PROFILE IN GIVING

In Memory of Collins Oguejiofor '22

When **COLLINS OGUEJIOFOR '22** died unexpectedly in Norwalk, Conn., in June of 2020, where he was about to begin his clinical clerkship at the Connecticut branch campus, the UVM Larner College of Medicine community experienced a deep loss. Collins' teachers and fellow medical students know what a great physician he would have been.

To honor Collins' memory in a meaningful way, the Oguejiofor family worked with the Larner Development and Alumni Relations Office to establish a diversity scholarship fund in his honor, with an initial goal of raising $50,000 to endow the fund. By early September family, students, faculty, staff, and friends of the College have made gifts and commitments that, combined with matching funds from the Medical Alumni Association's Challenge Program, met the initial goal.

Collins' family deeply appreciates that Collins is remembered in the Larner College of Medicine community for his kind, warm nature. They established the Collins Oguejiofor Diversity Scholarship in the hopes that students with similar backgrounds can benefit from a medical education at UVM. They are grateful to the many students, faculty, staff, and alumni who have supported it, in addition to Collins' friends and family.

Support the Collins Oguejiofor Diversity Scholarship: **go.uvm.edu/collins**

The University of Vermont
LARNER COLLEGE OF MEDICINE

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On the Cover:
Class of 2024 members Carl Brasch, Varum Gupta, and Chantal Perera gather outside the Medical Education Pavilion after the October 2nd White Coat Ceremony. For more on the ceremony see page 6. PHOTO BY IAN THOMAS JANSEN-LONNQUIST

NEWS

HALL A

FEATURES

WEB EXTRAS

See more online at **med.uvm.edu/vtmedicine/web-extras** including videos, photos, and blog posts.

COVID•19 ONLINE

Read more Larner COVID-19 stories at:
go.uvm.edu/larnercovidstories

After a gorgeous autumn, most of the leaves have fallen here in Burlington. This comforting, seasonal shift is in contrast to the ongoing disruption caused by the COVID-19 pandemic. The world has changed, and new challenges arise, but that cannot keep us from delivering on our missions of education, research, and clinical care. I am so proud of how UVM and the Larner community have responded, highlighting the resourcefulness and versatility of our faculty, students, and staff.

I saw these qualities in action most recently during the White Coat Ceremony for our newest members of the community, the medical Class of 2024. While we couldn't hold the usual ceremony in Ira Allen Chapel, with friends and family in attendance, our first-year students were able to enjoy a hybrid event, gathering in carefully sized groups on campus, hearing from faculty and distinguished guests via Zoom, and then donning their white coats with just a few of us in attendance, and a whole world of well-wishers watching them on the livestream. It was new. It was safe. And it was still deeply moving. That's a combination I have been pleased to find in all our recent special events, be they investitures of new endowed professors, or community Town Halls, or reunion events for our alumni. These online gatherings have retained a feeling of personal closeness for the participants that surprised me. And the size of the audience who get to attend these functions has significantly increased. They may be online, but these are not "virtual" events. I encourage you to view them online on the Larner YouTube channel.

Despite the pandemic, we have medical students and graduate students in our buildings every day, and clinical education continues at our sites in Vermont and Connecticut. Our researchers, many of whom were deemed essential workers and were in their labs throughout the spring and summer, have continued their important efforts. I'm proud that this fiscal year that ended in June saw a record set both for our College's amount of externally funded research, ($105 million) and for the University's as a whole ($181.7 million). As you can read about in these pages, many scientists were able to pivot their work to address the pressing need for new knowledge related to the pandemic.

COVID-19 has thrown into high relief the vital role our institution plays in fostering research that improved the lives of those in Vermont and around the world—most recently with the news of our Vaccine Testing Center's involvement in a COVID-19 vaccine trial. That's why we are proud to proceed with construction of the Firestone Medical Research Building, thanks in large measure to the generosity of donors such as Steve Firestone, M.D.'69, and important funding such as the new $5.47 million shared resource facilities grant from the National Institutes of Health (written by our Senior Associate Dean for Research, Dr. Gordon Jensen). Our campus is changing, and the construction will be a bit disruptive for about two years, especially with regard to parking! On the other hand, I trust you will agree that this project, and the important work described in these pages, demonstrate the commitment and optimism we share for the bright future of our College.

RICHARD L. PAGE, M.D.
Dean, The Robert Larner, M.D. College of Medicine at The University of Vermont

VERMONT MEDICINE

Fall 2020 • Published November 2020

THE ROBERT LARNER, M.D. COLLEGE OF MEDICINE AT THE UNIVERSITY OF VERMONT

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Phase 3 COVID-19 Vaccine Trial Comes to UVM and UVM Health Network

The University of Vermont Medical Center and Vaccine Testing Center at the UVM Larner College of Medicine have been selected to take part in a Phase 3 trial for a COVID-19 vaccine developed by Oxford University and manufactured by AstraZeneca. The study will track the safety and effectiveness of the investigational vaccine. Approximately 30,000 participants from the United States will take part in this study, including at least 250 people locally.

