VERMONTMEDICINE

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

SPRING 2020

GETTING PERSONAL

Genomic DNA testing through the UVM Health Network ushers in the future of diagnosis

ALSO FEATURED: LUNG RESEARCH • PROFESSIONAL IDENTITY • COVID-19 RESPONSE

Contents

Helping Refugees Thrive



Omar Khan, M.D.'03 and Salwa Khan, M.D.'05

With refugees continuing to resettle in the Burlington, Vt., area from war torn areas around the globe, OMAR KHAN, M.D.'03 and SALWA KHAN, M.D.'05, want to help make sure these unique populations have the health care they need to thrive. The couple has created the Khan Family Fund at the UVM Larner College of Medicine to support collaboration between the Department of Family Medicine and the Department of Pediatrics on innovative approaches to clinical care for New Americans.

"We all have an important role in caring for the most vulnerable, and this collaboration reflects our

commitment to health care for all as a human right," says Khan. "We are proud and privileged to work closely with Larner leadership and frontline physicians to eliminate silos in caring for this community."

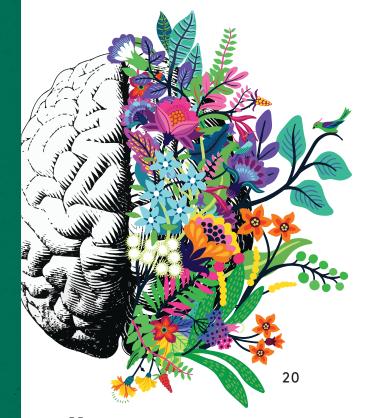
Omar Khan, the incoming Medical Alumni Association president, is president and CEO of the Delaware Health Sciences Alliance, which includes the major health systems and research universities in the Delaware Valley, and is a family medicine physician. Salwa Khan is a pediatric hospitalist and on the faculty at Johns Hopkins University School of Medicine.



The University of Vermont Larner College of Medicine

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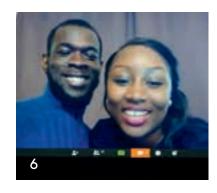


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From research on the effects of asbestos to vaping, Vermont Lung Center members continue a leadingedge tradition. BY JENNIFER NACHBUR

Web Extras



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



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





This issue of *Vermont Medicine* is coming to you at an extraordinary time in the history of our world, our nation, our state, and our College of Medicine. In early January, the concern about the novel coronavirus appearing in China began to build in our medical community. The ensuing steps and missteps associated with the virus and COVID-19, the respiratory illness it causes, are by now all too familiar to everyone.

As this magazine goes to press in early April, we find ourselves in a fight against the spread of COVID-19. This is proving to be a battle that is best won by a form of strategic retreat: physically distancing ourselves, working remotely whenever possible, and thereby minimizing the virus's network of transmission. We began that process at the College in early March. Now, and for the foreseeable future, our classroom teaching has moved online; we are fortunate that one of the outgrowths of our curricular reforms over the past decade is our faculty and student familiarity with the tools of remote learning.

In our research laboratories, our scientists and their teams have temporarily suspended all non-essential research. Over 120 researchers continue with essential duties, and more than 50 of those are now working on projects related to COVID-19 and the SARS-CoV-2 virus. Our research labs have also donated crucial personal protective equipment (PPE) for use by health care providers at the UVM Medical Center. Under the leadership of Debra Leonard, M.D., Ph.D., professor and chair of the Department of Pathology and Laboratory Medicine, whose work in genomic medicine is featured in this issue, our College has partnered with state agencies and the medical center to provide expertise, materials, and effort to assist in expanding coronavirus testing. All of our clinical chairs, the UVM Health Network Medical Group, and the medical center have worked together in cooperative and innovative ways to handle the surge of COVID-19 patients.

Our students, staff, and faculty are helping in numerous other ways. LCOMCares Service Corps has been founded to connect volunteers to fill crucial needs—training people in donning and doffing of PPE, helping prepare a field hospital set up at UVM's Patrick Gym, staffing a community hotline, delivering food to families of our frontline health care providers—to name just a few examples.

Farther afield, one of our medical students has developed a program that includes more than 70 other medical schools across the country, allowing medical students nationwide to connect with academic medical centers near them to volunteer their help. And our alumni throughout the nation are providing crucial frontline care. I want our alumni to know that all of us here in Vermont recognize their vital work. I'll be holding a series of Zoom "town halls" with alumni in the coming weeks, and hope to hear their stories and offer my support in real time.

Until we gather again in person, and we will, please stay safe and well.

RICHARD L. PAGE, M.D.

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

VERMONTMEDICINE

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

Richard L. Page, M.D.

INTERIM SENIOR ASSOCIATE DEAN FOR MEDICAL EDUCATION

Christa Zehle, M.D.

