

# VERMONT MEDICINE

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

PROFILE IN GIVING

# 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

The University of Vermont Larner College of Medicine  
Medical Development & Alumni Relations Office  
(802) 656-4014 | [medical.giving@uvm.edu](mailto:medical.giving@uvm.edu) | [www.med.uvm.edu/alumni](http://www.med.uvm.edu/alumni)

FOR INFORMATION ABOUT HOW YOU CAN SUPPORT THE WORK OF THE UVM LARNER COLLEGE OF MEDICINE AND ITS AFFILIATES, PLEASE CONTACT THE MEDICAL DEVELOPMENT AND ALUMNI RELATIONS OFFICE.



20

**News**

From the Dean ..... 2  
 Around the Larner Community ..... 3  
 Celebrating Match Day Virtually ..... 6  
 Residency Match List ..... 7  
 Harm Reduction ..... 8  
 Health Care Reform Efforts ..... 9  
 Glimpses ..... 10  
 Lewis First, M.D., Reflects on 25 Years ..... 11  
 Lessons from a Medical Student's First Mentor ..... 12

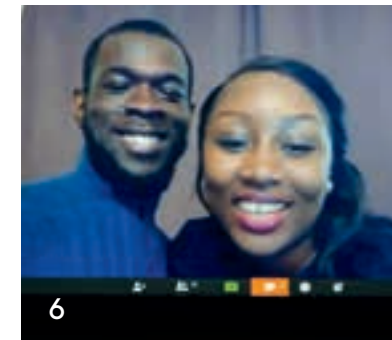
**Hall A**

President's Corner ..... 30  
 Class Notes & News ..... 31  
 Development News ..... 35  
 Flashback ..... 36  
 Obituaries ..... 37  
 Moment in Time ..... 40

**Web Extras**



See more online at [med.uvm.edu/vtmedicine/web-extras](http://med.uvm.edu/vtmedicine/web-extras) including videos, photos, and blog posts.



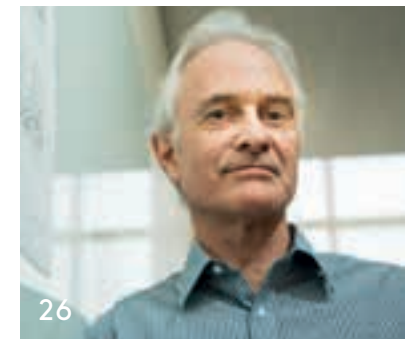
6



8



14



26

**Features**

**14 Getting Personal**

Genomic DNA testing through the UVM Health Network ushers in the future of diagnosis.  
BY ELEANOR OSBORNE

**20 Positive Change**

An innovative program helps Larner medical students find positive role models to forge their identities as physicians—so they can be fully present for their patients in the future. BY ERIN POST

**26 Deep Breadth**

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



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

## 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. Fourth-year 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."



### 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 developer 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

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.

**COVID-19 ONLINE** Read more Larner COVID-19 stories at: [go.uvm.edu/larnercovidstories](http://go.uvm.edu/larnercovidstories)

## VERMONTMEDICINE

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

DEAN  
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.

SENIOR ASSOCIATE DEAN FOR CLINICAL AFFAIRS  
Claude Deschamps, M.D.

SENIOR ASSOCIATE DEAN FOR FINANCE & ADMINISTRATION  
Brian L. Cote, M.B.A.

EDITORIAL & CREATIVE DIRECTOR  
Edward Neuert

MANAGING EDITOR  
Erin Post

CONTRIBUTING WRITERS  
Eleanor Osborne, communications specialist, UVM Health Network; Jennifer Nachbur

ART DIRECTOR  
Ann Howard

Spring 2020 • Published April 2020

CONTRIBUTING PHOTOGRAPHERS  
Andy Duback, David Seaver

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

VISIT VERMONT MEDICINE ONLINE: For full current and past issues and exclusive webXtras at: [www.med.uvm.edu/vtmedicine](http://www.med.uvm.edu/vtmedicine)

*Vermont Medicine* is published by The UVM Larner College of Medicine. Articles may be reprinted with permission of the editor. Please send correspondence to the editor by visiting: [www.med.uvm.edu/vtmedicine](http://www.med.uvm.edu/vtmedicine).



### 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.

**2019 GRADUATE HOODING CEREMONY**

*The UVM Graduate Hooding Ceremony on December 11, 2019, celebrated graduates of master's and doctoral degree programs from August, October and January.*