"This is an exciting opportunity for our area to help develop a safe and effective vaccine for COVID-19 and control the ongoing pandemic," said Beth Kirkpatrick, M.D., a specialist in Infectious Diseases at UVM Medical Center and director of the Larner College of Medicine's Vaccine Testing Center.

Dr. Kristen Pierce, also a specialist in Infectious Diseases at the UVM Medical Center, who leads the study and the Vaccine Testing Center with Dr. Kirkpatrick, adds, "We have significant experience testing vaccines at the University of Vermont and are proud to take part in this national effort. Volunteers will receive high-quality care throughout their participation and will be helping the global community move beyond the threat of COVID-19 by participating."

"Most people don't know that, thanks to ongoing research by Drs. Kirkpatrick and Pierce and the Vaccine Testing Center team, our college was already poised to contribute to the fight against this novel coronavirus," said Richard L. Page, M.D., Dean of UVM's Larner College of Medicine. "This vaccine trial will combine our research excellence with the outstanding clinical care provided by our partners at UVM Health Network and the UVM Medical Center, to bring us closer to eliminating this pandemic."

More information on the trial can be found at UVMHealth.org/COVIDStudy.

LCME* Accreditation Update

Key dates

VIRTUAL MOCK SITE VISIT
January 19-20 2021

VIRTUAL SITE VISIT
April 11-14 2021

*Liaison Committee on Medical Education

FLATICON

Cardiovascular and Brain Health Focus of New Center

The University of Vermont is now home to a new Center of Biomedical Research Excellence—the Vermont Center for Cardiovascular and Brain Health—thanks to funding from the National Institute of General Medical Sciences. Co-led by Professor of Medicine **Mary Cushman, M.D., M.Sc.**, and Chair and Professor of Pharmacology **Mark Nelson, Ph.D.**, the center will bring together junior and senior researchers to conduct team science across disciplines to determine causes and suggest optimal treatments for cardiovascular disease, the leading causes of death and dementia in the U.S.

The award is expected to bring nearly $12 million to UVM over five years, with $2.6 million in funding the first year.

"The Center is providing a platform to build sustainable research programs built on the exceptional potential of early career faculty, and addressing vital health problems facing society, in cardiovascular disease, stroke and cognitive impairment," said Dr. Cushman.

In addition to Cushman and Nelson, key faculty involved in the project include **Neil Zakai, M.D., M.Sc.**, associate professor of medicine, and **Peter Durda, Ph.D.**, faculty scientist in pathology and laboratory medicine, who will direct the Study Design and Molecular Epidemiology Core. **Todd Clason, M.S.**, researcher/analyst in pathology and laboratory medicine, who will direct the Customized Physiology and Imaging Core. Three junior faculty members from the Larner College of Medicine and the College of Nursing and Health Science will direct projects in the center:

- **Katharine Cheung, M.D., Ph.D.**, assistant professor of medicine: "Trajectories and Vascular Mechanisms of Cognitive Impairment in Chronic Kidney Disease;"
- **Masayo Koide, Ph.D.**, assistant professor of pharmacology: "Crippled Cerebral Blood Flow Regulation in Chronic Hypertension;" and
- **Denise Peters, P.T., D.P.T., Ph.D.**, assistant professor of rehabilitation and movement science: "Neuromechanisms Associated with Response to Gait Training in Chronic Stroke."

"The data are striking. The key takeaway is that children are not driving the pandemic. After six months, we have a wealth of accumulating data showing that children are less likely to become infected and seem less infectious; it is congregating adults who aren't following safety protocols who are responsible for driving the upward curve."

– William Raszka, M.D., speaking about a commentary he co-authored with Benjamin Lee, M.D., published in *Pediatrics*, titled "COVID-19 Transmission and Children: The Child Is Not to Blame"

Carney Receives President's Distinguished University Citizenship and Service Award

Notable

Jan Carney, M.D., M.P.H., professor of medicine, associate dean for public health and health policy, and senior advisor to the dean of the Larner College of Medicine, was named the 2019-2020 recipient of the President's Distinguished University Citizenship and Service Award in recognition of her innovative teaching, creative leadership and service to the University of Vermont community.

Carney, who served as Vermont Commissioner of Health from 1989 to 2003, has been a passionate advocate for preventive medicine and public health throughout her career—at UVM, in Vermont and nationally. Over the past 15 years, her public health projects course—run in collaboration with the United Way of Northwest Vermont—has resulted in the completion of well over 200 public health projects. Carney developed Vermont's first Master of Public Health degree and other graduate-level online public health programs and directs the Rural Health Research and Delivery Core for the Northern New England Clinical and Translational Research Network.

