significant teaching presence within the Division and the Department of Medicine, and proven his exceptional skills by winning several teaching awards. He will assist Dr Christopher McCartney in ensuring continued excellence in our education program.
The Mid-Atlantic Young Investigator Forum, co-directed by Drs Sundar Swaminathan and Michael Choi, was held in Baltimore from April 15-16. Medical students, PhD scientists, and clinical fellows from institutions across mid-Atlantic including University of Virginia (UVA), University of Pennsylvania, Johns Hopkins University, University of Maryland, University of Pittsburgh, Georgetown University, George Washington University, Drexel University, Duke University, University of Rochester, Montefiore Medical Center, and Vanderbilt Medical Center. Academic leaders in Nephrology participated as faculty judges, and presented their insights into their path to ground-breaking discoveries and successful careers in science. Postdoctoral fellows, Nabin Poudel, Vikram Sabapathy, Murat Dogan, William Nash, Sabrina La Salvia, and Rajkumar Venkatadri from UVA competed in this event.

Dr Sue Brown at UVA Men’s Basketball game, Final Four game on Saturday, April 6, 2019, at the US Bank Stadium in Minneapolis

Research & Scholars Day 2019
“Carey-Marshall-Thorner Research & Scholars Day”
Friday, May 17, 2019 @12:00 pm – 5:30 pm
Education Resource Center, 1220 Lee Street
Pinn Hall Conference Center, 1340 Jefferson Park Avenue

Department of Medicine
GRAND ROUNDS
“Trauma Informed Care for Black Men”
Marshall Fleurant, MD, Emory University
Friday, May 31, @12:00 pm –1:00 pm
Education Resource Center, 1220 Lee Street
One of the dominant themes of Medicine in the last 50 years has been change. This includes both change created by technical advances and changes in disease that in most cases should be seen as consequences of changes in our lifestyle. Change in the patterns of diseases related to allergic responses to our environment have led to several sequential epidemics of disease.

Most obviously for us the identification of the syndrome of delayed anaphylaxis to red meat and the development of the method of diagnosing the condition was dependent on the development of an IgE antibody assay for alpha-gal (Chung et al New Eng J Med 2008; Wilson and Platts-Mills 2018).

With the development of monoclonal antibodies around 1980, both Tannox and Genentec focused on developing monoclonal antibodies to IgE. The introduction of Omalizumab came 20 years later and is now accepted as an important part of the management of both asthma and chronic urticaria. Equally important it was the key to our accepting the use of biologicals in the treatment of allergic disease. Studies on the use of inhibitors of interleukins have been around for over 20 years. Indeed Dr. Borish published a paper on the use of an IL-4 inhibitor in the treatment of asthma in 1999. Most recently a monoclonal that blocks both IL-4 and IL-13 (dupilumab) is producing clinical results in several different diseases including atopic dermatitis, asthma, sinus disease, and eosinophilic esophagitis. More remarkable still the company involved is considering trials with a monoclonal designed to kill plasma cells in the bone marrow followed by treatment with the monoclonal against IL-4 and IL-13 so that the bone marrow is repopulated without IgE plasma cells. Overall the use of biologicals has already made major changes to our practice, however it is likely that these agents will transform the practice of allergic disease completely over the next 20 years.

In parallel with the changes in allergic disease the immunodeficiency world has expanded very rapidly. This is in part because of the availability of novel treatments but more importantly because it is increasingly easy and affordable to carry out genome sequencing. The result has been that there are now hundreds of syndromes that can be defined by genetics and in many cases the treatment has become both more rational and more effective. We know the clinics run by Dr. Lawrence and Dr. Borish which focused on immunodeficiency to be very busy. During the time that Peter Heymann and I ran the training program in allergy and immunology i.e. from 1986-2016, we observed a truly remarkable increase in food allergy. This was first obvious as an increase in "immediate" often severe allergic reactions to food in childhood. This included milk, egg and tree nuts but was dominated by peanuts. More recently and certainly after 1990 there has been a progressive increase in cases of the completely different eosinophilic esophagitis (EoE). Our current view is that these increases in two forms of food allergy reflect distinct change in lifestyles. This disease for which we now have both adult and pediatric clinics as a collaboration between Emily McGowan and both adult and pediatric GI may well reflect changes in the processing of food over the last 40 years.