SENIOR ASSOCIATE DEAN FOR RESEARCH Gordon Jensen, M.D., Ph.D.

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SEND US YOUR STORIES: If you have an idea for something that should be covered in Vermont Medicine, please email: vmstories@med.uvm.edu

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Vermont Responds to the Covid-19 **Pandemic**

By early April, the worldwide pandemic had caused most functions of UVM and the Larner College of Medicine to shift to remote modes. Most research laboratories began suspending their work. Medical and graduate student classwork went online in mid-March, and clinical teaching, in accordance with Association of American Medical Colleges recommendations, was suspended shortly thereafter. Fourthyear students' Match Day Celebration became an online virtual event (see page 6.), Larner faculty, staff, and students, as well as affiliated partners at the UVM Health Network and Nuvance Health in Connecticut, began working in many different ways to meet the expected surge of Covid-19 patients.

"Even as this pandemic affects us in new ways daily, and even as we are unable to predict what will come next, I feel fortunate to be part of the Larner community," wrote Dean Rick Page in an update to the community. "We are all connected, surrounded (now often virtually) by people who share a common bond. We are in this for the right reasons, and that will provide resilience in the days going forward."

Pictured above, clockwise from left: The "Vermontilator," Jason Bates, Ph.D., Carolyn Geraci '22, Vinh Le '23, **UVM Cancer Center and Vermont** Integrated Genomics Resource laboratory technicians Scott Tighe, Diana Gerrard, and Jessica Hoffman run tests for a potential alternative to the prescribed COVID-19 test.











Team Invents Simplified Ventilator

Through March and early April, a team of UVM scientists, engineers and doctors developed a new design—and built a working model—for a simple, inexpensive ventilator.

"We think these could be rolled out very quickly and be effective on an emergency basis," says lung expert and Larner Professor of Medicine Jason Bates, Ph.D., who lead the team that included UVM engineers Jake Kittell, Mike Lane, Carl Silver and Guy Kennedy. Preliminary calculations suggest the UVM ventilator "can be produced quickly and in large numbers for a few hundred dollars per unit in parts and materials," Bates says.

The Vermont-built machine was quickly assembled out of a commercially available motor that drives a rotating disk, conventional medical hoses, and other relatively simple parts. The team's prototype was built using a 3-D printer and machining equipment, with pieces that could be easily milled or cast, and assembled. The design is being submitted to the FDA for emergency review.

Scientists Explore Test Alternatives

A team of Larner virus and infectious disease experts tested whether a single-step version of the COVID-19 test could yield the same result as the prescribed two-step test. Their preliminary findings from a small sample, posted on the online bioRxiv website, showed a potential alternative that could lead to greater and faster availability of testing for COVID-19.

Senior study author Jason Botten, Ph.D., first author Emily Bruce, Ph.D., and colleagues underscored the preliminary nature of their initial findings. The team is continuing the research and collecting results to further validate this potential solution to the current bottleneck for these tests.

Action Network Goes National

On March 13, first-year medical student Vinh Le left the Larner campus, uncertain about when he and his classmates would return. As he grew used to the new rhythm of remote classes, the desire to rekindle the excitement and passion for service that he'd felt when together with his classmates helped ignite a new project. By late March, Le's Medical Student COVID-19 Action Network (MSCAN) emerged. Founded with Le's classmate, Cyrus Thomas-Walker, and software devloper Jam Risser, MSCAN is an online searchable database for all medical student-organized COVID-19-related service opportunities across the country. As of mid-April, MSCAN includes more than 400 activities at 78 U.S. medical schools.

Protecting Front Line Workers

In dental offices, nonmedical labs, secondary schools, meat-packing plants, medical spas, nail salons, and other businesses and locations around Vermont that are currently closed or operating at a reduced level, personal protective equipment (PPE) is sitting unused. In the face of PPE shortages during the COVID-19 pandemic, resident Vivek Chittineni, M.D., and a group of volunteers including Amy Lynn Teleron, M.D., assistant professor of medicine, McKenna Lee, UVM Medical center senior project manager for supply chain services, and medical students Madeline Fritz '22, Micaila Baroffio '23, and Carolyn Geraci '22 organized a PPE collection effort. "Seeing how dire situations have already gotten in places like New York City and Seattle, places where doctors and nurses are working without the appropriate PPE, we had an opportunity to get ahead of a possible shortage here," says Geraci. "We're trying to provide a stop-gap if it does become a problem in Vermont." VM





IRVIN RECEIVES W. FRED TAYLOR PH.D. AWARD

Associate Dean for Faculty Affairs and Professor of Medicine **Charles Irvin, Ph.D.**, has been selected by the EPSCoR/IDeA Coalition and Foundation Boards as the inaugural recipient of the W. Fred Taylor Ph.D. Award for Outstanding Contributions to the National Institutes of Health (NIH) Institutional Development Award (IDeA) Program. The new annual award recognizes an individual who

has contributed significantly to enhancing the impact of the NIH IDeA Program either regionally or nationally, and honors the late Dr. Taylor, whose 20 years of NIH service expanded opportunities for students, faculty and institutions in locations with historically low levels of biomedical research funding. He received the award February 24, 2020.