**8**  
MASTER OF PUBLIC HEALTH

**20**  
MASTER OF SCIENCE IN MEDICAL SCIENCE

**1**  
MASTER OF SCIENCE IN CLINICAL AND TRANSLATIONAL SCIENCE

**0**  
MASTER OF SCIENCE IN CLINICAL PHARMACOLOGY

**2**  
MASTER OF SCIENCE IN PATHOLOGY

**4**  
PH.D. IN CELLULAR, MOLECULAR AND BIOMEDICAL SCIENCES



Madeleine Kunin

### 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

# Celebrating Match Day Virtually

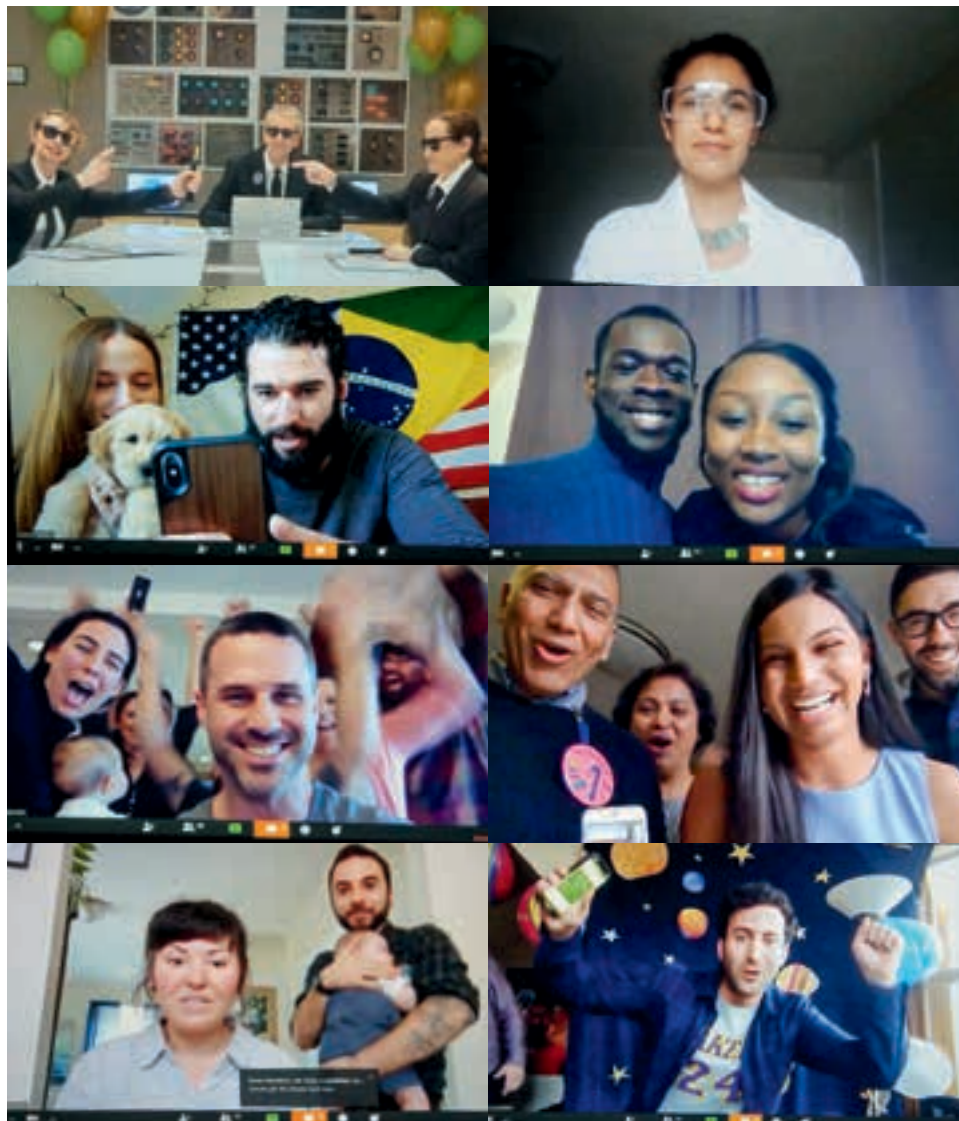
THE PHRASE “KEEP YOUR DISTANCE” has taken on a whole new and deeply important meaning in the era of COVID-19 and even Match Day, the annual senior medical student rite of passage, was not “immune” to honoring this behavior. On March 20, 2020, members of the Larner College of Medicine’s Class of 2020—and 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**



**CLASS OF 2020  
MATCH  
RESULTS**

**120**  
STUDENTS MATCHED

**72**  
INSTITUTIONS

**14**  
TO UVM MEDICAL CENTER

**48**  
TO PRIMARY CARE

## LARNER COLLEGE OF MEDICINE CLASS OF 2020

### 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 Romero ..... Lahey Clinic (Burlington, Mass.)  
Nicholas Selig ..... Health Quest (Poughkeepsie, N.Y.)  
Patricia Wang ..... Yale-New Haven Hospital  
Timothy Wong ..... Johns Hopkins Hospital

### COMBINED ADULT/CHILD PSYCHIATRY

Pamela Derickson ..... University of Vermont Medical Center

### DERMATOLOGY

Sree Kolli ..... Henry Ford Hospital (Detroit, Mich.)

### DIAGNOSTIC RADIOLOGY

Alexa Arvidson ..... University of Michigan Hospitals-Ann Arbor  
Wendy Hou ..... Jacobi Medical Center/Albert Einstein College of Medicine  
Gregory Johnston ..... University of Vermont Medical Center

### EMERGENCY MEDICINE

Ashley Aiken ..... Montefiore Medical Center/Albert Einstein College of Medicine  
Harshal Athalye ..... University of Miami/Jackson Health System  
Jennifer Boccia ..... Albany Medical Center  
Nicholas Bompastore ..... University of Massachusetts Medical School  
Nathan Dreyfus ..... UC San Francisco-Fresno  
Zachary Ehret ..... New York-Presbyterian Brooklyn Methodist Hospital  
Caleb Knight ..... Denver Health Medical Center  
Nektarios Konstantinopoulos ..... University of Vermont Medical Center  
Jacob Lehman ..... University of Vermont Medical Center  
Andrew Pham ..... Harbor-UCLA Medical Center  
Kyle Remy ..... Icahn School of Medicine at Mount Sinai St. Lukes-Roosevelt  
Shawn Sanford ..... Beth Israel Deaconess Medical Center  
Danielle Smith ..... University of Washington Affiliated Hospital  
Caroline Vines ..... University of North Carolina Hospitals  
Caleb Watkins ..... Albany Medical Center  
Andrew Wick ..... University of North Carolina Hospitals

### FAMILY MEDICINE

Zara Bowden ..... Family Medicine Residency of Idaho  
Benjamin Flinn ..... St. Elizabeth Medical Center (Utica, N.Y.)  
Anthony Gallegos ..... CHRISTUS Health (San Antonio, Texas)  
Eli Goldberg ..... University of Vermont Medical Center  
Kathryn Grenoble ..... University of Vermont Medical Center  
Marie Kenney ..... St. Joseph’s Health (Syracuse, N.Y.)  
Anna Lidofsky ..... UC Davis Medical Center  
Alexis Nadeau ..... University of British Columbia  
Scott Neary ..... University of Rochester/Strong Memorial Hospital  
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 Center  
Elias Schoen ..... Crozer-Chester Medical Center (Upland, Penn.)  
Conner Soderquist ..... University of Massachusetts Medical School  
Harris Syed ..... University of Iowa Hospitals and Clinics  
Emily Vayda ..... Maine Medical Center

### GENERAL SURGERY

Pooja Desai ..... Albany Medical Center  
Hanna Mathers ..... MedStar Georgetown University Hospitals  
Tyler Oe ..... Morristown Memorial Hospital (Morristown, N.J.)  
Daniel Wigmore ..... Stony Brook Teaching Hospitals

### INTERNAL MEDICINE

Charles Cubberley ..... University of Utah Health  
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 ..... University of Vermont Medical Center  
Ethan Witt ..... Oregon Health & Science University  
Collin York ..... University of Virginia