It is truly exciting to be part of such a dedicated and talented community of professionals working together to meet head-on the rapid changes facing the world of Medicine.

~Thomas AE Platts-Mills, MD
**RESEARCH INTERESTS**

**Platts-Mills Lab**

**Alpha-gal**

In collaboration with Coleen McNamara and Angela Taylor we have identified a potentially very serious connection between the presence of IgE antibodies to the oligosaccharide galactose alpha-1,3-galactiise (alpha-gal) and coronary artery disease (CAD) (Wilson et al 2018). The hypothesis is that following eating meat derived from mammals the normal slow, i.e. hours, development of LDL and HDL which can be 20-10 nanometers in diameter, there are particles of fat in the circulation carrying alpha-gal epitopes which are small enough to pass through the endothelial wall of blood vessels. This can give rise to urticarial or anaphylactic reactions in the skin and the systemic circulation at 3-6 hours after eating meat. Alternatively these particles could contribute to the development of CAD. Strikingly the association appears to apply to patients who have the IgE antibodies and is not restricted to subjects who experience attacks of hives or anaphylaxis.

The phenomenon of IgE antibodies to alpha-gal that develop following tick bites is almost certainly a persistent feature of rural life and are unlikely to be new. However the prevalence of Lone Star ticks close to houses has undoubtedly increased with the dramatic rise in the population of deer on our lawns. It is important to remember that there were no deer in Albemarle County in 1948 and still very few as late as 1980. The primary cause of the increase in the deer population was the introduction of hidden electronic fences to control dogs, and the deer are a major breeding host for Lone Star ticks. (Gaines et al 2014) This has led to the remarkable fact that for the first time in ten thousand years we have a large population living in suburban areas with wild animals free to approach the homes closely. The question is whether we have created a truly dangerous threat to our health. The associated question is whether this association with antibodies to alpha-gal is a major part of the reasons why a diet based on mammalian products appears to be such an important risk for CAD.

**Borish Lab**

**Rhinovirus-mediated Asthma Exacerbations**

The Borish laboratory is currently funded by the NIH and pharmaceuticals to investigate innate immune mechanisms driving rhinovirus (RV)-induced asthma exacerbations. In particular, these studies involve inoculation of volunteers who are either healthy controls, allergic rhinitics, or asthmatics with RV-A16 strain. These studies confirm reduced expression of an interferon-mediated innate immune response in the asthmatics with reduced expression of IFNs-α, -β, and -λ reflecting in part reduced expression of the viral RNA signaling machinery MDA-5 and RIG-I. This absence of an IFN-mediated response, however, is compensated by increased expression of a “type 2” (allergic inflammatory) response in the asthmatics reflected by increased expression of the epithelial cytokines IL-25, IL-33, and TSLP, increased recruitment of innate lymphoid cells resulting in increased eosinophil inflammation. Our current hypothesis is that the enhanced eosinophilic response successfully drives an anti-viral immune response and, as such, the asthmatics display quite similar viral loads in comparison to the healthy controls and allergic rhinitics. However, this is accomplished at the “price” of eosinophil-mediated inflammation, which we suspect contributes to the more severe and protracted symptoms observed in the asthmatics.

**Woodfolk Lab**

Ongoing research focuses on immune mechanisms of asthma pathogenesis in children and adults. This includes studies on the adaptive response to rhinovirus, which is a major trigger of acute wheezing episodes in children. A key goal is to elucidate the properties of pathogenic T cells in the blood and airways using high-dimensional single-cell analytical methods, and to define mechanisms of T-cell induction. Dr. Woodfolk recently received an NIH/NIAID R21 award to explore the mechanistic link between IgE and Th1 responses in rhinovirus-induced asthma. In an ongoing U01 project (NIH/NIAID), she and her fellow PI, Ronald Turner MD (Department of Pediatrics), are working to define hallmarks of cross-protection in the adaptive response to rhinovirus in a novel sequential challenge model in humans that uses 2 different rhinovirus strains. In a new collaboration with Max Weder, MD, and Michael Shim, MD, in the Division of Pulmonary and Critical Care Medicine, Dr. Woodfolk’s lab is also exploring the features of T-cells that may contribute to lung transplant failure.
In addition to providing comprehensive care for adult patients with the spectrum of allergic disorders and asthma our division has numerous specialized clinical initiatives:

**Immune deficiencies** - The immunodeficiency clinic is a referral center for patients across the region with known or suspected primary and secondary immunodeficiencies. Patients benefit from a comprehensive approach to their care, including careful review of medical records, evaluation by a clinical immunologist (Dr. Larry Borish and Dr. Monica Lawrence), laboratory, radiology, pathology and/or genetic testing (as indicated), and access to cutting-edge treatments. Patient care is facilitated by a dedicated nurse care coordinator (Darla Low, RN). The clinic receives generous support from the Jeffrey Modell Foundation, which recently designated UVA a Diagnostic and Research Center for Primary Immunodeficiency.

**PIDD** - We have a research program that is currently focused on IgE as a biomarker of humoral immunodeficiency. We also have recently received approval to establish a biorepository which will bank serum, blood and genetic materials from patients with primary immunodeficiency to use in future research.

**Dermatology** - Both adult and pediatric patients are seen in the combined allergy/immunology/dermatology clinic by Dr. Barrett Zlotoff (dermatology) and Dr. Monica Lawrence (allergy/immunology), who provide multi-disciplinary management of conditions such as severe atopic dermatitis, chronic urticaria, and contact dermatitis.

**Food Allergy** - We are establishing an extensive network for the diagnosis and management of food allergies including protocols for advanced diagnostic testing and challenges. Patients are also invited as appropriate to participate in many of the novel therapeutic desensitization clinical research protocols currently being developed.

**Severe Asthma** - In conjunction with Dr. Drew Harris we are now offering a combined allergy/pulmonary clinic devoted to the care of severe very poorly controlled high-risk asthmatics. We have now entered the biologic era of the care of these severe asthmatics with 5 biologics currently approved and several others in various stages of development. Identifying and matching individual patients to the appropriate therapeutic can be quite challenging but when the correct match is achieved this can also be quite rewarding.

**Eosinophilic Esophagitis (EoE)** - In order to provide integrated care to patients with EoE, we have established a multidisciplinary EoE clinic, which combines the expertise of allergy (Emily McGowan), gastroenterology (Bryan Sauer [adult] and Barrett Barnes [pediatric]), and nutrition. Patients with EoE receive comprehensive care in the diagnosis, treatment, and management of this condition, which includes the opportunities to pursue either medical or dietary therapy and participate in ongoing clinical trials.

**Chronic Sinusitis** - Chronic sinusitis. Our sinusitis clinics involve combined appointments with members of the allergy division (Drs. Larry Borish and Anna Smith) who work in close collaborations with two colleagues in the Department of Otolaryngology (Drs. Spencer Payne and José Mattos). Patients are thereby offered comprehensive evaluation of anatomical, allergic, and immunologic mechanisms driving their disease, thorough assessments with nasal endoscopy and radiographic analysis followed by team developed medical and surgical individualized protocols. As with all of our other specialty clinics we have a strong research interest including studies regarding pathogenic mechanisms of eosinophilic chronic sinusitis, mechanisms of aspirin-exacerbated respiratory disease, and evaluation of causes of anosmia in these disease. In addition, as appropriate, patients are offered opportunities to participate in clinical trials of the numerous biologic therapies being developed for these disorders.


Tell us a little bit about yourself.
I was born in Colorado but grew up in Northern Virginia. I attended Duke University as an undergraduate (Go Blue Devils!! Sorry Wahoos – once a Dukie, always a Dukie!). I went to medical school at Washington University in St. Louis and stayed there at Barnes-Jewish Hospital for my internal medicine residency. I came back to the east coast for my fellowship in Allergy and Immunology at the NIH. My first faculty job was here at UVA in 2013, and I have been here ever since. I live in Crozet with my husband, 6 year daughter, 3 year old son and 8 month old puppy (who is almost as much work as another child!)