JEMISON NAMED ASSISTANT DEAN FOR TECHNOLOGY/CHIEF INFORMATION OFFICER

On February 20, 2020, **Jill Jemison** was named assistant dean for technology/chief information officer for the UVM Larner College of Medicine. Jemison joined the College in 2002 to lead the transition to online learning and was named manager of online learning

in 2004. Since 2010, she has led the College's Technology Services team. Nationally, Jemison serves on the Association of American Medical Colleges (AAMC) Group on Information Resources (GIR) Diversity and Inclusion Work Group. In 2015-2016, she was the first female faculty director of the AAMC GIR Leadership Institute (now AAMC Leading Information Technology in Academic Medicine). Currently, Jemison chairs the Data Task Force for the College's LCME accreditation efforts.



HOLMES, GALBRAITH APPOINTED UVM CANCER CENTER INTERIM CO-DIRECTORS

On January 13, 2020, Associate Professor of Medicine **Chris Holmes, M.D., Ph.D.**, and Professor of Medicine **Richard Galbraith, M.D., Ph.D.**, assumed duties as interim co-directors of the University of Vermont Cancer Center. They

replace Perelman Professor in Cancer Research and Chair of Biochemistry Gary Stein, Ph.D., who has stepped down from his role as director. Holmes has been serving the Cancer Center for decades in numerous leadership roles in translational science, clinical research, and medical oncology. Dr. Galbraith has a long successful history of academic medicine leadership and is in the process of stepping down as UVM's vice president for research. Holmes and Galbraith will serve as interim co-directors while the College undertakes a national search for a permanent director.



AVILA HONORED WITH STATEWIDE AWARD

Maria Mercedes Avila, Ph.D., M.S.W., associate professor of pediatrics, VT LEND program director, and Office of Diversity and Inclusion health equity inclusive excellence liaison, received the Sister Elizabeth Candon Distinguished Service Award at the 2019 Vermont Women in Higher Education fall dinner. Colleagues nominating Avila for the award called her "a tireless advocate for social justice, gender

equity, and addressing all forms of oppression in higher education and society as a whole." Avila's focus on equity and justice in behavioral health has been recognized with a variety of awards, including, among others, the 2016 Child Mind Institute National Change Maker Local Hero Award and the 2016 Association of University Centers on Disabilities National Multicultural Council Leadership in Diversity National Award.

Zehle Named Senior Associate Dean for Medical Education



Christa Zehle, M.D.'99, has been named Senior Associate Dean for Medical Education at the Larner College of Medicine. Zehle, who has served as Interim Senior Associate Dean for Medical Education since January 2019, assumed the new role in March of 2020 following a national search. She joined UVM in 2003 as assistant professor of pediatrics and was promoted to associate professor in 2011. She became associate dean for students in 2012.

Leffler Named President and COO of UVM Medical Center



On December 30, 2019, Professor of Surgery **Stephen Leffler, M.D.'90**, was appointed permanent president and chief operating officer of the University of Vermont Medical Center after serving as its interim president and chief operating officer since the retirement of Eileen Whalen, M.H.A., R.N., in June 2019. A 26-year veteran of the medical center, Leffler served as chief medical officer from 2011 to 2017. In 2017, he was named chief population health and quality officer for the UVM Health Network.





College Hosts Inaugural Gender Equity Celebration

ON MARCH 4, FORMER VERMONT Governor Madeleine Kunin helped kick off the Larner College of Medicine's first-ever event to recognize achievements in gender equity. Gov. Kunin hosted a keynote presentation, titled "A Memoir: Coming of Age," and participated in a Q&A interview moderated by Associate Dean for Public Health and Health Policy Jan Carney, M.D., M.P.H. The event featured the presentation of the College's inaugural gender equity awards.

Gender Equity Awardees

Gender Equity Champion Award:

Ramsey Herrington, M.D., assistant professor of surgery and chief of emergency medicine

Gender Equity Outstanding Achievement in Medicine and Science Award:

Mary Cushman, M.D.'89, M.Sc., professor of medicine and director of the thrombosis

and haemostasis program

The Polaris Award for Outstanding Mentorship:

Debra Leonard, M.D., Ph.D., professor and chair of pathology and laboratory medicine

The Rising Star Emerging Professional Award:

Lauren Elizabeth Faricy, M.D., assistant professor of pediatrics

"THE CLEAR TREND IS THAT PHYSICIANS ARE PRESCRIBING LESS, PATIENTS ARE USING LESS, AND THERE IS NO APPRECIABLE CHANGE IN PATIENT REPORTED PAIN CONTROL OR SATISFACTION AFTER IMPLEMENTATION OF THESE REGULATIONS."