### MEDICINE-PEDIATRICS

Kirsten Martin ..... MedStar Georgetown University Hospitals

# RESIDENCY MATCH LIST

### NEUROLOGICAL SURGERY

Scott Mitchell ..... Indiana University School of Medicine

### NEUROLOGY

Ava Bakhtyari ..... Boston University Medical Center  
Kinjal Thakor ..... University 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 Mason ..... Ohio State University Medical Center  
Kathryn Patton ..... Loyola University Medical Center  
Jasmine Robinson ..... Zucker School of Medicine-Northwell Southside Hospital

### OPHTHALMOLOGY

Nicole Jedrzynski ..... California Pacific Medical Center  
Chad Serels ..... Cleveland Clinic Cole Eye Institute  
Purvi Shah ..... Brown University  
Matthew Sommers ..... University of Pittsburgh

### ORTHOPAEDIC SURGERY

Nathan Benner ..... University of Washington Affiliated Hospitals  
Christopher Bernard ..... University of Kansas School of Medicine-Kansas City  
Stephen Daniels ..... University of Colorado School of Medicine-Denver  
Gregory Roy ..... University of Vermont Medical Center

### OTOLARYNGOLOGY

Thomas Arnell ..... University of Vermont Medical Center  
Allison Reeder ..... Yale-New Haven Hospital  
Vanessa Trieu ..... University of Utah Health

### PATHOLOGY

Karamatullah Danyal ..... University of Vermont Medical Center  
Elizabeth McLeod ..... Madigan Army Medical Center-Fort Lewis  
Benjamin Smith ..... Oregon Health & Science University  
Gregory Worswick ..... University of Arizona College of Medicine-Tucson

### PEDIATRICS

Ramin Badiyan ..... UC Irvine Medical Center  
Gesca Borchardt ..... University of Arizona College of Medicine-Tucson  
Victoria Close ..... Westchester Medical Center (Valhalla, N.Y.)  
Kyna Donohue ..... Tufts Medical Center  
Kassandra Gibbs ..... University of Massachusetts Medical School  
Russell Himmelstein ..... Stony Brook Teaching Hospitals  
Hannah Johnson ..... University of New Mexico School of Medicine  
Florence Lambert-Fliszar ..... University of Washington Affiliated Hospitals  
Rebecca Merriam-Stelfox ..... University of Vermont Medical Center  
James Rohwer ..... University of Texas Southwestern Medical School-Dallas  
Cole Shapiro ..... Duke University Medical Center  
Laura Thompson-Martin ..... Stanford University Programs

### PEDIATRICS/RESEARCH

Amy Berkman ..... Duke University Medical Center

### PLASTIC SURGERY

Elizabeth O’Neil ..... Rush University Medical Center  
Pedram Zargari ..... University of Minnesota Medical School

### PRELIMINARY MEDICINE

Daniel De Los Santos ..... University of Vermont Medical Center  
Charles Nicoli ..... National Capital Consortium Walter Reed National Military Medical Center

### PRELIMINARY SURGERY

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

### PRIMARY MEDICINE

Jennifer Morris ..... University of Rochester/Strong Memorial Hospital  
Michael Rodriguez ..... University of Virginia  
Eleanor Stedman ..... University of Vermont Medical Center

### PSYCHIATRY

Julia Hannigan ..... Thomas Jefferson University (Philadelphia, Penn.)  
Lee Hiromoto ..... Oregon Health & Science University  
Alejandra Vivas Carbo ..... Montefiore Medical Center/  
Albert Einstein College of Medicine

### PSYCHIATRY/GENERAL/CHILD

Isabella Kratzer ..... University of Pittsburgh Medical Center Medical Education

### UROLOGY

Erin Hunt ..... University of New Mexico School of Medicine  
Nikolas Moring ..... Albany Medical College

 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](http://MED.UVM.EDU/VTMEDICINE/WEB-EXTRAS)



## 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.

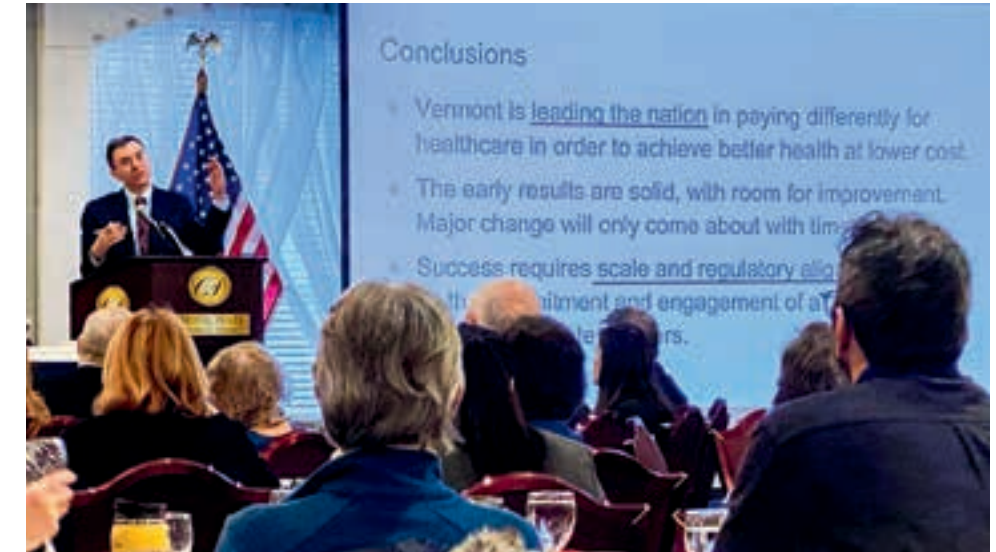
Sharfstein was the keynote speaker at a Jan. 30, 2020, health care reform breakfast hosted by the University of Vermont Health Network in Montpelier. He and other speakers underscored those two themes—progress and patience—while Gov. Phil Scott reiterated his support for reform under the state’s all-payer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

Though there are early success stories, there also are challenges that lie ahead for all-payer.

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, as well.”