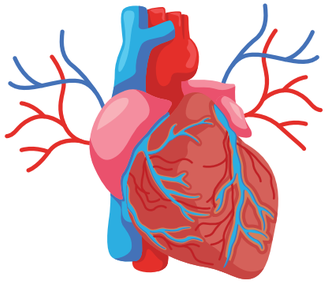
An active national and statewide leader in the American College of Physicians, Carney is a recent past vice-chair of the ACP Health and Public Policy Committee; she was awarded a Mastership in the ACP in recognition of the significance of her contributions to the field of medicine. She has championed policy efforts to reduce the health consequences of tobacco use and sugary beverage consumption in Vermont and co-chaired the UVM Tobacco-Free Steering Committee, whose work led to UVM's Tobacco-Free Campus Policy in 2015. In recent months, Carney has stepped up once again, helping educate Vermonters about COVID-19 safety protocols and information through webinars and media interviews, as well as assisting UVM leaders to develop the Return to Campus plan.

Jan Carney, M.D., M.P.H.

SIGMON AND NEW MODELS OF OPIOID TREATMENT RECOGNIZED

Associate Professor of Psychiatry **Stacey Sigmon, Ph.D.**, is featured on *Fast Company's* 11th annual list of the Most Creative People in Business. *Fast Company* recognized Sigmon in the "For Designing a Superior Solution" category for her work developing new models of opioid treatment delivery. Sigmon has built a national reputation for developing and testing innovative treatment options to bridge the gap in treatment access for patients in rural areas, including computerized dispensers for controlled medication dosing and interactive voice response systems for remote support.

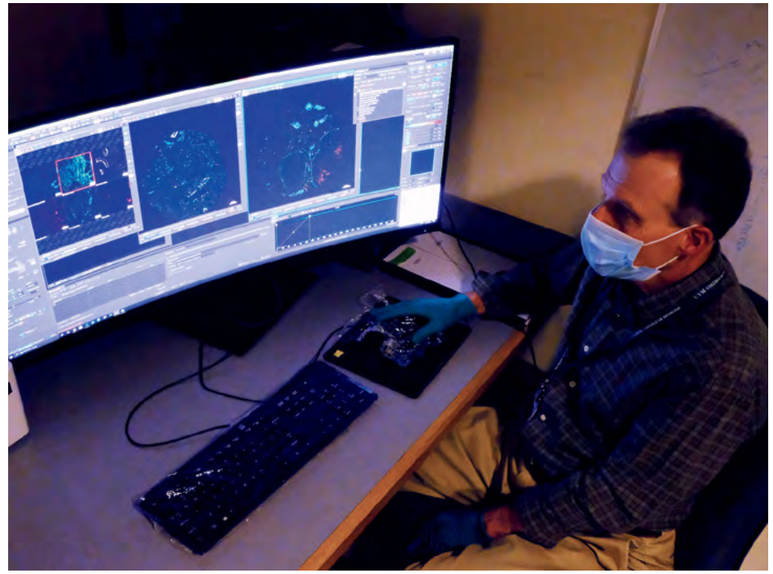
At left: illustration of Dr. Sigmon from *Fast Company* by Erick Davila.



LARNER TEAM PLAYS ROLE IN NIH COVID-19 BLOOD CLOTTING TREATMENT TRIALS

Research

UVM is participating in a major national research effort to evaluate the safety and effectiveness of varying types of blood thinners to treat adults diagnosed and hospitalized with COVID-19. Part of the Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV) initiative, the three trials will be coordinated by the NIH's National Heart, Lung, and Blood Institute and funded through Operation Warp Speed. Collectively known as ACTIV-4 Antithrombotics, the goal is to give doctors critical insights to improve the care of patients with COVID-19 and prevent life-threatening blood clots. UVM's Laboratory for Clinical Biochemistry Research, led by University Distinguished Professor of Pathology & Laboratory Medicine and Biochemistry **Russell Tracy, Ph.D.**, will serve as the central laboratory for the studies. Professor of Medicine and Pathology & Laboratory Medicine **Mary Cushman, M.D., M.Sc.**,is a lead investigator on the RAPID COVID COAG anticoagulation trial that will form a key part of the ACTIV-4 Antithrombotics inpatient clinical trial. Assistant Professor of Surgery **Christos Colovos, M.D., Ph.D.**, will lead the ACTIV-4 Antithrombotics Inpatient Trial at UVM Medical Center, offering Vermont patients with COVID-19 the opportunity to participate in this research.