 Mayo Fujii, M.D.'13, M.S., referencing a study she co-authored that found no signs of inadequate postoperative pain management in surgical patients despite drastic reductions in opioid prescribing by Vermont physicians

4 VERMONT MEDICINE SPRING 2020

UVM LARNER COLLEGE OF MEDICINE 5

NEUROLOGICAL SURGERY

OPHTHAL MOLOGY

Celebrating Match Day Virtually

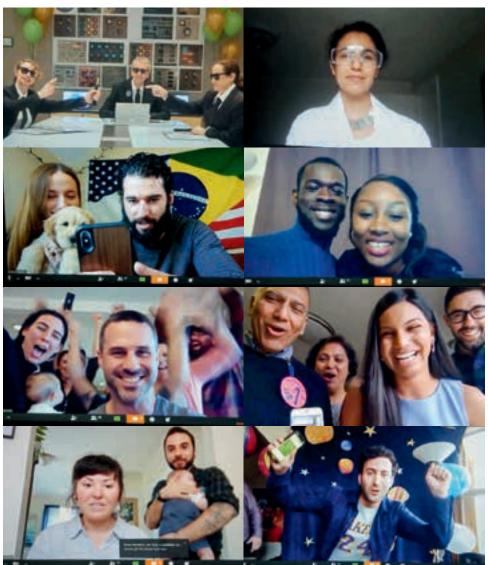
THE PHRASE "KEEP YOUR DISTANCE" has taken on a whole new and deeply important meaning in the era of COVID-19 and even Match Day, the annual senior medical student rite of passage, was not "immune" to honoring this behavior. On March 20, 2020, members of the Larner College of Medicine's Class of 2020—and medical schools across the country—went virtual to ensure social distancing while celebrating the news of where they will be spending the next three to seven years training as residents following graduation. The National Resident Matching

Program reported that the 2020 Main Residency Match was its largest in history, with a record 40,084 U.S. and international applicants participating.

The College's "SPACE MISSION 2020" themed event was livestreamed on YouTube for friends, family, faculty, staff, and students to view as nearly 50 "space stations," populated with nine or less people each, connected with "Mission Control" where Larner College of Medicine Dean Richard L. Page, M.D., Senior Associate Dean for Medical Education Christa Zehle, M.D.'99, and

Interim Assistant Dean for Students Shaden Eldakar-Hein, M.D., M.S., hosted the event made possible via Zoom webinar technology.

A total of 120 students from the Class of 2020 have matched into residencies at 72 different institutions across the U.S. and Canada, 48 in primary care specialties. Several students learned of their residency locations prior to Match Day through the Military Match and early specialty matches. Students in the Class of 2020 will earn their medical degrees in May 2020 and begin their residencies in June. VM





READ AN ADDRESS FROM THE STUDENT COUNCIL PRESIDENT, VIEW MESSAGES TO THE CLASS OF 2020 FROM ALUMNI AND FACULTY, AND VIEW AN INTERACTIVE MAP OF RESIDENCY MATCH LOCATIONS: MED.UVM.EDU/VTMEDICINE/WEB-EXTRAS



INSTITUTIONS

TO UVM MEDICAL CENTER

TO PRIMARY CARE

| ANESTHESIOLOGY |
|--|
| Nana Agyepong Westchester Medical Center (Valhalla, N.Y.) |
| Megan Kawasaki Icahn School of Medicine at Mount Sinai St. Lukes-Roosevelt |
| Britta Kilgus University of Vermont Medical Center |
| Michael Persaud Yale-New Haven Hospital |
| Melissa RomeroLahey Clinic (Burlington, Mass.) |
| Nicholas Selig Health Quest (Poughkeepsie, N.Y.) |
| Patricia Wang |
| Timothy Wong Johns Hopkins Hospital |
| COMBINED ADULT/CHILD PSYCHIATRY |
| Pamela Derickson |
| DERMATOLOGY |
| Sree Kolli |
| DIAGNOSTIC RADIOLOGY |

