In this fall issue of The Chart, we celebrate the beginning of another academic year. As students in our newest Class of 2022 at the Larner College of Medicine dive into their first few classes, our faculty are busy directing courses and leading active learning sessions, serving as mentors, and of course treating patients and conducting their own research. We welcome new faculty in divisions across our Department of Medicine, and congratulate the many faculty who received promotions in rank.

Our faculty’s continued success in securing large research grants is particularly noteworthy. One example: Over the last year, researchers in the Division of Pulmonary and Critical Care Medicine have been awarded a total of roughly $8.76 million in new research funding, which is an incredible achievement. We are extraordinarily fortunate to have so many nationally and internationally recognized scientists as our colleagues. See the Research News section of The Chart for more details about their work and others across the Department of Medicine.

Another recent focus for the department has been on improving the Epic user experience. Although working in the electronic medical record system is a vital part of our days, we also know it can also be a source of frustration and anxiety. A team including Benjamin Suratt, Rachel McEntee and David Ziegelman recently visited two outpatient practices to conduct a “sprint” aimed at helping all staff members – from nurses and physicians to schedulers and support staff - troubleshoot problem areas and improve how Epic works for them on a day-to-day basis. By all accounts, the sprints were a huge success. We hope the targeted training helps to increase efficiency and improve communication and workflow.

Thanks for reading this issue of The Chart – hope you enjoy!

On the Cover: Michael LaMantia, M.D., M.P.H.

Photo by David Seaver

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New and Notable

LaMantia Invested as Inaugural Holly and Bob Miller Chair in Memory and Aging

Michael LaMantia, M.D., M.P.H., associate professor in the Division of General Internal Medicine/Geriatrics, was invested as the inaugural Holly and Robert Miller Chair in Aging and Memory at the University of Vermont on August 21, 2018. LaMantia is a nationally-recognized expert in the care of older adults, particularly those with cognitive impairments such as Alzheimer’s disease and other dementias. Respected Vermont philanthropists Holly and Bob Miller have made a $6 million gift to UVM to permanently endow three faculty positions. The Miller Chair in Memory and Aging will focus on issues related to memory and aging; the Miller Professor in Nursing Leadership will advance the field of nursing leadership; and a third will address clinical practice in nursing.

New Faculty

Division of Hospital Medicine
Lee-Anna Burgess, M.D., assistant professor
Caleb Doyle-Burr, M.D., assistant professor

Division of General Internal Medicine/Geriatrics
Assistant Professor Jonathan Benjamin Willfong, M.D., joined the team in Williston. He will assume the care of patients as Dennis Plante, M.D., retires.

Division of Immunobiology
Emily Bruce, Ph.D., faculty scientist

Division of Infectious Disease
Devika Singh, M.D., assistant professor
Timothy Whitman, D.O., associate professor

Division of Pulmonary Disease and Critical Care Medicine
Jessica Badlam, M.D., assistant professor
Skyler Lentz M.D., assistant professor. His primary appointment is in the Division of Emergency Medicine in the Department of Surgery.

Katelyn Morrisette, M.D., assistant professor

Division of Rheumatology and Clinical Immunology
Sanjeev Patil, M.D., assistant professor
Honors and Awards

Amy Teleron, M.D., assistant professor in the Division of Hospital Medicine, will be accepting the American Heart Association Silver Plus Award on behalf of UVM Medical Center. The medical center is the only hospital in Vermont receiving this award. Hospitals who receive this recognition demonstrate at least 85 percent compliance in each of the four Get With The Guidelines®:Resuscitation Recognition Measures. The Silver level recognizes compliance for one calendar year and the Plus signifies achievement of high survival rates in the top two quintiles for all hospitals receiving the Silver Award. Internal medicine residents serve as the team leaders for the Code Blue team that responds when a patient suffers a cardiac arrest and needs resuscitation. Teleron runs a mock code blue leadership curriculum for residents every week with the help of the chief residents and the simulation lab focused on teamwork and communication.

