

Medicine Matters

NOVEMBER 2019

NEWS FROM THE UVA DEPARTMENT OF MEDICINE



DEPARTMENT OF MEDICINE

MISSION

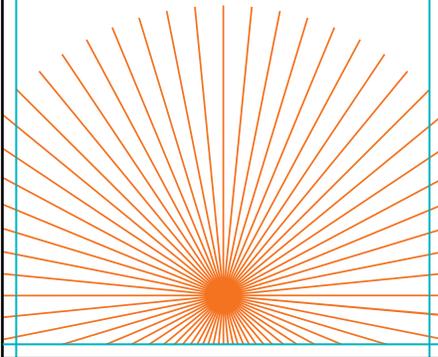
We are dedicated to preventing disease and treating illness, educating and inspiring future leaders in the field of internal medicine, and supporting innovative biomedical research.

VALUES

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

PLEDGE

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



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MESSAGE FROM THE CHAIR



Welcome to another edition of Medicine Matters. Last week, the Department's leadership team presented our annual review to the School of Medicine. This is a good time to reflect on whether we met our collective goals for the year and to think about how we can improve. Typically, during these reviews we focus on financial data as well as mission-specific data regarding our performance in clinical, research and educational endeavors. I was so proud to present this information as I strongly believe that the Department is an institutional leader in all areas. We continually out-perform budget, we represent approximately 25% of all clinical activity in the health system and nearly 35% of all research activity. We provide the majority of student teaching with accolades from learners year after year. We have developed novel clinical, research and educational programs. We have published over 800 peer-reviewed publications last year! We are approaching nearly 1 million RVUs in productivity. Simply summarized, we are awesome!

Now, that does not mean we can rest on our laurels. There is definitely work to be done and areas that we need to focus on.

Some of these include:

1. We need to work to increase all forms of diversity in the Department. This is especially true at the faculty level.
2. We need to ensure that everyone has a voice in the Department and that everyone feels valued and included.
3. We need to improve patient access to our services. This has gotten much worse across all specialty care areas and we need to develop plans to address this.
4. We need to continue to diversify our research portfolio beyond NIH grants as well as develop deeper research capabilities around healthcare service delivery and clinical outcomes.
5. We need to expand research in precision and personalized medicine and build programs in these areas.
6. We need to foster more cross-grounds collaborations to leverage the great strength of UVA in many areas such as engineering, data science, education and other areas.
7. We need to strengthen our ties to our community so that we are the healthcare provider of choice.
8. We need to look for philanthropic opportunities to aid in sustainable funding of our missions.

There are many other areas that require our attention and in the next month I will share our Departmental priorities for your comments and review. Collectively, the talent in the Department should be able to develop solutions for all of these challenges. I am so proud to work with such capable and compassionate colleagues.

Many, many thanks.

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

QUICK LINKS

DOM WEBSITE

DOM CALENDAR

GRAND ROUNDS

HIGHLIGHTED DIVISION

DOM TWITTER

MINDFULNESS MATTERS

DOM FINANCIAL UPDATE

Department of Medicine Summary of Consolidated Financials FY20 as of September 30, 2019

	Budget YTD	Actual YTD	Variance YTD
Work RVUs	220,615	217,892	(2,723)
Clinical Receipts (NPSR)	14,844,385	14,465,399	(378,986)
Total Revenues	47,010,048	49,149,900	2,139,852
Total Expenditures	47,364,797	45,950,650	1,414,146
Net Income	(354,748)	3,199,250	3,553,998

Summary Explanation of Variance:

For the fiscal year ending September 30, 2019 DOM posted a consolidated net surplus of \$3.2M and a favorable variance to net budget surplus of \$3.6M. The unfavorable variance in Net Patient Service Revenue is due to a delay in payor credentialing and percentage increase in patients on Medicare. Other Clinical support revenue outperformed budget by \$880K, offsetting the unfavorable variance in Net Patient Service Revenue. The department realized non-personnel cost savings of \$1.4M driven by lower than expected grant expenditures.

BILLING TEAM SPOTLIGHT PROFILE

Brianne Thomas



Tell us a little bit about yourself.

I have been with UVA Physicians Group for a little over a year now. I started out in the Insurance Processing Unit at Lewis & Clark as a Special Payor Analyst and am now a Coding and Billing Specialist for the Department of Medicine. I started my healthcare career as a CNA/Health Unit Coordinator at UVA Hospital for four years before I found my forever career with coding.

I have a Siamese cat named Skippyjon Jones and an orange tabby named Weasley. Our favorite time of year is autumn because I like the crisp, cool air and they like chasing the falling leaves.

Favorite vacation/activity spot?

Ireland! I am of Irish heritage so when I had the opportunity to visit in 2017, I was instantly enchanted and fell in love with everything about it. I especially enjoyed riding from village to village and watching the sheep own the fields, roads, and any other place they wanted to graze.

What are you usually doing on the weekend?

If I am not pet sitting, I am enjoying time with my friends and family. I like going to the movies and trying new restaurants. I also like sleeping in, but the cats are up and ready to be fed at the crack of dawn.

Best advice anyone ever gave you?

My mother & father are always reminding me to see the glass as being half-full, not half-empty. It is usually best to seek out the good in people and situations; I have learned that it will get you far.



DOM UPDATES & NOTES



Michael Scheld, MD



Fred Hayden, MD



Jim Bergin, MD



Max Luna, MD



Rachel Stidham



Pamela Mason, MD



Mitchell Rosner, MD

Congratulations to **Mike Scheld, MD** who received the *Alexander Fleming Award for Lifetime Achievement*.