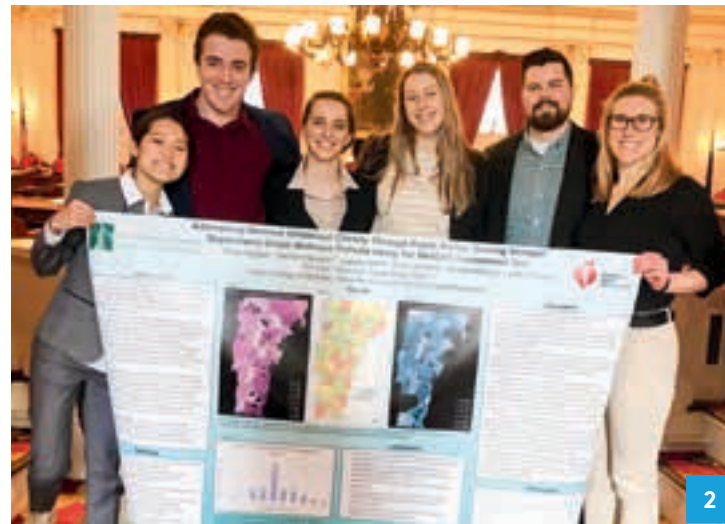
It is “unbelievably important” to keep moving forward on the current path of health care reform, said John Brumsted, M.D., president and chief executive officer of UVM Health Network.

“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



2



5



6



3



4

**Glimpses**

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.



Lewis First, M.D.

**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 child-friendly 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**

## Faculty Reflection

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

In 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. **WM**



Doctoring in Vermont preceptor Dale Stafford, M.D.'81, sees a patient with Anna Quinlan '22 in his office in Berlin, Vt.





# GETTING PERSONAL

## GENOMIC DNA TESTING THROUGH THE UVM HEALTH NETWORK USHERS IN THE FUTURE OF DIAGNOSIS

BY ELEANOR OSBORNE | PHOTOGRAPHY BY ANDY DUBACK

It was the longest 30 minutes of his life. Sitting in his office in the ground floor of the UVM Medical Center's main campus, Michael Towle stared at his computer while, in the office just down the hall, Debra Leonard, M.D., Ph.D., chair of pathology and laboratory medicine at the Larner College of Medicine, studied his genetic blueprint. Leonard was looking to see if Towle had the mutation for frontotemporal dementia (FTD), a devastating disease that strikes early.

A half-hour later, Leonard called him in to her office to tell him the good news: he did not have the mutation. Then, together, they cried.

A few years earlier, spurred on by the record of dementia and cancer in his family, Towle had decided to have his genome sequenced. After his mother began showing symptoms of FTD, the family asked William Pendlebury, M.D., professor emeritus of pathology and laboratory medicine at the Larner College of Medicine, to recommend and order genetic testing for their mother to try to identify the mutation causing FTD in their family. That information, along with the sequencing of Towle's genome, gave Leonard the scientific crystal ball she needed to predict Towle's chances of getting the disease. >>

## THE VOCABULARY OF GENOMICS

**Genes:** The inherited information in our body's cells is written in DNA code and packaged in these units.

**Genome:** An individual's complete set of genes plus the sequence in between the genes. Almost all our body's cells contain two complete copies of the human genome, which contains about 20,000 to 25,000 genes located on 23 pairs of chromosomes. Understanding the role of variations in our DNA code is very important for understanding disease.

**Genetics:** The study of genes

**Genomics:** The study of genomes

Towle is the only one of his siblings who's had his genome sequenced to find out whether he had the mutation. "I wanted to be able to prepare," he says. "And I wanted to know if my kids were at risk." But even as he sat in his office waiting, his resolve wavered. "I was doubting myself, then I was sure it was the right thing to do, then I was doubting myself again—it was an endless loop of uncertainty. Finding out put an end to the cycle. It was powerful."

### PLAYING THE HAND YOU'RE DEALT

In poker, as in life, many of us think in terms of doing the best with what we have. By that way of thinking, what if you could learn your lifetime risks for disease.... and act accordingly?

That's the idea behind the genetic testing currently being offered to patients at select UVM Medical Center primary care offices. The test, provided at no cost as part of each patient's preventive health care, identifies differences in an individual's DNA that make certain diseases such as cancer and heart disease more likely. Results are protected in the patient's medical record, along with all the rest of their medical information.

Leonard, founder of UVM Health Network's Genomic Medicine Program, sees the integration of genetic testing into clinical care as an important next advance to traditional health care. "Genetics

influences your overall health and longevity. We want to bring this into medical practice in a safe and effective way." With this in mind, the initial goal of the project is to test 1,000 patients by the fall of 2020 and 50,000 patients over five years.

The test, which is being offered at no cost, is coordinated through the UVM Health Network Genomic Medicine Program and is powered through partnerships with two companies—Invitae, a West Coast company specializing in clinical genetic testing, and LunaDNA, a platform that provides a patient-centric research database. What makes the LunaDNA platform unique is that it lets patients who opt to share their genomic and health information for research control how that information is shared for research. "Genetic information is a commodity," says Robert Wildin, M.D., associate professor of pathology and laboratory medicine and pediatrics and associate medical director of genomic medicine. "This platform gives patients control over how their information is used."

Further, says Wildin, "It's really important that we get this right, because the relationship between DNA differences and disease is worked out through research. Without data from real people that helps us distinguish normal DNA differences from disease-promoting ones, we can't advance the knowledge on when and how to apply this information to the clinic."

### A WINDOW ON THE FUTURE

Using just two teaspoons of blood, the two-part test provides two things. First, a genetic health screen of 147 genes for cancer and cardiac risk. These are mostly genetically "dominant" disorders, so if a person has a positive result, they have an increased risk of having or developing the condition, and each of their children has a 50 percent chance of inheriting the same increased risk.

Secondly, the testing provides a carrier screen that targets 301 genes for genetically recessive conditions like cystic fibrosis. Most people are carriers of at least three recessive health conditions, most of them rare. Carriers have one altered copy of the gene, and one "normal" copy which prevents the disease. To have the disease a person needs to have received an altered gene copy

from each of their parents. Thus, if you are a carrier, only if your partner also is a carrier would you have a chance of having a child affected by the condition. If both parents are identified as carriers, there's a 1 in 4 chance for each child to have the disease.

The UVM Medical Center laboratory sends the blood to the Invitae, a company based in San Francisco, which does the sequencing and interpretation of the results. Each patient receives a full report of their test results and an action plan created by genomic medicine experts at UVM Medical Center. If a patient has a positive result on the genetic health screen, family members can get tested for the positive results for free, as long as they do so within 90 days. Partners of carriers identified in the carrier screen can get tested at a reduced cost.