Why healthcare?
My mother is a retired nurse and I grew up hearing stories that she would tell about her patients and her day. In many ways, I “grew up” in a hospital – first calling her at work, then volunteering as a candy-stripper in junior high, and then working as the overnight telephone operator in high school. So, deciding to attend medical school felt like a natural transition and the obvious next step for me.

What brought you to Charlottesville?
After having our daughter, my husband and I were eager to move somewhere less congested and fast-paced than the DC area. At the same time, we wanted to be close enough to family and friends and all the resources that the DC area has to offer. We came down to visit Charlottesville for a weekend trip and fell in love with the area. We were fortunate to both find jobs here and have loved being here!

What excites you about your work?
My primary clinical interest is in primary immunodeficiency. This is a field which is constantly growing and changing, so it is never boring. I love that when I go to conferences I learn about new diagnostic tests, treatment options and diseases that are directly applicable to the patients I am seeing. I also love that the field of clinical immunology is relatively small (so I know many of the folks across the country) and incredibly collegial. If I see a patient with a condition that someone anywhere in the country or even world has expertise in, all it takes is an email or a phone call and almost invariably, that person is willing to help in any way that they can, whether it be providing advice on diagnosis or treatment, seeing the person in consultation, or arranging for blood/DNA to be sent to them to assist with analysis.

Proudest / greatest achievement outside the professional realm?
Watching my kids grow up into the amazing people that they already are, even at such a young age, has been an incredible joy and source of pride.

Next life?
Professional organizer (move over, Marie Kondo!)

What are you usually doing on the weekend?
I am usually spending time with my kids and husband, or my family who recently moved here from Northern Virginia.

How did you meet your partner?
He was a fellow in the medical ICU when I was a resident. Our paths only crossed briefly in the hospital, but a mutual friend set us up later.

Favorite vacation/activity spot
Anywhere warm – I love the sun (and conversely, can’t stand the cold!)

Most admired person, and why?
My parents, for truly living the American dream. They came to this country from India in the 1970s with almost nothing, and knew almost nobody to ask for help. They moved to a town in rural Colorado at a time when there were very few (if any) immigrants and so had to overcome so many stereotypes/beliefs. They saved every penny and worked so hard to provide my sister and I with every opportunity to succeed.

Best advice anyone ever gave you?
When choosing a specialty, a faculty mentor who was towards the end of his career said that in whatever specialty I was thinking about, I should look for the “old folks” that were still practicing. If there were a lot of them, with no signs of wanting to retire early or slow down, it was a good sign that it was a specialty that I would still enjoy doing later in life, that brought a lot of satisfaction to those practicing. If on the other hand there were mostly young faces, it might be one that seemed exciting at the time but could lead to burn-out later on. Let’s just say there are a lot of “old folks” still doing Allergy and Immunology and they all seem to love our specialty, even after all these years!

What about you would surprise us?
I was a Cameron Crazie in college – hair dyed blue, face painted, loudly cheering and chanting during games, sleeping in a tent for weeks for tickets to the most competitive games of the season – the whole thing. I still am a big sports fan.
Tell us a little bit about yourself.
I have spent my time growing up in the midwest and have lived primarily in Pittsburgh, Cincinnati and St. Louis. I can say first hand that while these three cities have an extensive history of rivalry, they are in fact largely the same city in 3 different locations. While in St. Louis for my undergraduate education I was lucky enough to meet my wife and convince her to follow me through relocations back to Cincinnati for medical school and on to Charlottesville for residency at UVA.

Why medicine?
My choice to go into internal medicine was fairly straightforward. During medical school I was regularly told that my zest for information gathering and note writing meant that my home was with the medicine team. In regards to why I chose UVA, I think I got incredibly lucky. I remember that after interviewing at a variety of programs the residents at UVA stood out. They seemed to me to be the most supportive and genuinely friendly residents I had met anywhere I had gone. We have loved our years here in Charlottesville and are very excited to spend a few more learning about Allergy and Immunology.