Congratulations to **Fred Hayden, MD** who received the *Lifetime Achievement Award from the International Society for Influenza and other Respiratory Virus Diseases (ISIRV)*.

Congrats to **Jim Bergin, MD, Max Luna, MD, and Pam Mason, MD** for being featured in the patient experience videos that you can find [here](https://vimeo.com/363803699/5ed61a3aef) and [here](https://vimeo.com/363803637/9b5e6d9755). (<https://vimeo.com/363803699/5ed61a3aef> and <https://vimeo.com/363803637/9b5e6d9755>)

Congratulations to **Rachel Stidham** on being promoted from a Lab Technician 1 to a Lab Technician 2.

Welcome **Dr Firas El Chaer** to the Division of Hematology/Oncology effective November 1, 2019.

Congratulations to **Mitch Rosner, MD** on being presented the Theodore E. Woodward Award at the American Clinical and Climatological Association (ACCA) for his lecture titled "*Exercise-Associated Hyponatremia*"

CLINICAL TRIALS

Genitourinary Oncology

19-21599 Other: National EA8143

A Phase 3 Randomized Study Comparing Peri operative Nivolumab vs. Observation in Patients with Renal Cell Carcinoma Undergoing

Nephrectomy (PROSPER RCC)

Stages: II; III CT.GOV ID: NCT03055013

Primary: Dreicer, Robert

CRC: Drake, Jennifer

Hematologic Malignancies

19-21391 PHAR AML003

Phase III Multicenter Open-Label Randomized Trial to Evaluate Efficacy and Safety of CPI-613 in Combination with High Dose Cytarabine

and Mitoxantrone (CHAM) Compared to High Dose Cytarabine and Mitoxantrone (HAM) in Older Patients (>=60 years) with lapsed/Refractory Acute Myeloid Leukemia (AML)

Stages: Any/all stages CT.GOV ID: NCT03504410

Primary: Keng, Michael

CRC: Johnson, Sharon, Lisa; Underwood, Kim, M

Other Oncology Trials

19-21503 PHAR TP-3654-101

A Phase I, First-in-Human, Open-Label, Dose-Escalation, Safety, Pharmacokinetic, and Pharmacodynamic Study of Oral TP-3654 Administered Daily for 28 Days to Patients with Advanced Solid Tumors

Stages: IV CT.GOV ID: NCT03715504

Primary: Dillon, Patrick

CRC: Hazen, Stephen

Thoracic Oncology

19-21757 Other: Other LUN17-139

A phase II study of Carboplatin plus Pemetrexed plus Atezolizumab plus Bevacizumab in chemotherapy and immunotherapy-naïve patients with stage IV non-squamous non-small cell lung cancer:

Big Ten Cancer Research Consortium BTCRC-LUN17-139

Stages: IV CT.GOV ID: NCT03713944

Primary: Gentzler, Ryan

CRC: Hockenberry, Gracie

DOM UPDATES & NOTES

Physician has spent career helping women with breast cancer navigate hormone therapies



By Ruth Serven Smith, *The Daily Progress*
rserven@dailyprogress.com (434) 978-7254

[First published in The Daily Progress Oct 14, 2019](#)

University of Virginia physician Dr. Richard Santen has research, and then he has his passion project.

For much of his career, Santen has been a highly respected endocrinologist who in 2014 and 2015 served as president of the Endocrine Society. He made groundbreaking discoveries that helped people who had had breast cancer navigate therapies which prevent estrogen from acting on the cancer.

For the past several years, though, he has turned his attention to a challenge that is simpler, medically speaking, but also difficult to navigate: getting appropriate treatment to people with diabetes who live in underserved — often low-income and rural — areas.

There is a shortage of about 1,500 adult and 100 pediatric full-time endocrinologists nationwide, according to a recent workforce analysis report by the Endocrine Society; meanwhile, the number of children and adults diagnosed with diabetes and other hormone conditions is increasing.

So, Santen, in the midst of his regular work, calls colleagues and recruits them to join a telehealth initiative. Through the phone, and with assistance from a nurse, he can train a patient to check their own blood sugar and monitor results. In four years, he has helped about 100 patients through the six-month rotation, he said.

“We ought to reboot retired physicians and allow them to use telehealth to give back,” he said.

In March, Santen will be honored with the Fred Conrad Koch Lifetime Achievement Award by the Endocrine Society.

His research has uncovered the role of hormones in promoting breast cancer and pioneered the development of aromatase inhibitors, which are now the standard of care treatment. Due in part to his research, physicians have learned how to safely give doses of medication that blocks estrogen to post-menopausal women who have had or are at risk of developing breast cancer.

Estrogen stimulates breast growth in young women but, especially as women age, it can also encourage the growth of breast cancers.

Before menopause, estrogen is produced by a woman’s ovaries. After menopause, the adrenal gland converts androgen into estrogen.

Researchers tried to stop the growth of breast cancer with two hormonal therapies: one blocked estrogen’s ability to act. The other blocked the production of enzyme that converts androgen into estrogen, meaning that estrogen doesn’t travel to breast cells and encourage cancerous growth.

“If you block the aromatase enzyme you block the production,” he said.

Huge collaborative studies established aromatase inhibitors as highly effective treatments of breast cancer and for use in reproductive disorders.

In 2010, the field had made such strides that Santen was asked to write a statement about everything then known about progesterone and estrogen. Many doctors and women had been told confusing and contradictory things about hormone therapy and potential side effects.

“It was an attempt to try to cut through the noise.”