Jan Carney, M.D., M.P.H., professor in the Division of Pulmonary Disease and Critical Care Medicine, received the Vermont Public Health Association’s first Public Health Champion Award at their annual meeting in Montpelier, VT, in May of 2018.

Gilman Allen, M.D., professor in the Division of Pulmonary Disease and Critical Care Medicine, was interviewed for an article titled “Changing Practice in Critical Care,” published by the American Board of Internal Medicine Foundation on August 16, 2018. Allen discusses procedures at UVM Medical Center that have reduced resource overuse in the critical care setting.

Mary Cushman, M.D., M.Sc., professor in the Division of Hematology/Oncology, was elected as a board director of the Founders Affiliate of the American Heart Association/American Stroke Association. This board is focused on building resource capacity and improving cardiovascular health in the northeast region. She is also chairing a Task Force on Women in Science and Medicine for the American Heart Association.

Improving the EMR User Experience with the Epic Sprint

A team of information technology experts from the Department of Medicine recently visited several outpatient practices in the Burlington area to help their staff members “sprint” in real time to a better understanding of how to use Epic, the electronic medical record system.

In an effort led by Vice Chair for Academic Affairs Benjamin Suratt, M.D., Rachel McEntee, M.D., assistant professor in the Division of Hospital Medicine, and David Ziegelman, M.D., assistant professor in the Division of General Internal Medicine, the team spent two weeks at each of the locations chosen to pilot the Epic Ambulatory Clinic Sprint: South Burlington Adult Primary Care and the Infectious Disease Clinic at UVM Medical Center. The team, which also included Epic trainer Scott Woytowick and UVM Medical Group trainer Chelsey Carpenter, observed staff members in action as they went about their day-to-day duties using Epic, offering feedback on best practices and new ways to use the system to better suit their needs. Sue Lee served as project manager.

“With the sprint we are really focused on efficiency of practice,” says Suratt. “There’s a neutral team coming in who is focused, on-task, and looking for opportunities to make things better.”

Physician burnout – a challenge that affects the health of clinicians and the quality of patient care nationally – has some roots in how providers interact with the EMR system. Studies have shown that lack of quality training when the system is first implemented leads to a cascading host of problems and inefficiencies even years later. This frustration can be one of many factors leading to continued on page 4
clinicians feeling disengaged and demotivated in their work. User data – both nationally and here at UVM Medical Center - also show a spike in EMR activity in the evenings and weekends, not a good sign for well-being.

“We take all of this home with us nowadays,” says Suratt. “We don’t finish; we go home and do it remotely.”

The sprint process acknowledges those challenges and focuses on solutions. Every sprint began with a 90-minute introduction and small group training. The team conducted three one-hour sessions of one-on-one “at the elbow” training for every staff member and provider in the clinic. They also held drop-in sessions and hosted daily interprofessional huddles for physician leaders, clinic managers and “super users” from different areas of the practice.

The huddle format – which brought together key staff members from across the clinic to focus on specific challenges – yielded positive results, says McEntee, who has also completed training to become an Epic certified physician builder. “I was impressed by how productive these conversations were,” she says. “People shared things with each other that they never would have thought to talk about otherwise.”

Although some challenges with Epic require the intervention of IT programmers, many day-to-day inefficiencies were addressed through “personalization,” or changes that users can implement to make the interface work better for them. Some examples: Creating a panel of frequently ordered tests, or inputting commonly used words or names to auto populate.

“IF PEOPLE ARE ABLE TO PERSONALIZE THE EMR, THEN THEY’RE MORE SATISFIED.”

— BENJAMIN SURATT, M.D.

The Department of Medicine’s Epic Ambulatory Clinic Sprint grew out of Suratt’s attendance at the Association of American Medical Colleges Annual Meeting in Boston in November of 2017, where he heard a presentation from a University of Colorado team who went through a similar process. Suratt, McEntee and Ziegelman wound up visiting Colorado to learn more, and came back with a wealth of information.