Proudest / greatest achievement outside the professional realm?
My family, there is absolutely nothing in this world more important to me than my family. My wife and I met early during our undergraduate years and somehow convinced her to overlook a variety of character flaws and marry me anyways. At this point we have 3 amazing children and I’m pretty sure she’s stuck with us. I spend most of my free time outside of the hospital hanging out with my almost 3 and almost 5 year old boys and our freshly minted 2 month old daughter. It’s a lot of fun, it’s also a lot of work, but mostly fun (Michaela does most of the work, (Sorry)).

Where did you go on your last vacation?
Prior to our daughter being born approximately 2 months ago my wife and I were able to sneak away for a short trip to Washington D.C. while our older boys stayed with their grandparents. We were able to check out a lot of really exciting museums, some incredibly delicious food and a Blackhawks/Capitals game. We were even able to hang out with some of our friends from college who work in Washington now.

What’s one thing you always have in your fridge?
I think the best answer to this is probably a tie between leftovers and children’s yogurt. I am quite lucky that no matter what we seem eat, somehow there are always leftovers for me to eat the following day. Additionally our children are pretty into yogurt in all possible forms we’ve found so far (pouch, cup or tube).

If you could learn to do anything, what would it be?
This one is pretty simple. I wish that I had mastery of a second language. I took ~12 years of Latin in high school and college. This has made me passingly familiar with Romance languages, but certainly not conversational or even helpful really. If I had to choose a language it would probably be Spanish. Though my second choice would definitely be sign language.

Words to live by?
“Our planet is a lonely speck in the great enveloping cosmic dark. In our obscurity – in all this vastness – there is no hint that help will come from elsewhere to save us from ourselves. It is up to us. It’s been said that astronomy is a humbling, and I might add, a character-building experience. To my mind, there is perhaps no better demonstration of the folly of human conceits than this distant image of our tiny world. To me, it underscores our responsibility to deal more kindly and compassionately with one another and to preserve and cherish that pale blue dot, the only home we’ve ever known.” ~Carl Sagan
Tell us a little bit about yourself.
I grew up in California, born in San Fransico and raised in Los Angeles. I always thought that I wanted to be a doctor, but my foray into economics in college confirmed it. At Dartmouth Medical School I met my now husband, and we were fortunate enough to match together to UVA. We have been happily calling Charlottesville home for five years now.

Why Allergy and Immunology?
I have always felt drawn to academic medicine and thought I would subspecialize, but surprised myself during my pediatrics residency by loving primary care as well. While doing an allergy and immunology elective in residency, I realized I had found a perfect marriage of primary care, preventative medicine, and subspecialty knowledge. I love that I have the opportunity to take care of a spectrum of well and sick patients, and get to study the immune system in depth. It’s a fascinating and burgeoning field, and I feel privileged to do this work.

Why UVA?
My husband’s sister actually graduated from UVA the year we came here for residency. It was because of her that we knew how great Charlottesville is: festivals, concerts, beautiful hiking and wineries abound. When we were looking for residency spots, UVA offered strong academic programs in both our fields, as well as the sense of community and comradery we were looking for. I love working with the people here, both in pediatrics and in allergy/immunology.

Proudest / greatest achievement outside the professional realm?
I have travelled all over the US and Europe with choirs all the way through medical school. I have gotten to sing at Carnegie Hall and St. Peter’s Basilica in the Vatican. It’s pretty cool if you’re a music geek.

What’s one thing you always have in your fridge?
Eggs. Not only do I love breakfast at any time of day, but they are essential for baking, which is my favorite pastime. Have you heard of procrastibaking?

Where did you go on your last vacation?
It had been a while since I had spent the winter holidays with my family, so we all met in Berlin this year to see the Christmas markets. My family is really into food, and we had a great time eating currywurst and drinking gluhwine.

What do you do in your spare time?
My husband and I had a beautiful baby boy last year and love him to death. So what spare time?