Methods pioneered by Santen to effectively use hormones to treat breast cancer and manage menopause symptoms are now seen as standards of care.

Physicians’ understanding of how hormones interact with cancerous cells has grown by leaps and bounds, Santen said. It has been neat, he said, to watch the research develop and to see the distance traveled.

“The first generation Model T got followed up by the Cadillac and the Porsche,” he said.

Santen and his colleagues discovered, though, that aromatase inhibitors are only effective from about 6 months to 10 years; eventually, the body develops a resistance.

Santen is now working on a therapy called tissue selective estrogen complex, which is a pill that contains both estrogen and a designer estrogen. It helps address menopausal symptoms but doesn’t affect breast development, and, according to preliminary trials, may prevent breast cancer.

“It’s really the first effective treatment for postmenopausal women,” he said.

Santen will receive his award at the society’s annual meeting in March.

Section Chief Message - Paul Helgerson, MD



Paul Helgerson, MD, SFHM
Section Head, Hospital Medicine

It is my pleasure to highlight the work of Hospital Medicine and the excellent, varied work of our 36 physicians. Paralleling the group's growth in numbers, we have expanded our footprint in quality, operations, education, and scholarship over the past year.

The fall has also brought several changes in leadership on the clinical units and within the group. Amber Inofuentes has agreed to take on the role of Associate Section Head and will be helping to lead aspects of quality and operations within our practice. Given my own transition to co-lead of the Medical Subspecialties Service Line, there will be new medical directors on the three inpatient units. Charlie Magee will be the medical director on 3W, Joe Hall on 3C, and Bahnsen Miller on 3E. To ensure that they are familiar faces, each is profiled below.

The Hospitalist section has also taken on an expanding role in education. In addition to his position within the IM Clerkship, Alex Millard has taken on an Associate Program Director role within the Residency Program. Andrew Parsons, also an Associate Program Director, continues in his leadership role within the FCM course. Seven hospitalists are now FCM mentors.

Andrew has also established himself as a leader, along with George Hoke, in the High-Value Care domain locally and nationally. Be on the lookout for initiatives that will help us all deliver the most efficient, effective care coming soon! Hospitalists are increasingly taking on quality improvement work and disseminating these successes as scholarship. We've outlined in this issue Dr. Inofuentes' HOME Team program as a wonderful example of a program that benefits a cohort of our patients most in need.

Thanks to everyone in the department for your support and collegiality. It is a pleasure to highlight the many accomplishments of our friends and colleagues.

FAMILY MATTERS



Dr Jessica Dreicer welcomed Gryfinn "Finn" Ellis McCrystal. Born March 10, 2019, weighing 7lb 10 oz and 20 inches in length.



This summer, Dr Inofuentes welcomed Rosemary Elise Turner Inofuentes. Born July 5 at 12:27 am weighing 7lb 10 oz. and 19.25 inches in length.

Pictured: Ellie, Amber, Rosemary Elise, Jason, Eli



Rosemary Elise

NEW FACES



David Fink, MD

David Fink joined the Hospitalist section this summer. David originally grew up in Bethesda, Maryland, then started venturing off to UVA for college, New Orleans for medical school, Houston for residency, and has now happily returned to UVA. When David isn't doing the whole medicine shtick, he is addicted to Latin dancing (salsa, bachata, and zouk), and has relatively recently discovered hiking national parks, and a love for making music. David is honored to join the staff at UVA and is

looking forward to getting to know everyone.



Melissa Kehl, MD

Melissa Kehl joined the Hospitalist section this summer. Melissa came to UVA after 10-plus years as a hospitalist in community hospitals outside Atlanta, GA. Melissa did her residency at Loyola University outside Chicago, IL, after completing medical school at the University of Illinois at Chicago as well. Outside of her hospital work, she enjoys hiking with her husband and their dogs, many forms of needlework (largely crocheting and knitting, though she has been known to

sew and embroider as well) canning, (largely hot sauce and jam) brewing cider, mead and the odd batch of beer. Melissa moved here so she and her husband could be closer to their daughter, who had resettled from Atlanta to Reston, she and her husband enjoy spending more time with her.



Alex Lawson, MD

Alex Lawson joined the UVA Hospitalist section this summer. Alex, a Nebraska native and therefore a requisite college football fan, moved to Charlottesville in 2012 to attend medical school at UVA. Over the next four years, Alex fell in love with both the area and the institution, ultimately staying at UVA for internal medicine residency. As such, Alex feels it's a great privilege to now join the hospitalist group and serve the community where he trained. Outside of the hospital, Alex

loves playing jazz piano, collecting vinyl, golfing, and visiting local breweries.



Jack Melson, MD

Jack Melson joined the UVA Hospitalist section in July 2019 and will be working as part of the hospitalist team. He received his MD and completed residency training in internal medicine at the University of Virginia. As part of the hospitalist team, he will be splitting his time between assisting in the care of Hematology/Oncology inpatients and caring for patients on the General Medicine service. When away from the hospital, Jack enjoys spending time with his wife and son.



Nicholas Schmidt, MD

Nicholas Schmidt joined the UVA Hospitalist section on July 2019 after completing residency at UVA. Dr Schmidt is originally from South Carolina where he completed his undergraduate and medical school education (Go Gamecocks!). Nicholas will be primarily working on the hematology/oncology service with additional time spent on general medicine teams. While not at the hospital, Nicholas enjoys traveling with his wife as well as watching sports.