It’s a long-term goal to figure out how to scale the process up while keeping costs in check; the team is currently working with IT leadership to find additional funding to expand to other clinics.

“A post-sprint survey at both locations showed that nearly 100 percent of participants found the experience to be valuable, reinforced by enthusiastic individual comments.

“I feel like I have much more control with using Epic, instead of feeling like Epic is controlling me!”

“I like the fact that the whole team enjoyed their time in clinic and was engaged and ready to give feedback on how we could do better.”

“The most useful aspect of the sprint was that it increased hope about how the EMR can work for me instead of against me.”

THE EPIC SPRINT: WHAT PARTICIPANTS SAY

Division of Nephrology Welcomes New Faculty and Staff

Thanks to faculty retirements as well as a growing demand for services, the Division of Nephrology has grown over the past year. Led by Division Chief Richard Solomon, M.D., the division recently welcomed several new members. They bring a diverse assortment of skills and expertise to UVM Medical Center and the Larner College of Medicine, promising to help further the research, education and clinical missions of the institutions.

Alison Fitzgerald, M.D., Assistant Professor

Where are you from?

New York City (Manhattan)

What’s your focus in nephrology?

I focus on hyponatremia and pregnancy in CKD. It is rewarding to take care of outpatients with chronic kidney disease ranging from mild disturbances to dialysis dependency, and apply an understanding of a complex system that is linked to many disease processes.

What are your hobbies outside of medicine?

Spending time with my kids, running, and skiing.

Sree Susarla, M.D., Assistant Professor

Where are you from?

India

What’s your focus in nephrology and what do you love about the specialty?

I focus on home dialysis and electrolyte abnormalities. Nephrology is the division of medicine for smart brains!

What are your hobbies outside of medicine?

Stargazing and astronomy
continued from page 5

Megan Houston, APRN

Where are you from?
I’m a Vermonter and grew up in Craftsbury in the northeast part of the state.

What’s your focus in nephrology?
I work in the acute dialysis unit on Shephardson 4 in collaboration with the attending nephrologist, taking care of dialysis-dependent ESRD patients who are hospitalized; patients who are just starting and new to dialysis; as well as an outpatient dialysis group with unique needs dialyzing on our wards.

What are your hobbies outside of medicine?
I enjoy spending time with my large extended family. We go to the family camp in the summer for swimming, kayaking and barbecue.

Nina Nasirahmedevara, M.D., Assistant Professor

Where are you from?
I am from a small coastal town in southeast India.

What’s your focus in nephrology?
I am focused on acute kidney injury and chronic kidney disease. The complex physiology is what most interests me, how everything in the body is interlinked and dependent on each other, and how the kidneys play a major role in overall electrochemical balance.

What are your hobbies outside of medicine?
I love to paint and draw. I love to come up with new arts and crafts ideas with papers and random things that are left over from other projects.

Abhishek Kumar, M.D., Assistant Professor

Where are you from?
I grew up in India and moved to the U.S. 10 years ago for further education. I consider myself lucky to be recruited as a faculty member at UVM.

What’s your focus in nephrology?
I work in transplant medicine. I am grateful to be able to establish a long-term relationship with a patient and help them navigate complex and often very difficult life choices.

What are your hobbies outside of medicine?
Sports always have my attention. I love being out there in a team and contributing.

Macauley Onuigbo, M.D., Associate Professor

Where are you from?
I graduated from the College of Medicine, University of Nigeria, Enugu Campus in 1981. I have practiced medicine in Nigeria, the United Kingdom and the U.S. I retired from Mayo Clinic in January of 2018 after 15 plus years and joined UVM in early February.

What’s your focus in nephrology?
My focus in nephrology cuts across the following: An interest in acute kidney injury with emphasis on nephrotoxicity of therapeutic agents; the wider application of the analysis of serum creatinine trajectories in AKI management and renal prognostication; and the impact of the EMR on physician burnout and stress. With my MBA, I have a particular interest in the management of the rising and potentially unsustainable healthcare costs here in the U.S.