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| Gregory Johnston |
| EMERGENCY MEDICINE |
| Ashley Aiken Montefiore Medical Center/Albert Einstein College of Medicine |
| Harshal Athalye |
| Jennifer Boccia |
| Nicholas Bompastore |
| Nathan Dreyfus UC San Francisco-Fresno |
| Zachary Ehret New York-Presbyterian Brooklyn Methodist Hospital |
| Caleb Knight |
| Nektarios Konstantinopoulos University of Vermont Medical Center |
| Jacob Lehman |
| Andrew Pham Harbor-UCLA Medical Center |
| Kyle RemyIcahn School of Medicine at Mount Sinai St. Lukes-Roosevelt |
| Shawn Sanford Beth Israel Deaconess Medical Center |
| Danielle Smith |
| Caroline VinesUniversity of North Carolina Hospitals |
| Caleb WatkinsAlbany Medical Center |
| |

 $Alexa \ Arvidson \dots University \ of \ Michigan \ Hospitals-Ann \ Arbor$

Wendy Hou......Jacobi Medical Center/Albert Einstein College of Medicine

| Andrew Wick | University of North Carolina Hospital |
|-------------------|---|
| FAMILY MEDICINE | |
| Zara Bowden | Family Medicine Residency of Idah |
| Benjamin Flinn | St. Elizabeth Medical Center (Utica, N.Y. |
| Anthony Gallegos | CHRISTUS Health (San Antonio, Texas |
| | University of Vermont Medical Cente |
| | |
| | St. Joseph's Health (Syracuse, N.Y. |
| Anna Lidofsky | UC Davis Medical Cente |
| | University of British Columbi |
| Scott Neary | University of Rochester/Strong Memorial Hospita |
| Morgan Pratt | Middlesex Hospital (Middletown, Conn. |
| Katherine Price | University of Massachusetts Medical School |
| Monica Rodgers | McKay-Dee Hospital Center (Ogden, Utah |
| Alden Sacco | Maine Medical Cente |
| Elias Schoen | Crozer-Chester Medical Center (Upland, Penn |
| Conner Soderquist | University of Massachusetts Medical School |
| Harris Syed | University of Iowa Hospitals and Clinic |
| Emily Vayda | Maine Medical Cente |
| GENERAL SURGERY | |

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| Charles Cubberley | University of Utah Health |
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| Alexander DiSciullo | Tufts Medical Center |
| William Earle | Beth Israel Deaconess Medical Center |
| Lauren Gaffaney | Temple University Hospital |
| Jinal Gandhi | Boston University Medical Center |
| Dylon Gookin | Rhode Island Hospital/Brown University |
| Benjamin Lin | University of North Carolina Hospitals |
| Arjun Patel | Tripler Army Medical Center |
| Eva Petrow | University of Rochester/Strong Memorial Hospital |
| Jackie Tsao | Kaiser Permanente-Los Angeles |
| Danielle Wall | |
| Ethan Witt | Oregon Health & Science University |
| Collin York | University of Virginia |
| MEDICINE DEDIATRICS | |

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Kirsten Martin..... MedStar Georgetown University Hospitals

| Scott Mitchen |
|---|
| NEUROLOGY |
| Ava Bakhtyari Boston University Medical Center |
| Kinjal ThakorUniversity of Miami/Jackson Health System |
| OBSTETRICS & GYNECOLOGY |
| Cyrus Jalai Montefiore Medical Center/Albert Einstein College of Medicine |
| Sara Natasha Jost-Haynes Eastern Virginia Medical School |
| Isabelle MasonOhio State University Medical Center |
| Kathryn Patton Loyola University Medical Center |
| Jasmine Robinson Zucker School of Medicine-Northwell Southside Hospital |
| |

| OTTITIALMOLOGI | |
|---------------------|------------------------------------|
| Nicole Jedrzynski | California Pacific Medical Cente |
| Chad Serels | Cleveland Clinic Cole Eye Institut |
| Purvi Shah | Brown Universit |
| Matthew Sommers | University of Pittsburg |
| ORTHOPAEDIC SURGERY | |

| Nathan Benner | University of Washington Affiliated Hospital |
|---------------------|--|
| Christopher Bernard | University of Kansas School of Medicine-Kansas Cit |
| Stephen Daniels | University of Colorado School of Medicine-Denve |
| Gregory Roy | University of Vermont Medical Cente |
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| OTOLARYNGOLOGY | <u>f</u> |
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| Thomas Arnell | University of Vermont Medical Center |
| Allison Reeder | Yale-New Haven Hospital |
| Vanessa Trieu | University of Utah Health |
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| PATHOLOGY | |
|----------------------|--|
| Karamatullah Danyal | University of Vermont Medical Cent |
| Elizabeth McLeod | . Madigan Army Medical Center-Fort Lew |
| Benjamin Smith | Oregon Health & Science Universi |
| Erica Worswick Unive | rsity of Arizona College of Medicine-Tucso |
| | |