Ryan Wiggins, MD

Ryan Wiggins joined the UVA Hospitalist section this summer. Ryan received his undergraduate degree from the University of Virginia before returning to New Jersey for medical school at Rutgers New Jersey Medical School. Ryan attended Boston University, where he completed an internship and residency at Tufts Medical Center. Ryan recently married his wife Jackie, who is a Neonatology fellow here at UVA. Ryan and Jackie recently adopted a dog, Nola. In Ryan's free time, he enjoys playing golf and hiking.



David Fink and Charlie Magee hiking at Ragged Mountain Reservoir

HOME TEAM PROGRAM UPDATE

Nationally, an extremely small number of patients (1%) account for a disproportionate burden of healthcare costs (22%). These patients are what are referred to as high utilizers and, not surprisingly, are more likely to have mental health or substance use disorders in addition to complex chronic medical illnesses. In early 2017, a dedicated group of multidisciplinary providers on 3West sought to better understand our local problem of 30-day readmissions and discovered that a small cohort of adult patients (n=10) with sickle cell disease (SCD) accounted for 7% of all readmissions to the General Medicine (GM) service and nearly \$1million in annual costs. After conducting patient interviews to understand these patients' experiences in care and exploring best practices for patients with SCD and high utilization, the use of longitudinal, multidisciplinary, individualized care plans (ICP) was identified as a promising approach. ICPs were subsequently developed through a care planning meeting with each patient/family and representation from all relevant disciplines, including nursing, social work, pharmacy, and various physician specialties. The plans provide a concise summary of each patient's medical history and prior utilization and outline detailed strategies for optimal care across the inpatient-outpatient continuum; in essence, a roadmap to care for a "common presentation" of the patient's chronic illness, with focus on complex pain and behavioral management. Once developed, these plans are published in EPIC for frontline providers to access from any point of care.

Impact analysis of the program 12 months post-intervention demonstrated meaningful reductions in 30-day readmissions, admissions, hospital bed days, and total costs in the pilot cohort. Anecdotally, patients praised the improved consistency in their care, and providers expressed appreciation for the effectiveness of ICPs in facilitating the care of complex patients. In 2018, based on the success of the pilot program, the program received central funding to expand to other patients with extremely high inpatient utilization (>four 30-day readmissions/year) with dedicated physician and nursing resources to further the program's reach.

Beginning November 2018, program director Dr Inofuentes was joined by Teresa Radford as a Nurse Navigator to provide intensive care coordination for enrolled patients in the rebranded MSSL HOME team program.

Since the expansion, the HOME team has enrolled 13 additional patients with primary diagnoses ranging from Alcohol Use Disorder to Type 1 Diabetes to complications of quadriplegia. Additionally, the program has sought novel ways to approach and slow the cycle of high hospital utilization for patients with end-stage illnesses by enrolling select patients for advanced care planning. In an early analysis of program expansion for the first 5 enrolled patients, average monthly admissions and 30-day readmissions decreased modestly, and hospital bed days of care decreased by nearly 40%. Notable successes of the program include partnering with health system and community mental health resources to assist the service line's most frequently admitted patient in completing an inpatient alcohol rehab program and securing Medicaid and permanent supportive housing and assisting another patient with alcoholism, COPD and significant cognitive decline in a transition to hospice provided in a skilled nursing environment.

In June, the HOME team program was recognized by the health system for excellence in patient care quality with the Charles L. Brown Award. This past summer, the HOME team began qualitative research of enrolled patients through structured interviews to better understand the impact of the program and ongoing barriers to better health from the patient's perspective. This November, Dr Inofuentes will co-lead a workshop at the national meeting for the Center for Complex Health and Social Needs (Camden Coalition) on the importance of cross-sector teams in reducing utilization among patients with substance use and mental health disorders.

HEMATOLOGY/ONCOLOGY HOSPITALIST PROGRAM

The hospitalist group has recently developed a relatively new avenue of service in the form of a hematology-oncology hospitalist service. This group evolved out of a growing need in the hematology and oncology service line for more providers to support its increasing patient needs, the rapidly expanding stem cell transplant program, and its rising number of clinical trials.

The hematology-oncology hospitalist primarily serves in three different domains: supervision of chemotherapy administration, management of medical problems associated with malignancies and their associated therapies, and assistance in caring for patients receiving autologous stem cell transplants. For patients receiving regularly scheduled chemotherapy, they are often admitted by an outpatient hematologist or oncologist to the service where they can be observed for toxicities associated with chemotherapy administration. The partnership with the hospitalists can help us aid in providing more access to care for patients with advanced hematologic and oncologic needs. UVA hematology and oncology patients who present to the hospital with medical problems manifesting as a result of their diseases or therapies often require inpatient care. In the past, this has largely been managed by the hematology/oncology attendings along with resident teams. UVA's expertise has been increasingly recognized on a national scale, so have the needs to accommodate growing numbers of patients. The hematology-oncology hospitalist will aid in offloading that group so that we can allow for more patients to receive the excellent standard of care that UVA is accustomed to providing. Finally, the stem cell transplant program has been an area of surging growth. The program completed its milestone 500th transplant just this year. Given the medical complexity of some of these patients and associated treatments, the hospitalists have formed a partnership in which we can co-manage a patient's complex medical problems and complications of transplants along with the hematology team to effectively extend the reach of care we can provide.

This has been a wonderful collaborative effort between Hematology/Oncology and the hospitalists, and we look forward to seeing how it will further grow and develop.

HOSPITAL MEDICINE - EDUCATION

FOUNDATIONS OF CLINICAL MEDICINE 1



Andrew Parsons Foundations of Clinical Medicine

Sneed, MD; Chris Moore, MD; Rahul Mehta, MD; Glenn Moulder, MD; Greg Young, MD; and Andrew Parsons, MD who also directs the FCM-1 course.