Research

$5.4 Million NIH Grant Funds New Shared Resource Center

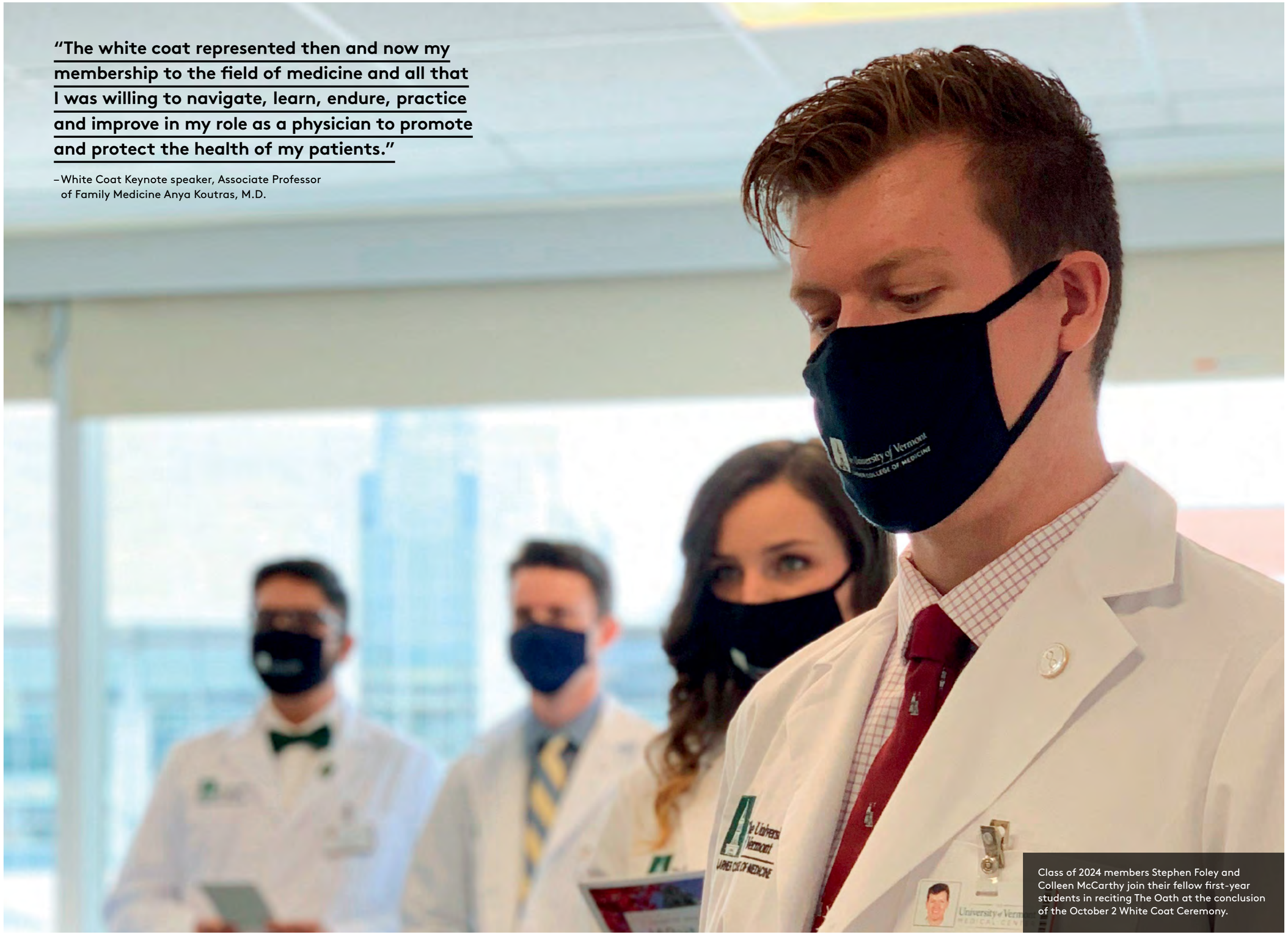
A new $5.47 million grant from the National Institutes of Health (NIH) to the Larner College of Medicine will fund the creation of the UVM Center for Biomedical Shared Resources. Larner Senior Associate Dean for Research **Gordon L. Jensen, M.D., Ph.D.**, is principal investigator on the grant.

The new Center will integrate five of the leading UVM laboratory-based, shared resource core facilities, including the Vermont Integrative Genomics Resource, the Vermont Genetics Network, the Flow Cytometry and Cell Sorting Facility, the Microscopy Imaging Center, and the Mass Spectrometry Facility. In fulfillment of UVM's land grant mission to be a resource for its community, the new center will provide services to institutions across northern New England, and support large, regional research programs. The grant will enhance long-term sustainability through efficiencies of scale, improved access, cross training of personnel, and sharing of resources.

"Our shared resource cores provide state-of-the-art research equipment and methods to UVM investigators and trainees," said Jensen. "The funding of this Center will support continued growth in biomedical research spanning our institution and region for years to come."

The grant will fund completion of the Center's home on the first floor of the new Firestone Medical Research Building, which will be located on the south end of the Larner College of Medicine complex, connected to the current Health Sciences Research Facility. Initial construction work on the new building began in October.