| PEDIATRICS |
|---|
| Ramin Badiyan |
| Gesca Borchardt University of Arizona College of Medicine-Tucso |
| Victoria Close Westchester Medical Center (Valhalla, N.Y |
| Kyna DonohueTufts Medical Cente |
| Kassandra GibbsUniversity of Massachusetts Medical School |
| Russell Himmelstein Stony Brook Teaching Hospital |
| Hannah Johnson |
| Florence Lambert-Fliszar University of Washington Affiliated Hospital |
| Rebecca Merriam-StelfoxUniversity of Vermont Medical Center |
| James Rohwer |
| Cole Shapiro |
| |

| Laura Thompson-Martin Stanford University Program |
|---|
| PEDIATRICS/RESEARCH |
| Amy Berkman |
| PLASTIC SURGERY |

| | Rush University Medical Center University of Minnesota Medical School |
|----------------------|---|
| PRELIMINARY MEDICINE | |

| PRELIMINARY SURGERY | |
|-------------------------------------|-------------------------------------|
| Medical Center | |
| Charles Nicoli National Capital Con | sortium Walter Reed National Milita |
| Daniel De Los Santos | University of Vermont Medical Cent |

| Allison Greene | Dartmouth-Hitchcock Medical Center |
|-------------------|---|
| Zachary Silberman | .Rhode Island Hospital/Brown University |
| PRIMARY MEDICINE | |

| PRIMART MEDICINE | |
|-------------------|---|
| Jennifer Morris | University of Rochester/Strong Memorial Hospita |
| Michael Rodriguez | University of Virgini |
| Eleanor Stedman | University of Vermont Medical Cente |
| PSYCHIATRY | Thomas Iofferson University (Philadelphia Denny |

| <u>PSYCHIATRY</u> | |
|--------------------------|--|
| Julia Hannigan | Thomas Jefferson University (Philadelphia, Penn. |
| Lee Hiromoto | Oregon Health & Science University |
| Alejandra Vivas Carbo | Montefiore Medical Center |
| | Albert Einstein College of Medicin |
| PSYCHIATRY/GENERAL/CHILE | |

| Isabella Kratzer University of Pittsburgh Medical Center Medical Education |
|--|
| UROLOGY |

| OKOLOGI | |
|-------------|---|
| Erin Hunt . | University of New Mexico School of Medicine |
| Nikolas Mo | ring Albany Medical College |





A Lesson in Harm Reduction

EVERY FRIDAY AFTERNOON, Noorin Damji '22 and Kristina Valentine '22 set off from the Larner College of Medicine campus to pick up the well-stocked mobile outreach van owned by a local nonprofit. Together, they drive north to rural communities in Franklin County, Vt., like Swanton, St. Albans, and Enosburg and deliver free packs of sterile hypodermic syringes, fentanyl testing strips, and Narcan to people who inject drugs.

This effort is known in public health as harm reduction. Damji and Valentine provide clients with access to tools and instruction aimed at reducing their risk of fatal overdose, as well as HIV, hepatitis C and other infections. Information about recovery programs is also available, but only if clients show an interest in receiving it.

"A super-important tenet of harm reduction is letting people choose their own level of intervention," explains Damji, who learned an appreciation for "meeting people where they are" while volunteering for a similar program as an undergraduate at UC Berkeley. "The idea that people who inject drugs don't care about their health just isn't

true. I think participating in harm reduction is our social responsibility as physicians."

"We both want to be part of a new generation of physicians who are considered to be non-judgmental, aware and open," adds Valentine.

Damji and Valentine, who are 2019-20 Schweitzer Fellows with the New Hampshire/Vermont Albert Schweitzer Fellowship chapter, are continuing a project launched in 2018 by Schweitzer Fellow for Life Katrina Thornburgh '21. Fellows receive a small stipend and conduct year-long projects that address the health needs of underserved populations and uphold the "Reverence for Life" philosophy made famous by physician, humanitarian and 1952 Nobel Peace Prize recipient Albert Schweitzer, M.D. An internship is now in the works to involve additional Larner medical students when the current fellowship project ends.

Theresa Vezina, associate director of Vermont CARES, has played an essential role in the project as a community partner and mentor, making sure the students are competent and comfortable in their work. This year, Damji and Valentine see one

"A super-important tenet of harm reduction is letting people choose their own level of intervention."

– Noorin Damji '22

or two clients per week from an overall caseload of about 30. Clients schedule appointments anonymously by calling a Vermont CARES number that is routed to the students' cell phones via an app. The meetings are held in public places, like shopping center parking lots.

Some clients have made use of the service for five years or more, Vezina says. And that's OK. This program is about helping people stay alive and as healthy as possible while they're using drugs and, she adds, "We want to make sure they know that any time they're into getting treatment they can let us know." VM

This story was reported by Kim Asch, with the UVM Health Network

Health Policy

National expert praises Vermont's health care reform efforts

VERMONT IS "LEADING THE NATION" IN health care payment reform and is seeing early examples of higher quality, lower cost care, says Joshua Sharfstein, M.D., professor of the practice in the Department of Health Policy and Management at Johns Hopkins Bloomberg School of Public Health.