Launched in 2018 by UVA School of Medicine, Foundations of Clinical Medicine (FCM) 1 is an 18-month longitudinal course led by physician coaches and non-physician co-mentors engaging patients, standardized patients, and simulation to introduce and foster clinical skills. FCM-1 aims to develop history taking, relationship building, physical examination, differential diagnosis, and diagnostic reasoning skills through small group, case-based exercises. FCM-1 is the pre-clerkship portion of the larger FCM program, a novel 4-year long curriculum focused on professional identity formation. The time students spend in FCM creates their foundation as a physician. Within the UVA School of Medicine curriculum, morning lectures concern themselves primarily with basic science knowledge. The practice of medicine—both the science and the art in all of its subtleties—is the focus of FCM.

FCM-1 had a successful first year in large part due to a number of hospitalists who serve as physician coaches: Becky Kenner, MD; Ben

HOSPITAL MEDICINE - PUBLICATIONS

Andrew Parsons, Bahnsen Miller, George Hoke. [“Adjuvant Corticosteroids in Hospitalized Patients with CAP: When is it appropriate to treat?”](#) Appeared in *The Hospitalist*, June 2019.

Andrew Parsons, A Pahwa, A Burger. [“Clinical Guideline Highlights for the Hospitalist: Diagnosis and Management of Clostridium difficile.”](#) *J Hospital Medicine*. Accepted August 2019.

Andrew Parsons, Karen Warburton. [“A Novel Clinical Reasoning Coaching Program for the Medicine Learner in Need”](#) *MedEdPublish* October 2018. 8, [1], 9.

George Hoke. [“A Just-in-Time Tool for Teaching High Value Care, Medical Education”](#)

George Hoke. [“Choosing Wisely: Next Steps”](#) *Journal Of Hospital Medicine*, Pending Publication.

George Hoke. [“Redesigning Acute Care: Hospitalists Make Room for Geography”](#) *Journal of General Internal Medicine*, Pending Publication.

W McCall, Karen Warburton, J Rencic, Andrew Parsons. [“Lessons in Clinical Reasoning: Pitfalls, Myths, and Pearls; Chest Pain and Shortness of Breath”](#) *Diagnosis* 0,0 (2019).

W Eschenbacher, Anthony Marino, George Hoke, Andrew Parsons. [“Really Good Stuff: A Just-in-Time Tool for Teaching High-Value Care”](#) *Medical Education*. Accepted, April 2019.

Paul Helgerson, I Jenkins. [“Engaging the C-Suite in Quality Improvement Efforts”](#) Peer-reviewed SHM Web-Based CME Module, Pending Publication.

Paul Helgerson. [“Coaching a Quality Improvement Team”](#) Peer-reviewed SHM Web-Based CME Module. Pending Publication.

Eschenbacher, W., Marino, A., Hoke, G. and Parsons, A. (2019). [“A just-in-time tool for teaching high-value care.”](#) *Medical Education*, [online] 53(11), pp.1143-1143.

HOSPITAL MEDICINE - RESEARCH

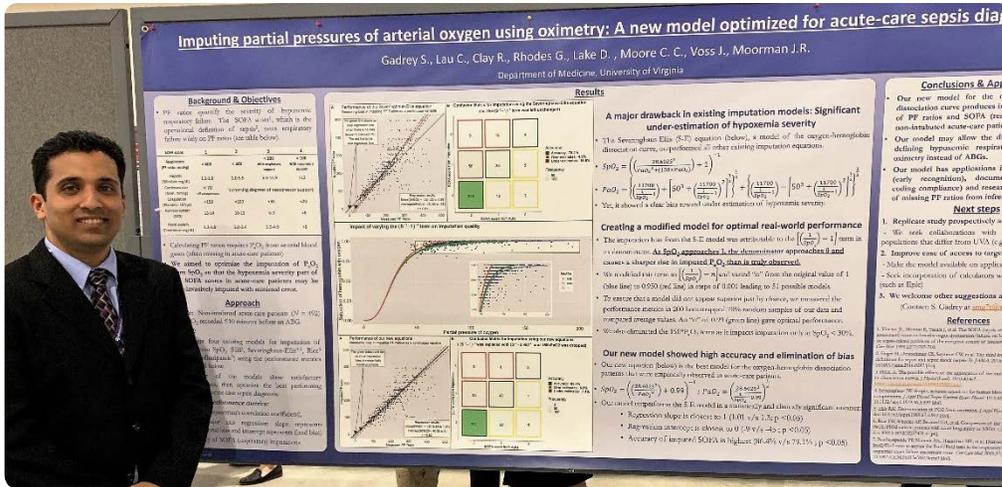


With Exercise Physiology Core Lab staff at UVA

An essential duty of a hospital medicine provider is to pick up the earliest signs of clinical deterioration. This is crucial because delays in initiation of therapy often have disastrous consequences in the acutely ill patients that are seen by hospitalists. Dr. Shrirang Gadrey's research aims to use the power of advanced sensing and signal processing technology to create novel solutions for commonly encountered problems in hospital medicine.

One area of his study has been the use of oxygen-hemoglobin dissociation curve (ODC) models to estimate the partial pressure of arterial oxygen (PaO2) using non-invasive pulse oximetry sensors (SpO2) instead of invasive arterial blood sampling. He found that all existing models have a very concerning bias towards underestimating the degree of respiratory failure. So, he created a distinct model of the

ODC that provides more accurate and unbiased PaO2 estimates. This model is much better suited for use in acutely ill patients than all prior models.