The Center will be an important asset to UVM's continuing research success. In an increasingly competitive national research landscape, UVM recently posted a record total of more than $181.7 million in yearly research funding for fiscal year 2020, with $105 million of that coming from biomedical research associated with Larner faculty—a 32 percent increase over the prior year. Larner researchers also recently received a $12 million multi-year grant from NIH for the Center of Biomedical Research Excellence on Cardiovascular and Brain Health that will also be housed in the new Firestone Medical Research Building. In addition, Larner researchers have risen to the special challenges of 2020, with more than 50 active COVID-19 research projects in progress.



"The white coat represented then and now my membership to the field of medicine and all that I was willing to navigate, learn, endure, practice and improve in my role as a physician to promote and protect the health of my patients."

–White Coat Keynote speaker, Associate Professor of Family Medicine Anya Koutras, M.D.

Class of 2024 members Stephen Foley and Colleen McCarthy join their fellow first-year students in reciting The Oath at the conclusion of the October 2 White Coat Ceremony.

ALTERING THE WHITE COAT

CLASS OF '24 CEREMONY TAKES ON PANDEMIC TWIST

For the last quarter-century, the White Coat Ceremony has been a ritual at U.S. medical schools, one that officially welcomes students into the medical profession and emphasizes the responsibility they carry as they don the traditional physician's white coat. This year, during the most serious worldwide health crisis in a century, the University of Vermont's Larner College of Medicine revised the ceremony, traditionally held with family and friends in attendance at UVM's Ira Allen Chapel, using a format that underscores that responsibility.

On October 2, 2020, medical students in the Class of 2024, along with a limited number of faculty, administrators and staff, gathered in person in small, physically-distanced groups to receive their first white doctors' coats as family and friends joined in remotely via a livestream.

Speakers—participating through Zoom—included Larner College of Medicine Senior Associate Dean for Medical Education **Christa Zehle, M.D.**, Larner College of Medicine Dean **Richard L. Page, M.D.**, UVM Health Network President and Chief Executive Officer **John Brumsted, M.D.**, and 2020 Leonard Tow Humanism in Medicine Award recipient **Anya Koutras, M.D.**, associate professor of family medicine. Associate Professor of Medicine **Prema Menon, M.D., Ph.D.**, and Interim Associate Dean for Students **Lee Rosen, Ph.D.**, read the names of each student receiving a white coat. At the end of the ceremony, Dean Page led the students—assembled in small groups in classrooms throughout the college—in reciting "The Oath." VM

WATCH A SHORT VIDEO OF STUDENTS RECITING THE OATH AND VIEW MORE PHOTOS: MED.UVM.EDU/VTMEDICINE/WEB-EXTRAS

Three Questions with Beth Kirkpatrick, M.D.

Viewpoint An internationally recognized physician-scientist, Beth Kirkpatrick, M.D., has a decades-long history of leadership in the field of vaccine testing and development. In 2001, she launched the UVM Vaccine Testing Center (VTC), and since then, the VTC has grown to assume a prominent role in the development and evaluation of vaccines for globally important infectious diseases. The VTC has garnered support from the National Institutes of Health, the Bill & Melinda Gates Foundation, and the U.S. Department of Defense, among others. Kirkpatrick is also principal investigator and director of UVM's Translational Global Infectious Disease Research Center of Biomedical Research Excellence and Chair of the Department of Microbiology and Molecular Genetics.


Beth Kirkpatrick, M.D.

VM: **How are past successes in vaccine development informing the work going on across the globe on a COVID-19 vaccine? On the flip side, what is unprecedented about this effort?**

BK: "We have multiple twenty-first-century tools at our disposal that are transforming the vaccine field. They have grown out of concerns that vaccine development was too slow to respond to epidemics, including influenza and Ebola epidemics. For example, there's been a lot of progress with computational means of understanding the parts of the pathogen necessary to put in a vaccine. We also have new vaccine platforms or types, including those based on genetic sequences; these allow the rapid construction of new vaccines. The field has also figured out how to overlap clinical trial designs, which also speeds things up. All of these new measures save us a significant amount of time and makes vaccines that are more precisely designed. And what we understand about the human immune response is just phenomenal now. Immunophenotyping—getting a display about what exactly is going on in the immune system—has been transformational.

The other thing that's unprecedented in COVID vaccine development has nothing to do with the science, and that's the financial investment. The government is doing what they call at-risk vaccine development, manufacturing the vials of vaccine to have them ready even before we know whether the specific vaccines work. If they don't work, these vials will all be thrown away. If they do work, we've saved ourselves years of time in manufacturing vaccines. The only way any COVID vaccine could even have a prayer of coming out in 2020 or 2021 is through this type of approach. In the past, the fastest vaccine ever developed was about six years, and that was the Merck Ebola vaccine. Most of the time, they take probably twelve to twenty years, and now we are trying to do this in about a year, so that's really unprecedented too."