What are your hobbies outside of medicine?
I enjoy sports, including lawn tennis and soccer. I also like writing, both science, fiction and poetry, as well as travel.

Trio of Department Members Receive SPARK VT Funding

Three Department of Medicine researchers have been awarded 2018 SPARK VT grants by the UVM Offices of the Provost and Vice President for Research. The program, designed to cultivate faculty entrepreneurship and technology commercialization, was founded by the Department of Medicine before it expanded university-wide in 2014-15.

The 2018 SPARK VT recipients are:

Jason Botten, Ph.D., associate professor in the Division of Infectious Disease, for Development of monoclonal antibodies for “Treatment of Hantavirus Disease in North America”

Daniel Weiss, M.D., Ph.D., professor in the Division of Pulmonary Disease and Critical Care Medicine, for “Development of Tissue-Specific Bioinks for Regenerative Medicine”

Cushman Editorial Featured in JAMA

Mary Cushman, M.D., M.Sc., professor in the Division of Hematology/Oncology, co-authored an editorial in JAMA about the association of optimal cardiovascular health factors with cognitive function and MRI measures of brain vascular health. The editorial, published August 18, 2018, and titled “Striving for Ideal Cardiovascular and Brain Health: It Is Never Too Early or Too Late,” sends the message that maintaining good cardiovascular health through healthy diet, physical activity, and healthy weight is associated with better cognitive function regardless of age.

Jensen Co-Authors Global Criteria for Diagnosing Malnutrition

Senior Associate Dean for Research Gordon Jensen, M.D., Ph.D., professor in the Division of Gastroenterology and Hepatology, co-led a major report that provides a global consensus scheme for diagnosing malnutrition in adults in clinical settings. Titled “The GLIM Criteria for the Diagnosis of Malnutrition — A Consensus Report from the Global Clinical Nutrition Community,” the report was published in the Journal of Parenteral and Enteral Nutrition and Clinical Nutrition after more than two years of work by the Global Leadership Initiative on Malnutrition (GLIM) working group.
Grant Highlights

**Jason Bates, Ph.D., Sc.D.,** professor in the Division of Pulmonary Disease and Critical Care Medicine, has been awarded an R01 grant for “Preserving Epithelial Barrier Integrity in Ventilator-Induced Lung Injury.” With Bates serving as communicating principal investigator, co-principal investigators are Gary Nieman, M.S., associate professor of surgery at Upstate Medical University, and Don Gaver, Ph.D., chair of the Department of Biomedical Engineering at Tulane University. The award amount is $677,719 in year one (direct plus indirect costs). The total over four years (direct plus indirect) is $2,576,833, which includes two major subcontracts to the collaborating sites.

**Anne Dixon, M.A., B.M., B.Ch.,** professor and chief of the Division of Pulmonary Disease and Critical Care Medicine, has received a roughly $3.4 million R01 grant from the National Heart, Lung and Blood Institute for “Mitochondrial Redox Perturbations in Obese Allergic Asthma.” Co-principal investigator is UV’s Assistant Professor of Pathology and Laboratory Medicine Vikas Anathy, Ph.D.

**Rachel McIntee, M.D.,** assistant professor in the Division of Hospital Medicine, was awarded a University Health Center (UHC) grant for a project, titled “Pediatric to Adult Specialty Care Transition Project to Improve Medicaid Eligible Youth and Young Adult Access to and Utilization of High Quality Care in Pediatric and Adult Specialty Care Clinics.”

**Timothy Plante, M.D., M.H.S.,** assistant professor in the Division of General Internal Medicine/ Geriatrics, and two co-investigators – UVM Associate Professor of Pediatrics and Psychiatry Valerie Harder, Ph.D., and Maine investigator Kathleen Fairfield, M.D. – have received a $339,000 grant from the Northern New England Clinical and Translational Research Network via the National Institutes of Health for “Hospital Utilization for Opioid Overdose: A Community-Engaged Multidisciplinary Approach to Measure the Impact of Policy Change and Inform Interventions.”