Setting expectations is an essential part of the process. Pre- and post-testing consultation with their primary care doctor or a genetic counselor helps patients understand the different results possible—and appropriate actions. If, for example, the evidence supports taking preventive measures, then patients should act, with support from their physicians. If a patient shows an increased risk that could affect them at a later age, or learn about something that isn't fully understood yet, then their doctor may counsel them to not do anything, at least for the present. Finally, if evidence indicates that the results are not likely to influence their health or their family's health—now and in the future—patients may be advised to move on.

The overall aim is to set expectations appropriately, and to provide patients with information that is linked to established treatment guidelines. "This pilot is using a very targeted approach," says Aaron Reiter, M.D., one of several primary care physicians currently offering the test. So far about 20 patients from his practice have enrolled, and, he says, people have generally been receptive to the idea. "For some patients, their families have never talked about why Uncle Bob died at the age of 50. Just getting some information about their genetic blueprint can be comforting. What I tell them is that this is one more data point we can reference—for now and in the future." For those patients who tell him that genetic testing makes them



Debra Leonard, M.D., Ph.D., and Michael Towle, review Towle's genome.

nervous, he asks, "Does it make you nervous to have your blood pressure checked or your cholesterol levels measured?"

### A VILLAGE SETS THE STAGE

Behind the scenes, a team of health care professionals and patient advocates has been involved in developing clinical care pathways aimed at making the process safe and easier for providers and patients. Key participants in the group leading the effort included primary care and specialist physicians and administrators from UVM Medical Center and a group of patient and family advisors. The team also includes Timothy Lahey, M.D., professor of medicine at the Larner College of Medicine and director of clinical ethics at UVM Medical Center.

The care pathways provide common language for every aspect of the experience, from obtaining informed consent to guiding patients on next steps, such as which specialist a patient should be referred to and what kind of further testing the patient might need before seeing the specialist. "We're learning a lot about genes as we get more information," says Christine Giummo, a genetic counselor involved with the

program. "It's important for the family medicine doctors counseling these patients to have the information they need about further specialty care and testing so that they can advise accordingly. We have created the Genomic Medicine Resource Center to answer questions and provide resources for providers and patients."

Giummo notes that the care pathways' work is an evolving process: the team continues to adjust the pathways as patients and providers report on their experience, and as clinical evidence in the medical literature advances.

Striking the right ethical balance has also been a key focus. Ethical guidelines have helped shape the informed consent, to ensure that patients have a clear understanding of what the program offers, what the results can mean—and what kind of control they have over their information. Further, says Lahey, the ethical implications of knowing what your future holds have

**"I WAS DOUBTING MYSELF, THEN I WAS SURE IT WAS THE RIGHT THING TO DO, THEN I WAS DOUBTING MYSELF AGAIN—IT WAS AN ENDLESS LOOP OF UNCERTAINTY. FINDING OUT PUT AN END TO THE CYCLE. IT WAS POWERFUL." — MICHAEL TOWLE**

influenced the architecture of the pilot project. "We've been very careful. We don't want to give scattershot information that might lead to increased anxiety and unnecessary testing that ultimately isn't helpful. We want to offer information that is clearly connected to evidence-based pathways of care."

Community members who bring the patient and family voice to health care have played a role in ensuring that all the informational materials are understandable for patients and their families. Says Patient and



# "THE PROMISE OF GENOMIC-INFORMED MEDICINE IS TO IDENTIFY DISEASE RISKS AND MISSED DIAGNOSES, GET TO THE RIGHT TREATMENTS FASTER AND AVOID INEFFECTIVE TESTS AND TREATMENTS."

— ROBERT WILDIN, M.D.

Family Advisor Brian Harwood, "We worked hard to make sure the words used matched the intent of the program, and were understandable for patients," he says. "There was a lot of merging ideas and compromising."

Leonard feels strongly that this collaborative approach will help ensure the program's success. "Our overarching goal is to do no harm. We always want to make sure our processes are safe and effective - and that patients have control over the use of their personal health information."

Lahey is encouraged by the careful, toe-in-the-water way the Genomic Medicine Program is wading into this work. "The focus is pragmatic, the goal is to be evidence-based, and the aim is to use genetic information thoughtfully."

## THE GENOME AND VERMONT'S HEALTH CARE LANDSCAPE

If a patient who has no signs or symptoms learns they have a genetic difference that indicates the potential for lurking heart disease, the physician would order an echocardiogram. It's likely that this test wouldn't have been ordered in patients without recognized symptoms. How will these cause-and-effect ramifications of genetic testing impact our statewide efforts to reduce the overall cost of health care? How will we prove, in the long run, that genetic testing helps prevent future disease when incorporated into clinical care?

OneCare Vermont, Vermont's Accountable Care Organization (ACO), is well-positioned to view the results of genetic

## WITH THE FLICK OF A SWITCH

**An avid runner**, Greg Merhar sprinted his way through his early years before he became plagued by pain and intermittent fatigue.

"There was never an injury they could pinpoint," he says. "It was incredibly frustrating and limiting."

Still, he persevered, cutting out the backs of his sneakers so he could keep running through swollen Achilles tendons and taking medications to ease the pain. In college, a mysterious new symptom appeared: he felt like he had a bowling ball rolling around his stomach. This, too, came and went, with no apparent cause.

MRIs and upper GI studies revealed nothing. His doctors told him he needed a vacation.

Flash forward four decades. Merhar and his wife Debra Leonard, M.D., Ph.D., the founder of UVM Health Network's Genomic Medicine Program, decided it would be romantic if they gave each other their genome sequences for Christmas.

As it turned out, for Merhar, this was a life-altering gift. The sequencing

revealed that he has a genetic mutation on chromosome 16. With a little sleuthing, he also learned he fit the profile for Familial Mediterranean Fever (FMF), a condition in which his body doesn't produce any or enough of a protein that is involved in helping to regulate the process of inflammation. "Basically, any inflammatory event, I just blow up," he says.

Within a few days, he had a prescription for Colchicine. He took it Friday night. Saturday morning he woke up feeling like "a light switch had gone off." Sunday morning, he lay in bed and thought, "I have no pain."