VM: **What are the key questions researchers are focused on as they work towards a vaccine? How can wide use of (and trust in) the vaccine be promoted once we have one that has been thoroughly tested?**

BK: "The goal isn't going to be one coronavirus vaccine. It's multiple, first-generation coronavirus vaccines. Over the next few years, though, I would not be surprised if we have better vaccines. The top issue is always safety, safety, safety. After that, we want to know about immunogenicity—the immune response your body has that suggests you're going to be protected. And then finally, the efficacy. In vaccine world, this means that when you're confronted in your real life with the infection, how well will the vaccine prevent you from getting sick.

I would say the foundation for vaccine safety review has been quite robust and has stood the test of time. Generally, until recently at least, there has been trust of the system. At the same time, and especially now, there has to be transparency with this data and this process. I would anticipate that any company that has Phase 3 data will release much of it through the publication process. For those of us who work on vaccines, I think we also have an obligation to educate the public about the process. I do think we need to help people regain trust in this system because of the politicalization."

VM: **How are UVM researchers involved in efforts to develop and test a COVID-19 vaccine?**

BK: "We are part of a National Institutes of Health group called the COVID-19 Prevention Network, or CoVPN. The NIH has taken its hundreds to thousands of investigators who are funded by the NIH as part of all clinical trial networks related to vaccines or therapeutics and combined them into one quite amazing team of scientists and investigators across the country. Together, the team works on the Phase 3 studies of coronavirus vaccines in a harmonized way. It's a very impressive network of established and trusted scientists and investigators. We're lucky UVM is part of that group." VM

For late-breaking news of VTC participation in a COVID-19 vaccine trial, see page 3: "Phase 3 COVID-19 Vaccine Trial Comes to UVM and UVM Health Network."

SURVEY PUTS HEALTH PRIORITY-SETTING IN COMMUNITY HANDS

Community Many types of circumstances—unexpected and expected—can impact an individual's and a community's health, but a pandemic can turn things completely upside-down. After several months of navigating in COVID-19's uncharted waters, the community's strengths and weaknesses have become clearer. That's why Vermont United Ways and the Larner College of Medicine are giving Vermonters with a say in prioritizing community health needs via a survey that is the largest and most comprehensive public health project ever conducted by UVM medical students.

The goal of the project is to understand community health and social needs from the community's perspective to best meet priorities for the coming year.

Larner students and faculty have collaborated with United Way of Northwest Vermont for more than 15 years as part of the Larner Public Health Projects curriculum. In this course, second-year medical students work with nonprofit agencies in the area to help meet community health needs, conducting 17 public health projects to help address those needs.

"This year, COVID-19 brought additional community challenges, so the fall project our second-year students are conducting is a survey throughout Vermont," said Jan Carney, M.D., M.P.H., associate dean for public health and health policy and Public Health Projects course director at the Larner College of Medicine.

United Way of Northwest Vermont is leading this effort, engaging all United Ways in Vermont.

"As a community-led organization, United Way's work is driven by what our neighbors tell us is most important to them," said Amy Carmola, Ph.D., director of community impact at United Way of Northwest Vermont. "We're looking for people's perspectives and priorities on their health to be able to better assess community needs and direct our investments."

A total of 17 small, medical student groups will each look at one topic in the survey, conduct a literature review, analyze the data for their topic, and present the data and recommendations in research poster form at a December virtual poster session to celebrate and highlight findings.

Larner Faculty Inducted to Vermont Academy of Science and Engineering

Three Larner faculty members were elected to the prestigious Vermont Academy of Science and Engineering (VASE), by the VASE Board of Directors at their August meeting.

On October 26, VASE formally inducted Larner Dean and Professor of Medicine **Richard L. Page, M.D.**, Professor of Pharmacology **Frances Carr, Ph.D.**, and Professor of Biochemistry **Christopher Francklyn, Ph.D.** UVM Professor of Biology **Bryan Baliff, Ph.D.**, was also elected to VASE membership this year.

Chartered by the State of Vermont in 1995, VASE has as its mission "to recognize outstanding achievement and contributions in the broadly defined areas of science and/or engineering, to foster a deeper understanding and promote discourse on scientific and technical matters among the citizens of the State of Vermont, and to provide expert and impartial technical advice to the people and the government of the State of Vermont." VASE administers a slate of grants and awards to foster science and technical fields in the Green Mountain State.




Richard L. Page, M.D. (top), Frances Carr, Ph.D. (middle), and Christopher Francklyn, Ph.D.

The VASE Annual Meeting took place via Zoom, and featured a keynote address by Vermont Commissioner of Health and Larner Professor of Medicine Mark Levine, M.D., on "The Application (and Misapplication) of Science, Epidemiologic Data, Public Health Practices, and Health Policy during the COVID-19 Pandemic."