Another exciting area of his work involves collaboration with Dr. Ronald Williams in the School of Engineering. This work is funded by a seed grant from UVA's Center for Engineering in Medicine. Together, Dr. Gadrey and Dr. Williams have created a novel diagnostic device. This device analyzes complex patterns of respiratory kinematics (the breath related motion of the thorax and abdomen) to predict clinical deterioration. Currently, this device is being tested in healthy subjects in the exercise physiology lab, and preliminary results are encouraging.

Shrirang Gadrey presenting the new model for the oxygen-hemoglobin dissociation curve at the Society of Hospital Medicine's annual meeting in 2019.



Pilot testing a novel respiratory kinematics monitoring device in UVA's exercise physiology lab



Studying respiratory kinematic signals with Dr Williams

STAFF PROFILE - Travis Key



Jacoby and Travis

Why Healthcare?

I didn't set out to work in healthcare but when I started as a Health Unit Coordinator; I realized how comfortable I am in the environment and it felt like a "good fit".

What brought you to Charlottesville?

I am proud to say, I was born and raised in the Fifeville neighborhood of Charlottesville. I've seen Charlottesville grow so much in my lifetime. I love looking at the old pictures of how things have changed. Great memories!

What excites you about your work?

I like that no two days are the same. I couldn't imagine doing the same thing over and over, every day. I also work with a great team of people in Division of General, Geriatric, Palliative & Hospital Medicine!

Proudest/greatest achievement outside the professional realm?

I know its cliché but my son Jacoby makes me the proudest mother ever! He has warmed my heart since I first laid eyes on him. I can't explain the love in words, I can only feel it.

Also, going back to college in 2008 and earning my Bachelor's in Business Administration in 2010, while working full time and being a single parent. It wasn't easy but definitely worth it!



Jacoby and Travis

Next life?

I will just be thankful for another life!

What are you usually doing on the weekend?

Retail therapy with friends and family! Followed by a good meal. We love to visit new restaurants!

Favorite vacation/activity spot?

No particular place. As long as I can relax, it's a vacation!

Most admired person, and why?

My parents! There were a lot of us and they worked hard and sacrificed for us. There was always plenty of love. As a parent now, I definitely admire everything they instilled in us and I definitely incorporate it in my parenting.

Best advice anyone ever gave you?

Treat others, as you want to be treated!
Coming from a big family, my mother was adamant that we all treated each other with kindness; it was that way or no way!

What about you would surprise us?

Sorry, I'm pretty much an open book, no surprises!

FACULTY PROFILE - Joseph Hall



Heather, Henry, Joe, and Charlie

Why healthcare?

initially became involved in healthcare as an Occupational Therapist, out of a desire to help people in a tangible way to achieve more independence and normalcy in their lives. While working at UVA as an OT, I became more interested in the medical side of patient care, and also felt that I wanted a more significant role in the decision making process for my patients.

What brought you to Charlottesville?

was familiar with Charlottesville because my older brother did his medical school and Internal Medicine residency at UVA. Visiting him and his family, I grew to love the town and the surrounding area. UVA was the first place I applied when graduated from the OT program at UNC. The therapy department supported me through the process of taking the prerequisite classes for med school, and I knew that I wanted to return here for residency. By the end of residency, UVA felt like home, and I didn't want to leave.

What excites you about your work?

love direct patient care, especially the process of getting to know patients and helping them to achieve their priorities. I am excited to take on the role of the medical director, become better acquainted with my colleagues on the third floor, and together work toward shared goals of improving patient outcomes and the systems in which we practice.

Proudest/greatest achievement outside the professional realm?

Starting a family during med school and residency, and the ongoing process of raising 2 amazing boys.

Next life?

I love literature and would like one day to spend more time doing my own creative writing.

What are you usually doing on the weekend?

Currently, I am usually spending time with my wife, Heather, and our two sons, Henry (age 2) and Charlie (age 4). Their favorite activities are bike rides (me riding the bike and the boys riding in a trailer behind me, eating goldfish and yelling "Go fast!"), playing on the playground in our backyard (they love to use the hose to turn the slide into a waterslide) and visiting the "Discovery Museum," "C'ville Jump," or "Bounce, Play & Create."



Henry and Charlie preparing to go fast (though probably not fast enough for their liking)

Favorite vacation/activity spot?

Every summer, we go up to New Brunswick, Canada, to a cabin belonging to my wife's parents. It is pretty removed from civilization, surrounded by woods and waterways, and is a fantastic spot to unwind. The wildlife can also be amazing: so far I've seen a bear, a beaver and a moose.

Most admired person, and why?

My parents are amazing people who helped me grow into the person I am today.

The best advice anyone ever gave you?

Don't be afraid to say, "I don't know." (To prove it, I don't know where this originated, but I think it's especially important when teaching students/residents.)

What about you would surprise us?

In college, I was a member of the parliamentary debate team, and in my senior year, my partner and I won the Tennessee state championship.



Charlie and Joe in Canada

FACULTY PROFILE - Charles Magee



Corrine, Charlie, Braden, Ashley, and Cameron

Why Healthcare?

Discovering the secrets of the body and using this knowledge to heal the patient invokes a certain mysticism and personal connection that is rarely found in our world today. I remain as enamored with medicine today as I was a child dreaming of it over 30 years ago.

What brought you to Charlottesville?