**Benjamin Suratt, M.D., Renee Stapleton, M.D., Ph.D., and Michael Toth, Ph.D.,** have received a $3.2 million R01 grant for “Effects of Exercise on Inflammation-Induced Lung and Muscle Injury in Critical Illness (NEXIS-FLAME).” Daniel Clark Files, M.D., assistant professor of pulmonary, critical care, allergy and immunologic medicine at Wake Forest School of Medicine, is a co-principal investigator.

**Alien Repp, M.D.,** professor in the Division of Hospital Medicine, is co-investigator for a Vermont Child Health Improvement Program (VCHIP) grant, titled “Pediatric to Adult Specialty Care Transition Project to Improve Medicaid Eligible Youth and Young Adult Access to and Utilization of High Quality Care in Pediatric and Adult Specialty Care Clinics.”

Publication Highlights

**Saver JL, Cushman M,** Striving for Ideal Cardiovascular and Brain Health: It is Never Too Early or Too Late. *JAMA* 2018 Aug 30;320:645-7.


**Awards and Recognition**

The Department of Medicine is proud of the following internal medicine residents who were honored for their exemplary achievements:

**The Harriet P. Dustan, M.D. Award**
In recognition of acquisition of new knowledge through research performed during residency

- **Kara Landry, M.D.**

**The Frank L. Babcott, M.D. Memorial Award**
For idealism and integrity, education to patient care and commitment to the educational mission

- **Elena Kozakewich, M.D.**

**Richard E. Bouchard, M.D. Excellence in Primary Care Award**
For providing high quality comprehensive care, for dedication as an educator of patients, medical learners and support staff and for sincere and genuine concern for patients.

- **Kathleen Whitbread, M.D.**

The Department of Medicine honored several faculty members for their outstanding contributions to education:

- **E.L. Amidon, M.D.** Award Outstanding Teacher of the Year
- **Subspecialty Medicine**
- **Matthew Gilbert, D.O.**
  - *He was also selected by residents to speak at their Residency Graduation Dinner on June 8, 2018.*

- **Mark A. Levine, M.D.** Award Outstanding Teacher of the Year
- **General Internal Medicine**
- **Halle Sobel, M.D.**

**Summer Research Fellowship Mentors**

Five department faculty members served as mentors for rising second-year medical students who received summer research fellowships from the Cardiovascular Research Institute of Vermont:

- **Mary Cushman, M.D., M.Sc.,** mentor for Juan Conde ’21
  - “Smoking, Stroke Biomarkers and Risk of Stroke in a National Cohort”

- **Jeffrey Spees, Ph.D.,** mentor for Sean Meagher ’21
  - “Vaso-protective Treatment for Ischemic/Reperfusion Injury after Acute Myocardial Infarction”

- **Harold Dauerman, M.D.,** mentor for Kathryn Kurchena ’21
  - “Biomarkers of Bleeding and Thrombosis in Transcatheter Aortic Valve Replacement (TAVR)”

- **Peter Spector, M.D.,** mentor for Jennifer Holland ’21
  - “Epicardial Mapping in Atrial Fibrillation”

- **Neil Zakai, M.D.,** mentor for Matthew Lebow ’21
  - “Outcomes of Emergency Department Patients with Delayed Diagnosis and Treatment of Venous Thromboembolism”

- **Kathleen Whitbread, M.D.**

**Mary Cushman, M.D., M.Sc.,** mentor for Juan Conde ’21
“Smoking, Stroke Biomarkers and Risk of Stroke in a National Cohort”
Operations Committee Spotlight

Q&A with Friederike Keating, M.D., professor in the Division of Cardiovascular Medicine and chair of the Operations Committee

What is the mission of the Operations Committee?
The Department of Medicine Operations Committee serves to improve operational efficiency and cross-divisional collaboration.

To that end, the committee reviews operational data and compares practices across the divisions, and advises the departmental leadership (chair and unit chiefs) regarding operational matters. The committee has physician members from each division within the Department of Medicine plus a resident representative.