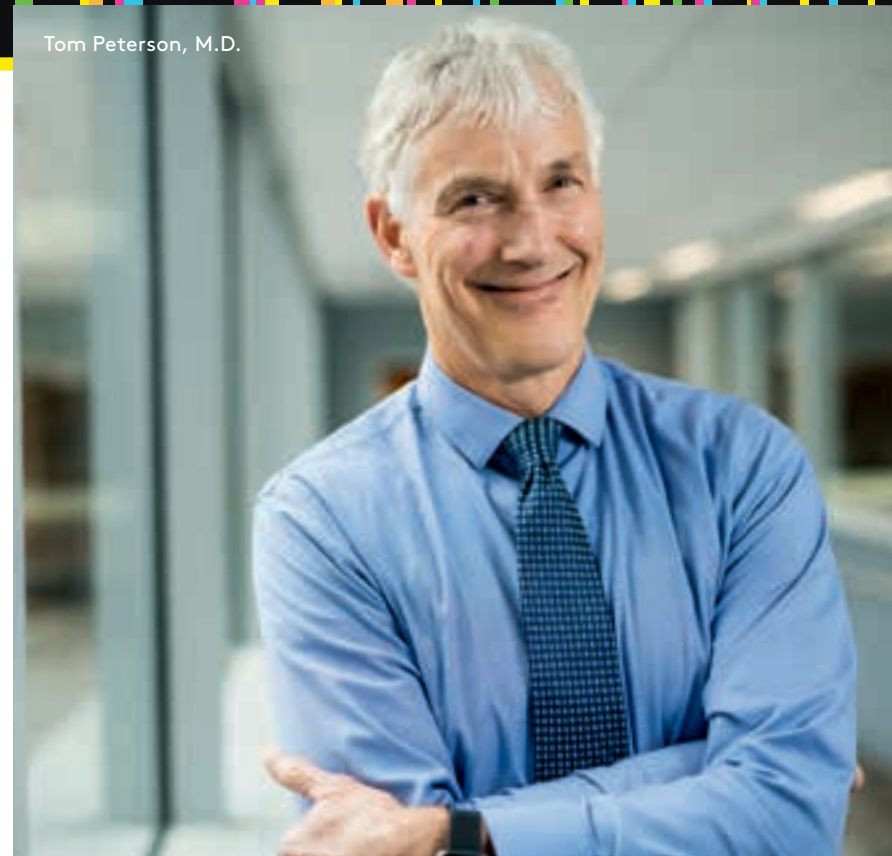
Merhar points out that because he doesn't look like someone of Mediterranean heritage, it wasn't a diagnosis that would have occurred to the many physicians who saw him over the years. "In that way I'm kind of the poster child for genetic testing," he says. "That was the key to my diagnosis."

Today, Merhar is still running. And every step of the way, with every passing year, the image of a man beset by pain recedes into the rear view mirror.



Greg Merhar and his doctor Aaron Reiter, M.D.

Tom Peterson, M.D.



## A PHYSICIAN'S EXPERIENCE

**Tom Peterson, M.D.**, physician leader of UVM Medical Center's primary care service line, sees the world through the dual lens of scientific inquiry and curiosity. Guided by these overlapping perspectives, in April of 2014 he signed on to have a full mapping of his genome—all 20,000 or so genes.

testing through the lens of cost effectiveness across the population. OneCare has already made a very significant contribution to the genetic testing currently being offered in primary care. Because an ACO can waive federal laws preventing health care organizations from offering innovative services for free, OneCare Vermont has given the program such a waiver so the genetic testing offered in this pilot is available to patients for free. This is a key factor in avoiding the bias associated with expensive procedures that can only be accessed by those who can afford them.

Norman Ward, M.D., associate professor of family medicine and chief medical officer, OneCare Vermont, says he's proud of the work that's been done thus far. "This is one of the first examples of an ACO and a statewide group of stakeholders wrestling with an issue of this scope and complexity.

While there are certainly plenty of questions out there for the future, for now I think it is safe to say that the Vermont payment model and our ACO structure makes us uniquely positioned to assess the value of genetics in routine medical care."

## POWER AND PROMISE OF THE UNKNOWN

The potential for genetic testing stretches far out on the horizon, marked with immense potential—and unanswered questions. Genome sequences and health information about individuals could contribute significantly to scientific research, helping us understand how DNA differences are connected to our health

But hanging over all this is the as-yet unknowns. How do we manage this technology so that people who learn about their genetic blueprint get information that is truly useful to them? How can we prevent anxiety and

As a physician and a scientist, he was drawn in—and then there was the personal: with a history of cardiovascular disease in his family, he wanted to know if additional risk for that was in store for him as well. "I had some trepidation," he says. "But it wasn't too daunting."

To look into what may be your future can be daunting, and information revealed through genetic testing can lead to more uncertainty. "Genetic testing is one of many examples of how our technology sometimes outpaces our understanding," he says. "We have to be mindful of how we use it."

His own results were encouraging—and useful. Not only was there nothing especially concerning, but the sequencing revealed important information about how his body metabolizes medication. Further, he says, "I have a unique level of confidence knowing that my entire genome is stored on a thumb drive."

needless further testing? How can we manage the cost implications?

In an ideal scenario, genetic testing would give patients and providers more information about their health and health risks. Timing of interventions could come before the onset of clinical disease. The number and types of tests could be tailored to the patient, using the test results as a guide. Patients and providers would have clear paths for making effective use of the information they learn from testing. Ultimately, genetic testing could lead to better care at equal or lower cost.

"This is an area of information impacting our health that we've never consistently integrated into health care," says Wildin. "Understanding how our genes impact health care is another tool in the tool box for providers and patients who can use it to make decisions about their care." VM

# Positive Change

By Erin Post



An innovative program helps Larner medical students find positive role models to forge their identities as physicians—so they can be fully present for their patients in the future.

**W**hen UVM Assistant Professor Nathalie Feldman, M.D., checks her email these days, she often finds herself scrolling through message after message from physicians, staff, nurses, and other healthcare professionals offering heartfelt thanks for a professionalism accolade they have received from a medical student. Whether they are recognized for exceptional mentorship, thoughtful compassion for a patient, or a simple moment of kindness, the students' words carry weight. Recipients are touched in profound ways, and faculty and residents, in particular, appreciate being acknowledged for their devotion to patient care and teaching.

"The expression of gratitude can have a profoundly positive effect," Feldman says, as she ticks down through the hundreds of emails in a folder labeled "Responses to Professionalism Accolades."

And then there's the impact on students: When they sit down to write a note of thanks, they are making time to reflect on the traits and skills they want to develop. They're prompted to think through what kind of doctor they want to be.