But it will take time and commitment to fully transform the system, Sharfstein said.

Sharfstein was the keynote speaker at a Jan. 30, 2020, health care reform breakfast hosted by the University of Vermont Health Network in Montpelier. He and other speakers underscored those two themes—progress and patience—while Gov. Phil Scott reiterated his support for reform under the state's all-payer model.

"The challenge is really changing the way we pay for something that's 20 percent of our state's economy without making it harder to access care, adding new costs or reducing quality," Scott said. "But the early results are giving me reason to be cautiously optimistic."

Vermont's all-payer model—coordinated by the accountable care organization One-Care Vermont—is meant to turn the current "fee-for-service" model on its head. The problem with fee for service is that it "actually rewards health care systems when their population is sicker, rather than rewarding them when their population is healthier," said Sharfstein, who oversaw development of Maryland's all-payer program as the state's health secretary from 2011-14. He's also a consultant for UVM Health Network.

The central concept of an accountable care organization is a group of providers working together to provide "high-quality, coordinated care," Sharfstein said. Those providers are rewarded if health care quality measurements are high and costs are less than expected, but they face risk if the opposite is true. The model also is designed to reward new approaches by providers, including an emphasis on primary care and on programs that seek to reduce the burden of chronic disease.

That approach is important for patients like St. Albans resident Marie Bessette, who



Joshua Sharfstein, M.D., professor of the practice in health policy and management at Johns Hopkins Bloomberg School of Public Health, said Vermont is seeing early examples of higher quality, lower cost care.

initially had difficulty controlling her blood sugar after she was diagnosed with diabetes in 2012. That changed when she got involved in a group for people with diabetes that meets monthly at her primary care practice —a group that grew from reform efforts under Vermont's all-payer model. Another promising development is a longitudinal care program piloted by UVM Health Network Home Health & Hospice. It offers ongoing support for higher-risk patients who no longer qualify for traditional home health benefits. The pilot program showed reductions in emergency department visits and hospitalizations, along with shorter hospital stays.

Vermont has a multiyear agreement with the federal government to implement and test its all-payer model, so called because it aligns Medicare, Medicaid and commercial

Though there are early success stories, there also are challenges that lie ahead for

Proper regulatory alignment is one. Getting more people involved in the model is another, as Vermont's accountable care organization has spread throughout the

state but is not yet hitting its scale targets. It is hard but important work that requires the commitment of providers across Vermont, said Vicki Loner, OneCare Vermont chief executive officer.

"OneCare Vermont has thousands of providers...that have really come together to participate in a pretty large effort to say, 'OK, we have been freed from the shackles of fee for service after decades," Loner said. "Now, we have the opportunity to care for people the way that we think is best and that makes the most sense for them and for us,

It is "unbelievably important" to keep moving forward on the current path of health care reform, said John Brumsted, M.D., president and chief executive officer of UVM Health Network.

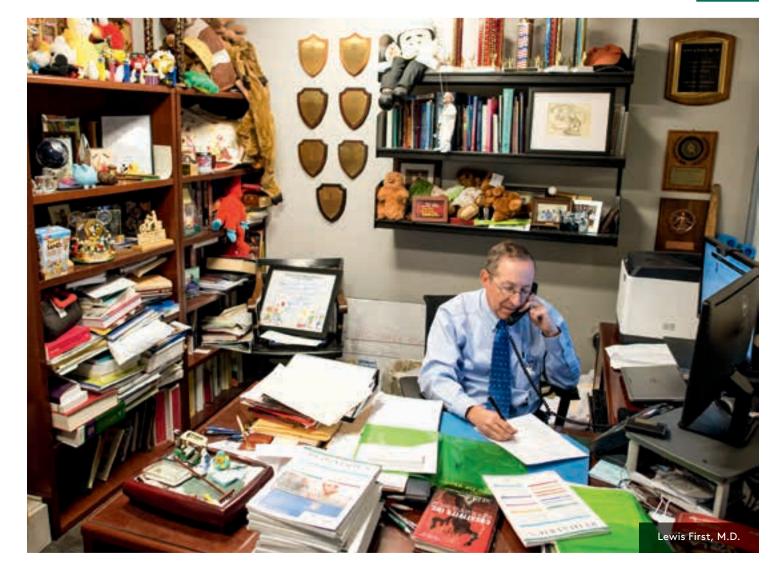
"Everybody wants the same thing," Brumsted said. "We want Vermonters to have access to the highest quality, affordable health care, when and where they want it. And we're all working on that." VM