Drs. Page, Carr and Francklyn join approximately 60 members of Vermont's community of scientists and engineers in the society.

GOYAL LAUNCHES SOCIAL MEDICINE ON AIR PODCAST

Raghav Goyal '22 is a producer for Social Medicine On Air, a podcast that "explores the field of social medicine with healthcare practitioners, activists, and researchers." In an episode titled "Medical Ethics in a Pandemic," Goyal interviews UVM Professor of Medicine **Tim Lahey, M.D., M.M.S.**

Listen to the podcast: http://go.uvm.edu/medicalethics

A NON-PROFIT FOUNDER, A CANCER RESEARCHER, A COMMUNITY ORGANIZER, AND A MUSICIAN:

UVM WELCOMES NEW GRADUATE STUDENTS

UVM graduate students bring a diversity of talents, skills, interests and backgrounds to their studies, helping them to grow into well-rounded scientists and researchers. Meet some of UVM's newest graduate students entering master's degree and Ph.D. programs this fall.

Chol Dhoor
Master's of Public Health Program

Originally from the Republic of South Sudan, Chol Dhoor moved to Vermont 13 years ago and graduated as a McNair Scholar from the University of Vermont with a bachelor's degree in Economics and Global Studies in 2011. He is now pursuing a Master's of Public Health degree at UVM. In 2016, Dhoor founded the Sudanese Foundation of Vermont Inc., an organization which provides college scholarships, mentoring programs, job searching, summer camps, and additional services to the Sudanese community in Vermont. As he begins his studies, Dhoor says that he's most excited about the diversity of his classmates. "Some of my classmates are doctors [or] Ph.D. candidates and others are taking this program as their second Master's. The program brings such a richness into one place," says he says, adding "I'm really excited about what is ahead to learn."

Shannon Prior
Cellular, Molecular, & Biomedical Sciences Ph.D. Program

A lifelong Vermonter, Shannon Prior received her bachelor's degree in biochemistry from UVM in 2014. After graduating, she worked in the lab of Kenneth Mann, Ph.D., now an emeriti faculty member, for three years before transitioning to the UVM Cancer Center, where she's been working as a clinical research coordinator since 2017. Her goal is to become a cancer researcher, with a particular interest in exploring the epigenetic regulation of cancer. She is looking forward to collaborating with her peers and UVM faculty. "It's exciting to get a chance to work with various investigators and groups who can bring their expertise to the table so we can work in a collaborative way to achieve a similar goal," says Prior. "I really believe this is what leads to well-rounded, comprehensive research."

Paola E. Peña Garcia
Cellular, Molecular, & Biomedical Sciences Ph.D. Program

Paola E. Peña Garcia is from Puerto Rico and recently graduated from the University of Puerto Rico with a bachelor's degree in cellular and molecular biology. She attended a specialized school from seventh to twelfth grade where she intensively studied music along with her other subjects. During college, Peña Garcia's self-proclaimed stage fright led her to seek out a different passion and she found her calling in science. It was a research opportunity during her undergraduate degree that led to her discovery of biomedical sciences and, she says, eventually cemented her decision to pursue a Ph.D. and career in research. Peña Garcia is particularly interested in lung immunobiology, inflammatory processes, and, overall, learning more about the cellular and molecular mechanisms of disease.

THE UNIVERSITY OF VERMONT • LARNER COLLEGE OF MEDICINE •
MASTERS AND PH.D. CANDIDATES

Harly Rodriguez
Master's of Medical Science Program

Originally from Bronx, New York, Harly Rodriguez received a bachelor's degree in neuroscience from Syracuse University. After graduation, he explored several different career paths including medicine, high school teaching, and community organizing. Eventually, Rodriguez decided to enroll in the Master's of Medical Science program at UVM and plans on applying to medical school to pursue a career in family medicine and psychiatry. Rodriguez co-founded the Bronx Community Health Leaders (BxCHL) at the Albert Einstein College of Medicine, a pre-health pipeline program. During the height of the COVID-19 pandemic in New York City, he worked as a medical scribe and medical assistant at an urgent care facility. Rodriguez is particularly interested in exploring "how mental health treatment is given to people of color," and says his background will aid him in doing so. "As a Latino from the Bronx, I come from an underrepresented minority background, which I know will set me up to help Spanish-speaking patients and patients of other backgrounds that experience health inequities," he says.

WORKING FOR CHANGE

Through words, photos and videos, Chris Veal '21 has been chronicling the effects of systemic racism while giving voice to peers who are underrepresented in the field of medicine. He is producing the Larner Stories Project, which features videos of classmates in conversation about challenges they have overcome in pursuing a medical career. A series of posts he wrote for the College's blog follow his experiences participating in protests in Wisconsin and his home state of Illinois. His essay, titled "At the Intersection of Fear, Grief and Love," was published online by the *Annals of Internal Medicine* in July. The following is an excerpt from his blog post, titled "We Are Ready for Change: United We Stand in Milwaukee."