As the Larner College of Medicine's director of the learning environment, Feldman is the architect of an innovative program to help medical students find positive role models as they forge their identities as physicians. Along with College-wide programs to emphasize wellness and engage students in self-reflection and self-care, the goal is to send students into medical practice with the skills they need to be fully present for their patients. This shift in focus—shining a light on the importance of wellbeing—has a ripple effect across the institution, possibly even helping to prevent burnout among physicians, one of the most intractable challenges in medicine. In practicing gratitude, Feldman sees a hopeful path forward, even as there is more work to be done.

"It's about all of us being the best we can be and acknowledging empathy and compassion when we witness it," Feldman says. "If we elevate the positive, it will begin to dominate our experience."

## Uncovering the Hidden Curriculum

Medical schools revolve around curricula, syllabi and course objectives—all designed to make sure future doctors have extensive knowledge of the human body and the clinical skills to diagnose and treat patients. But there's also the underlying lessons students absorb, ones that aren't necessarily overt: the hidden curriculum. Feldman describes this as an "acculturation," based in part on the subtle messages sent via the behavior of faculty and trainees.

Since it's largely unspoken, the hidden curriculum can have an outsized impact. Students are less inclined to question what they're learning, even if the dynamics they observe are unhealthy. For example, if a student sees a physician treating a nurse or a resident with disrespect, they may internalize the example being set. They may "question whether they belong," says Feldman, or decide that they just "need to toughen up."

Feldman and colleagues across the College, including the Office of Diversity and Inclusion and the Learning Environment and Professionalism Committee (LEAP), want to create the space for students to talk about what they're witnessing—the good and the bad.

"The learning environment efforts are really about dialogue across divides, whatever the divides might be," she says.

A new, confidential, online reporting system streamlines how students communicate about learner mistreatment and offers various options for intervention, from anonymously reporting a concern, to meeting with Feldman or another faculty member to decide how to proceed, to, in the most serious cases, filing a report of harassment or discrimination directly with UVM's Affirmative Action and Equal Opportunity Office. It's important that the available options be easily accessible and as transparent as possible, Feldman says, so that students know where and how they can receive support.

The online system also includes a call for accolades. Students can write in praise for individuals who have "upheld the highest standards of professionalism." Testimonials are shared anonymously with the recipient and their direct supervisor.

In addition, students reflect on professionalism through two new questions on course and clerkship evaluations. One offers students an opportunity to identify faculty members, residents or staff who are "exemplars of professionalism." Feldman says the response rate continues to astound her—the large number of accolades is a testament to the impact of these positive role



Nathalie Feldman, M.D.  
and Abigail Belser '22

models on students.

The second new question asks students to address any instances of potential mistreatment or unprofessional behavior they may have witnessed or experienced. Students explore how they perceived the action and receive support if desired. Through this system, trends and themes can be identified, empowering the College to provide education and professional development to improve the learning environment.

“Giving voice to our students provides an opportunity for them to engage in the process of improvement,” says Feldman.

Ongoing research seeks to quantify the effect of the College’s emphasis on reflection and gratitude, with Abigail Belser '22 at the front lines of this work. She spent the summer of 2019 as the learning environment intern, leading a study to measure the impact of the new accolade reporting system. She found strong student participation: Of the 851 clerkship evaluations received in the 2018-19 academic year, 67 percent contained one or more accolades. Belser and co-investigators analyzed themes in what students wrote and collected responses from faculty who received accolades.

“Just adding this simple question to the course evaluations actually has a positive impact on a lot of people, which I think is

pretty exciting,” she says.

The study, which was presented at the 2019 Association of American Medical Colleges (AAMC) annual meeting, invites further research. Leigh Ann Holterman, Ph.D., director of curricular evaluation and assessment and a co-investigator on the project, says the next step will be looking at the accolade reporting system’s effect on burnout. Structured interviews with faculty and students should help dig deeper into how encouraging gratitude changes the status quo.

“We want to see what impact it has on students,” says Holterman. “Does it change anything for them that they can identify? Then for the faculty, does it impact their desire to teach? Does it allow them to feel more invested?”

Belser is hopeful her peers will benefit from identifying role models early in their education, setting them up for a lifelong focus on positive change.

“Many studies have shown that gratitude—either taking a minute yourself to be grateful or also receiving thanks and appreciation—can have protective effects against burnout,” she says. “So, we think potentially doing something as simple as asking students to write a positive review about a faculty member could be beneficial to both students and faculty.”

### Bridging the Divide

At least four generations—from the Baby Boomers to Generation Z—now work in the field of medicine, bringing with them a cornucopia of communication styles, work styles and expectations for others. And although there’s still much work to be done, trainees are the “most diverse, culturally and ethnically, that they have ever been,” says Feldman. In this environment, cultural humility—understanding the limits of your own perspective and being respectful of another person’s experience—is key. And fostering it requires connecting with others in meaningful ways.

One program aimed squarely at making space for honest exchange: Cup of Coffee Conversations, where community members have the opportunity to sit down with a trained peer to discuss a misunderstanding or miscommunication. The model, first developed at Vanderbilt University’s Center for Patient and Professional Advocacy to address unprofessional behavior in hospital settings, is being adapted by the LEAP Committee for use in medical education. Although Feldman is always available to confidentially discuss issues regarding

**“Just adding this simple question to the course evaluations actually has a positive impact on a lot of people.”**

– Abigail Belser '22

mistreatment, the Cup of Coffee Conversation allows trained peers to come together to engage in dialogue to resolve an issue in a non-punitive way. The peer-mediated model gives the involved parties the “power to be the change agent,” Feldman says.

The pilot program recently expanded to include residents at UVM Medical Center, a novel innovation that the College plans to further explore, says Melissa Davidson, M.D., a member of the LEAP Committee and associate dean for graduate medical education at UVM Medical Center. Instead



### A Culture of Humility and Respect

A statement created under the direction of Dean Richard L. Page, M.D., underscores the UVM Larner College of Medicine’s approach to professionalism. After a 12-member task force created the statement with input from faculty, staff and students, the community came together to celebrate the statement’s launch. “Professionalism must be a core value of educators, scientists, caregivers, and all those who work in medicine and science,” says Dean Page. “Because of medicine’s great importance in people’s lives—often literally sustaining them—that power has to be handled responsibly, and with humility.”