This story was reported by Mike Faher, with the UVM Health Network





1: On April 1, members of the UVM Medical Center and Health Network, Vermont Department of Public Safety, Green Mountain Messenger Inc., JV Air LLC, and Heritage Aviation secured a private jet to replace the commercial flights transporting COVID-19 specimens to Mayo Clinic Laboratories. 2: A group of students testified at the Vermont Statehouse on January 30 regarding their work with American Heart Association—Vermont to score the strength of school wellness policies across the state. 3: The Gold Humanism Honor Society chapter hosted a Valentine's Day crafting table in honor of The Arnold P. Gold Foundation Solidarity Week for Compassionate Patient Care. 4: The Class of 2023 celebrates the American Heart Association's Go Red Day February 7. 5: Students host a bake sale for the annual UVM Children's Hospital Big Change Round-Up. 6: The weekend of February 22, Chris Veal '21 and Isaac de la Bruere '22, took a break from studying to meet with Mitzi Garahan, M.D.'91, in Coronado, Calif.



Viewpoint

Reflections on 25 Years

Lewis First, M.D., recently celebrated 25 years as chair of the Department of Pediatrics at the UVM Larner College of Medicine and chief of the UVM Children's Hospital. Here, he discusses his department's accomplishments and major developments in the field of pediatrics nationally.

VM: What do you consider some of the most important accomplishments for the Department of Pediatrics over the last 25 years?

LF: Our department faculty have been and continue to be national leaders in pediatric education, research, clinical care, and advocacy. Innovative programs and services we introduced have improved the health and well-being of children in our region, and many have been shared around the country and the world. We have added almost 60 family advisors to ensure we provide the highest quality childfriendly family-centered care possible. Our residents, fellows, and the Larner College of Medicine students we've trained sustain the legacy of excellent pediatric care practiced by Dr. Jim McKay, who founded our department in 1950 and served as chair for 33 years.

VM: How has the landscape of pediatrics changed nationally over the last 25 years?

LF: The focus has moved from not just caring for an individual ill child, but to also focusing on populations and finding ways to keep communities of children healthy. The role of genetics and the environment, and a recognition of how some social determinants of health can impact brain development, have been important advances. The field is also now moving towards the integration of behavioral and mental health care into all aspects of pediatrics.

VM: What would you say to pediatricians just entering the field? What do the next 25 years look like?

LF: There has never been a better time to be a pediatrician! In addition to seeing innovations in care developed and then implemented by our department and UVM Children's Hospital, I read about exciting improvements in child health nationally and internationally every day in my role as editor-in-chief of *Pediatrics*, the national peer-reviewed journal of the American Academy of Pediatrics. While these discoveries seem to be coming at a record pace, what doesn't change is the special relationship a pediatrician has with a child, their family, and the community they live in and that is what grounds us as pediatricians and makes the work we do so meaningful. VM

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Dale Stafford, M.D.'81, is a family medicine physician in Berlin, Vt. An alum of the UVM Larner College of Medicine himself, he has been a preceptor for the Doctoring in Vermont (DIV) course for roughly 30 years. Though currently suspended during the Covid-19 pandemic, when in session DIV introduces students to the art of patient care. Students complete eight sessions with a primary care physician, practicing interviewing and exam skills. Dr. Stafford has mentored dozens of Larner College of Medicine students over the years. Here, he reflects on the value of the course for students and physicians:

LESSONS FROM A MEDICAL STUDENT'S FIRST MENTOR

n reflecting on the Doctoring in Vermont course, in a few words, I find it refreshing, invigorating and hopeful. It is such a pleasure spending time with the students who are so eager and excited to see, talk to and touch "real patients" after all the "book" learning they're doing and have done.

BY DALE STAFFORD, M.D.'81 It never ceases to remind me what an honor it is to care for patients and how much there is to learn and how long it takes to learn it, starting (in many cases) from no clinical experience.

Often, seeing patients all day is actually a somewhat lonely, solo endeavor—just the patient and me in the room. Having a medical student with me allows me to share the patients' stories and their conditions. I enjoy introducing students to both the art and science of medicine.

I say that I find working with medical students hopeful because I am seeing young men and women who are so intelligent, dedicated and motivated that I feel we will be well-served by these future doctors. It has been a real pleasure to have had DIV students graduate, complete residencies and in some cases, end up working with me as colleagues or consultants. That is, of course, a function of having been doing this for so long.

This course is worthwhile because it gives students some real clinical experience during their year and a half of didactic studies, special time away from the classroom, books and computers. It is also worthwhile for us mentors. It give us a glimpse of the future, allowing us to see medicine through the eyes of a student who may be experiencing it for the first time.

Thank you for this opportunity to teach in the DIV course and keep up the good work managing the program. VM



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