Everything! UVA is a top-tier academic institution with a strategic vision that permeates and faculty who care deeply for one another. Charlottesville offers a rich cultural foundation with social growth and awareness so vital for a rapidly growing, family-forward community. Not to mention, the climate is fantastic and close to everything you could ever want to explore or do! Enjoy food? So do I! C'Ville has something for every taste bud! I've traveled to a lot of places, near and far. It doesn't get any better than this!

What excites you about your work?

Teaching. I can't think of a higher honor. Shaping young medical minds to excel in medicine is what drives me every day.

Proudest/greatest achievement outside the professional realm?

Fatherhood. By far, the hardest and most humbling experience. Military service. Deployments to both Iraq and Afghanistan provide me personal and professional strength, humility, and compassion. Nothing prepares you for the emotional turbulence but also the deep and lifelong connections through this service. I wouldn't trade my time serving for anything.

Next life?

This is it!

What are you usually doing on the weekend?

Running, hiking, camping, and spending time with my 3 children – basically soccer games most weekends.

Favorite vacation/activity spot?

The Outer Banks. A great location to reflect and focus on what matters most in life.

Most admired person, and why?

My mother – she prepared me for everything life's thrown at me.

The best advice anyone ever gave you?

Just don't screw up – my mom.

What about you would surprise us?

Favorite vegetable – okra; who doesn't love gumbo!



Braden, Corrine, Ashley, Charlie, and Cameron

FACULTY PROFILE - Alex Millard



Trish, Leighton, and Alex

grab a drink with after work.

Proudest/greatest achievement outside the professional realm?

The easy answer is being a dad, my two-year-old daughter Leighton makes me laugh a lot.

Next life?

I'd say, astronaut, I always wanted to travel to outer space.

What are you usually doing on the weekend?

Hanging out with my wife Trish, our daughter, and our two dogs. Reading books (my favorites from the last year have been Lincoln in the Bardo and A Gentleman in Moscow), watching football or soccer.



Trish, Leighton, and Alex

Why Healthcare?

It's a pretty typical story; like most, I liked the intersection of applying science in a way that directly helps people.

What brought you to Charlottesville?

I came here for residency in 2009 because I felt like I'd get proper training but felt like the people wanted to hang out with each other outside the hospital, which I found to be true. Aside from a year away, the last ten years have been spent here, and Charlottesville has been a great place to live, get married, and have a family.

What excites you about your work?

I really enjoy teaching medical students and residents. The opportunity to work with them forces me to be up on the latest information and causes every day at work to be a fresh experience. That, and working in a hospitalist group that genuinely works to provide quality clinical care but that I can also talk with about football or books and

Favorite vacation/activity spot?

I always like to visit new places; I'm good reading a book on the beach or hiking for a week in the mountains or seeing a great museum.

Most admired person, and why?

I'm amazed by anyone who can speak multiple languages or plays multiple instruments, things I've tried, and have no talent for.

The best advice anyone ever gave you?

Your kids grow up fast, so enjoy every moment.

What about you would surprise us?

I've been to Everest Base Camp and smelled pretty terrible after the two weeks of hiking.

FACULTY PROFILE - Bahnsen Miller



Jennifer and Bahnsen

Proudest/greatest achievement outside the professional realm?
Getting married last year!

Next life?
Beach bum.

What are you usually doing on the weekend?
If not working, I like exploring local wineries and breweries, running the Monticello trail, or watching LSU football.

Favorite vacation/activity spot?
Rosemary Beach, Florida.

Why Healthcare?

Working in healthcare allows for an amazing opportunity to help others, individually and on a system level. I was also attracted to the dynamic and challenging environment that brings together like-minded individuals.

What brought you to Charlottesville?

My wife 'matched' at UVA as a gastroenterology and hepatology fellow. We were interested in finding a place with a strong fellowship and hospitalist group - UVA is the perfect fit!

What excites you about your work?

Lots of things! I enjoy the opportunity to meet new people from different backgrounds - patients, students, residents, and colleagues. I also enjoy the diversity of my work - teaching, mentoring, leading, and learning.



Jennifer and Bahnsen



Jennifer and Bahnsen

Most admired person, and why?

My parents. Both came from humble beginnings and worked very hard to provide for my sister and I. They made many sacrifices for us and have been extremely supportive throughout my life.

The best advice anyone ever gave you?
Never give up.

What about you would surprise us?

Although I am one of the slowest moving people in the hospital (according to my wife), I attended college on a track scholarship, running the 200 and 400-meter sprints.

FACULTY PROFILE - Andrew Parsons



Why Healthcare?

It is a mix of so many things that are important to me: helping individuals that need it most, public health, basic science, and social justice.

What brought you to Charlottesville?

I came to Charlottesville for residency and stayed on as a hospitalist. Charlottesville—an artsy college town in the mountains—is perfect for our family.

What excites you about your work?

The variety. Caring for patients with unique backgrounds, applying lessons learned in clinical practice to teaching residents and medical students, and pursuing scholarly activities when able. Also, the people—our group has a passion and energy for work that is contagious. It's fun to be part of a great team.

Proudest/greatest achievement outside the professional realm?

Becoming a dad. My daughter Grayce is amazing.

Next life?

I need multiple lives. Evolutionary biologist (was almost this life), Foreign Service Officer, astronaut (without my fear of heights), globe trekker.

What are you usually doing on the weekend?

4-year old activities. Soccer practice, Swim lessons, Bounce-n-Play, and Little Gym. Then hopefully making it out to a winery.

Favorite vacation/activity spot?

Hilton Head, SC for vacation each year, but I like traveling to new places with some outdoor adventure.

Most admired person, and why?

Dolly Parton. Came from little means but never forgot. Always serving, always working, and always giving back.

The best advice anyone ever gave you?