Chris Veal '21

"Why did they shoot me so many times?" Jacob Blake asked his father as he began to regain consciousness in the ICU after he was shot seven times by the Kenosha Police. His father fought back tears as he struggled to answer a question so innocent yet so remarkably tragic.

"Why did they shoot him so many times?" Maria Hamilton thought to herself as she sat at a memorial service for her son, Dontre Hamilton, who was shot 14 times by the Milwaukee Police six years ago.

"Why do they shoot us so many times?" I shouted, with all the ferocity that question deserves, in unison with over 100 protesters, on a sunny day as we marched through the streets of Kenosha, Wisconsin. This question became the newest chant for a movement that has turned the final words and names of Black lives cut short by police brutality into a rallying cry for justice.

As my voice began to crack from the four hours of continuous shouting through my N-95 mask, I found myself breathless. The irony of my brothers and sisters in arms chanting "I Can't Breathe!" was certainly not lost on me.

I stepped away from the group and pulled down my mask. With my eyes closed, I enjoyed every bit of the Lake Michigan-infused air that effortlessly coursed through my lungs as I deeply inhaled.

WEB EXTRA: READ MORE BLOG POSTS AND SEE VIDEOS FROM THE LARNER STORIES PROJECT: MED.UVM.EDU/VTMEDICINE/WEB-EXTRAS

VISION 2025

A UNIFIED STRATEGIC PLAN FOR THE LARNER COLLEGE OF MEDICINE

Over the past year, through open forums and with input from faculty, students and staff from across the institution, the College's strategic plan has been refined to define who we are, what we care about, and to serve as a guide to our progress in the coming years.

Vision 2025 unifies plans within the College and aligns with the University of Vermont's strategic vision for Amplifying Our Impact and the implementation of that vision through achievement of the Academic Success Goals.

LARNER COLLEGE OF MEDICINE MISSION

To educate a diverse group of dedicated physicians and biomedical scientists to serve across all the disciplines of medicine; to bring hope to patients by advancing medical knowledge through research; to integrate education and research to advance the quality and accessibility of patient care; and to engage with our communities to benefit Vermont and the world.

VALUES

- Professionalism at the heart of patient care, research, and education
- Diversity, equity, and inclusion as essential components of all we do
- Commitment to the wellness of students, staff, and faculty
- Innovation of clinical care, research, and education
- Advocacy to promote public health and improve social conditions, including rural health disparities
- Building on our land-grant heritage to improve the health of Vermont and our region
- Excellence in all we do
- Stewardship of resources
- Service to our patients, our university, and our community

STRATEGIC FOUNDATION

- Caring for our people (students, faculty, staff)
- Commitment to a culture of continuous quality improvement in all we do
- Getting the word out to the Larner community, UVM and beyond

STRATEGIC PRIORITIES

COMMUNITY
Commit to the health of our state and region

1. Build on the land-grant tradition of UVM in commitment to accessibility across economic class and leveraging our knowledge in support of the community
2. Focus on primary care and public health
3. Further strengthen partnership and synergy with the UVMHN
4. Strengthen policy and advocacy to promote public health and health equity: improve social conditions, including rural health disparities

CLINICAL
Maximize UVMHN collaboration and partnerships

1. Incorporate missions of research and education into full implementation of network departments
2. Commitment to public health, population health, and health services research and value-based population care
3. Fully develop the role of Director of Research to increase the availability of clinical trials across the UVMHN; focus on rural healthcare delivery across our region
4. Fully develop the role of Director of Education to enhance clinical clerkship sites within the network; support graduate medical education; support innovation in continuing medical and interprofessional education

RESEARCH
Advance scope and impact of research

1. Improve infrastructure: Firestone Building, Center for Biomedical Shared Resources, Given Building renovation; sustained access to shared resource services; enhanced data processing/storage capabilities
2. Focus on current strengths and future opportunities: strengths in mechanistic, translational, and clinical research domains; support for innovation and entrepreneurship
3. Strengthen mentorship and career development for faculty, graduate students, post-doctoral fellows, medical students, and staff; maximize recruitment and retention
4. Diversify funding portfolio for research support: foundations, industry partnerships, and philanthropy

EDUCATION
Prepare the physician of the future (M.D. 2030)

1. Preserve the fundamentals of being a physician: professionalism; first, do no harm; joy of caring; wellness
2. Promote interprofessional education and care; incorporate personalized medicine (genomics, proteomics, etc.)
3. Enhance communication through telemedicine, social media, and digital health devices
4. Incorporate public health, environmental change, population health, health services research, big data, informatics, and artificial intelligence