What are some important current projects from the committee?
One current project is the access initiative, which is focused on making sure the right patients get seen at the right place within the right timeframe. Each division's representative is being asked to share what their group is doing to maintain and improve access.

How can faculty get involved in the work of the committee?
This group is an ideal sounding board for new initiatives or changes that will affect many or most divisions in the department. For example, in the past, we have heard from Epic regarding the coming update, from Patient and Family Relations regarding improved access, and from the Department of Pediatrics regarding transitioning care between pediatrics and adult medicine for young adults.

For more information, contact Tammy Stockton, assistant director for the Department of Medicine.

News and Notes

Margaret Butler, APRN, a nurse practitioner in the Division of Nephrology, received the highest score in her certification exam as an advanced practice nurse in nephrology in 2016. She has now been asked to join the test writing committee.

Emily Greenberger, M.D., assistant professor in the Division of Hospital Medicine, transitioned from the hospitalist team to Adult Primary Care at the South Burlington site. She will be caring for former patients of Alison Landrey, M.D., who is leaving UVM Medical Center to work closer to her home in Morrisville, Vt.

Glenn Goldman, M.D., professor and chief of the Division of Dermatology, traveled to South Africa in August to lecture at the South African Dermatology Congress and to review a fellowship program for the American Society for Dermatologic Surgery.

David Rand, D.O., assistant professor in the Division of Hospital Medicine, has initiated a new ultrasound curriculum for medicine acting interns.

In the Community

For the fifth year, Daniel Weiss, M.D., Ph.D., professor in the Division of Pulmonary Disease and Critical Care Medicine, helped to field a team composed of employees, friends and family from UVM Medical Center’s medical intensive care unit and plastic surgery for the annual Lake Champlain Dragonboat Festival. Team Mammaries garnered third place in their division and received bronze medals. The festival benefited the UVM Cancer Center Integrative Therapies Fund.

Members of Team Mammaries celebrate their third place finish in the annual Dragonboat Festival on Lake Champlain.

Members of the Division of Pulmonary Disease and Critical Care Medicine joined the LUNGFORCE Walk in Burlington this year. Team Lung-derful raised $1,137 for the American Lung Association.

David Li-Kang Chen, M.D., Glenn Goldman, M.D., Todd Holmes, M.D., Joseph Pierson, M.D., and Christine Weinberger, M.D., all faculty members in the Division of Dermatology, hosted a dinner at Hope Lodge on June 21, 2018. Hope Lodge provides a free home away from home for cancer patients seeking treatment at the UVM Cancer Center and their caregivers.

Members of Team Mammaries celebrate their third place finish in the annual Dragonboat Festival on Lake Champlain.
By screening 250 user reviews and comments for a once popular – but proven inaccurate – mobile app claiming to change your iPhone into a blood pressure monitor, a research team including Timothy Plante, M.D., M.H.S., has added to evidence that a high “star rating” doesn’t necessarily reflect medical accuracy or value.

Their analysis found that even the presence of app disclaimers warning users not to rely on the app for medical monitoring or diagnosis failed to dissuade people from doing so, or stop health care professionals from recommending the app. That app, called Instant Blood Pressure, was withdrawn from the market in July 2015.

In a report on the study, published in the Journal of the American Medical Informatics Association, the physicians call for medical professionals to be more skeptical of apps that don’t have scientific studies backing them, and warn members of the public that just because an app has been endorsed by a health care professional doesn’t mean it works.

“People tend to trust user reviews when shopping online and use them to decide which products to purchase, but that doesn’t cut it for medical apps,” says Plante, assistant professor in the Division of General Internal Medicine/Geriatrics. “There are certain thresholds of accuracy that need to be maintained, and a five-star rating doesn’t replace clinical validation studies and FDA review.”

Their new findings are a follow-up to the authors’ March 2016 JAMA Internal Medicine report that showed that four out of five times someone with high blood pressure used the Instant Blood Pressure app, they received falsely reassuring, non-elevated results.