“Sooner started, sooner done.” – Dad

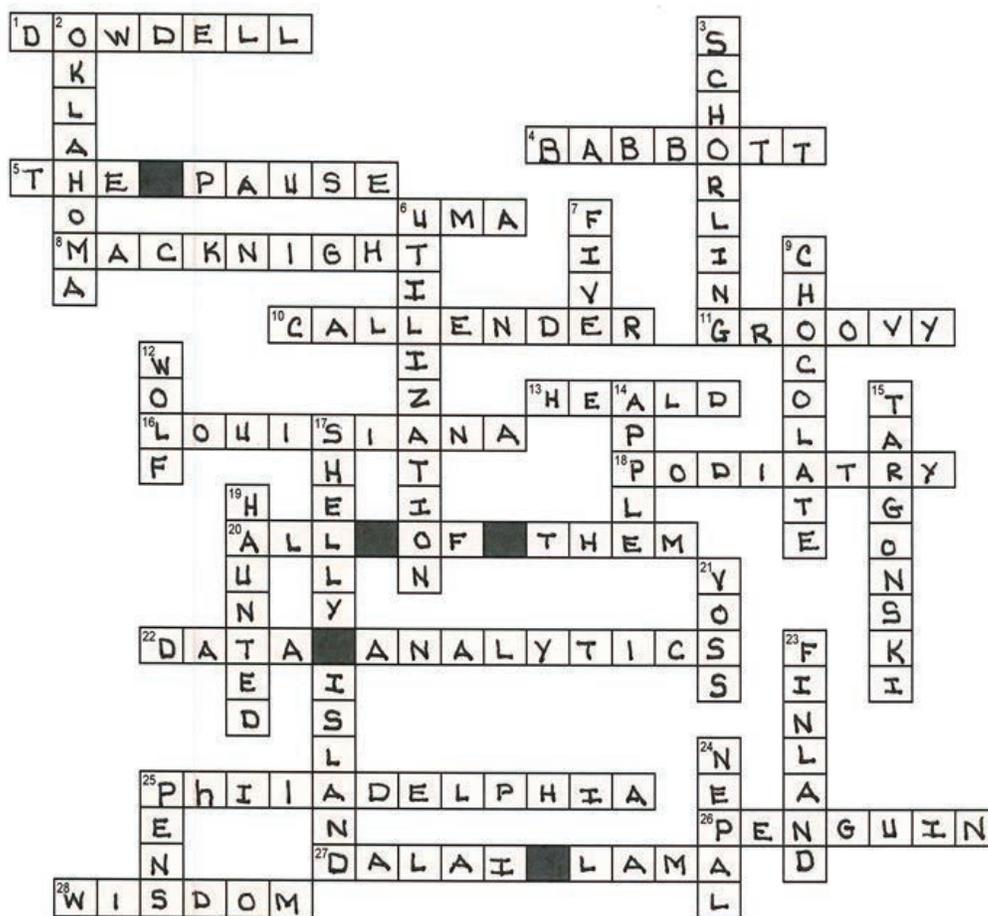
What about you would surprise us?

I very much enjoy keeping up with politics, reading books on astrophysics, and following University of Tennessee sports.



Andrew and Grayce

ANSWERS FROM LAST MONTH'S CROSSWORD



Across

- 1 This double Hoo (last name) bleeds blue and orange.
- 4 He's like Dorothy and isn't in Kansas anymore (last name).
- 5 Jon Bartels developed this practice to offer closure to medical team and patient after a patient death (two words).
- 6 This clinic is the largest provider of indigent primary care.
- 8 This physician (last name) works his craft on the field of play.
- 10 This physician's name is like a measure of time just spelled differently.
- 11 What is new Geriatric Section Head, Justin Mutter's, favorite word?
- 13 This physician (last name) is a birder extraordinaire.
- 16 Laurie Archbald-Pannone grew up with crawfish boils and Mardi Gras. In what state did she reside?
- 18 Specialty at UMA that deals with "agony of de feet."
- 20 Which Division is Mitch Rosner's favorite (three words)?
- 22 Clay may be his name but a potter he is not. What is Russ Clay's specialty (two words).
- 25 Division employee, Debra Burleigh, was born in this city where mummers march every New Years.
- 26 Which Batman villain does Sr. Admin Assistant, Shaun Wickline, most identify with?
- 27 Leslie Blackhall has spent time with which world leader (two words)?
- 28 For what is Peggy Plews-Ogan known?

Down

- 2 Division Administrator, Cyndi Smith-Power, grew up in this state where the winds come sweeping down the plains.
- 3 This physician (last name) teaches others to focus awareness on the present moment.
- 6 Joel Schectman is responsible for the management of what?
- 7 Palliative fellow, Alina Fomovska, speaks this number of languages.
- 9 What item can division staff not live without?
- 12 We can blame this physician's work for lowering the age at which colonoscopy's are now recommended. He's also hungry like a.
- 14 This may keep the doctor away but most physicians love them.
- 15 Behind bars is where this physician spends most of his time (last name).
- 17 Ruth Aldridge kayaked this mysterious barrier island in September 2017. It no longer exists (two words).
- 19 Some believe that one or more of the offices on the sixth floor of the CDW are what?
- 21 Last name of the physician whose photography is something to behold and adorns the Division's walls.
- 23 Ira Helenius was born and raised in what country?
- 24 The DOM Associate Chair for Professionalism and Diversity has been working in this SE Asia country to develop professionalism and ethics among students, residents and faculty.
- 25 Palliative physician, Tim Short, makes these as a hobby.