**Statement on Professionalism**  
*Our Larner College of Medicine community upholds the highest standards of professionalism as we follow our passion for lifelong learning and improvement. We demonstrate professionalism through integrity, accountability, compassion, altruism, and social responsibility. We honor the trust our society has placed in us as stewards of the art and science of medicine, relying on cultural humility, kindness, and respect to guide our daily interactions. We expect all members of our community to embrace these principles of professionalism as we strive to conduct and support patient care, research, and education that are second to none.*

of channeling a report to their program director—a person responsible for formal evaluation—what could feel punitive is turned into a learning opportunity.

“To have that one conversation with somebody who is not part of the program feels different,” she says.

Written feedback—both from students to instructors and instructors to students—can be another realm fraught with misunderstanding. So when faculty and residents voiced concerns over the nature of some of the written comments they had received from students, and students expressed a desire to learn more about how their feedback is used, the LEAP Committee, in collaboration with students from the College’s Student Education Group (SEG), launched a session devoted to the topic. The students worked in small groups to craft constructive feedback. They also heard from individual faculty members about how students’ responses to their teaching impacts them and helps them to improve. Sidney Hilker '21, vice chair of SEG, says students took the conversation to heart. “[Giving constructive feedback] is both a science and an art that you have to learn from practice,” Hilker says. “And I think that was a message well-received.”

Davidson, who hosts similar trainings for new residents and fellows at UVM Medical Center, helped to run the session for students. “The outcomes were so positive that the students said that they wished they had gotten this earlier,” she says. “They recommended that we do it for incoming medical students right on day one.”

As a result, the workshop has now been incorporated into orientation for first-year students. For faculty, Feldman and colleagues have hosted sessions for the Teaching Academy’s Medical Education Grand Rounds, featuring time to workshop feedback and a student panel focused on how faculty feedback affects them.

Feldman and colleagues, including LEAP Committee member Judy Lewis, M.D., also seek to share insights with other institutions. A learning environment curriculum utilizing videos designed and created by Feldman, Lewis and colleagues has for several years been exporting the College’s approach to professionalism and the learning environment. The films—one focused on the experience of medical students and the other on faculty, staff and residents—depict instances of potential mistreatment. After viewing the films,

audiences engage in facilitated dialogue around represented themes, with the goal of bridging generational, hierarchal or interprofessional divides. The curriculum, published on Med Ed Portal, has been integrated into the third-year clerkship orientation as well as the residency orientation at UVM Medical Center. Institutions including Yale University, Columbia University and the Mayo Clinic have adopted these materials for GME orientation and faculty development series. Presentations at national conferences including the International Association of Medical Educators Annual Meeting have sparked interest in medical schools around the globe.

“Film has a unique ability to elicit empathy,” says Feldman. “It brings up great discussions.”

### Lifelong Wellness

The first step for a physician seeking to provide high quality patient care may seem simple: “They need to be fully present,” says Lee Rosen, Ph.D., assistant professor of psychiatry and director of student well-being. Turns out modern medicine poses some challenge for this most important task.

“There’s the difficulty of engaging with people who are suffering,” says Rosen. “And then there’s doing it in this health care environment which has features that can be very mechanistic, that can draw people’s attention away from the most meaningful parts of their work. We have to give students the tools to be prepared for that.”

Just like building clinical skills, fostering emotional health requires “explicit curriculum,” one that is intertwined with the LEAP Committee’s work on professional identity formation and the College’s infrastructure for academic support.

“When you go to yoga, when you sleep, when you engage in meditative practice, you’re consolidating knowledge,” Rosen says. “You’re taking care of your brain.”

The student-run Wellness Committee offers a plethora of activities, from one-on-one peer support to spring and summer creemee nights. Their twice annual mental health panel, which features students speaking to their peers about their experiences accessing mental health treatment, is destigmatizing the process of asking for help. The Yoga Student Interest Group hosts free, weekly sessions on campus. A new meditation guide, created by Rosen and Collin York '20,

(continued on page 34)



Read more about the appointment of Anne Dixon as director, the Vermont Lung Center's designation as an Airways Clinical Research Center and more: [med.uvm.edu/vtmedicine/web-extras](http://med.uvm.edu/vtmedicine/web-extras)

# *Deep Breadth*

By Jennifer Nachbur

*From research on the effects of asbestos to vaping, Vermont Lung Center members continue a leading-edge tradition.*

Charles Irvin, Ph.D., and Anne Dixon, M.A., BM BCH

## It's easy to take breathing for granted;

for most of us, it happens whether we're paying attention or not. But if you're like Vermonter Bruce Towne, one of the hundreds of millions of people worldwide with a serious lung disease, walking and breathing "become an ordeal fairly quickly."

Healthy lungs work in concert with the trachea, diaphragm, and nasal passages, allowing us to inhale and exhale between 15 to 25 times per minute. Like a bellows that fuels a fire, the lungs expand, drawing oxygen into the body and bloodstream, and compress, expelling waste in the form of carbon dioxide. When something genetic, or in the environment, causes lung injury, the ability to breathe—and one's quality of life—is compromised.

For centuries, lung diseases have threatened human health and motivated scientists and clinicians to determine causes and find solutions. At first, all shortness of breath was considered asthma—a term coined by Greek physician Hippocrates. The condition, along with other lung diseases, became more well-defined over the centuries, and better understood over the past nearly half-century since the Vermont Lung Center at the University of Vermont was founded.

### The Age of Asbestos and Silicosis

In the early 1970s, decades before the tragedy of 9/11 and the appearance of "World Trade Center cough," a few groundbreaking studies by a small interdisciplinary group of Lung Center-affiliated researchers were putting UVM on the map in the field of environmental impacts on lung function.

In an effort to better understand the causes of interstitial lung disease—fibrosis or scarring in the lungs—UVM's first Lung Center director, the late Gareth Green, M.D., applied for and received the first-ever National Institutes of Health (NIH) National Heart, Lung and Blood Institute Specialized Center of Research (SCOR) grant. Among the populations the group studied were granite workers in Barre, Vt.

"He was a real leader in lung defense immunity and got the SCOR grant for pulmonary fibrosis when we didn't even really know what that was," says current Vermont Lung Center Director and Professor of Medicine Anne Dixon, M.A., BM BCh.

Green's bold move led UVM to become "a world leader in silica and asbestos-induced pulmonary disease," according to Robert Low, Ph.D., professor emeritus of molecular physiology and biophysics, who took on leadership of the SCOR grant after Green left the university in 1978. The award also ignited the careers of faculty like Professor Emeritus of Medicine Gerald Davis, M.D., and University Distinguished Professor of Pathology and Laboratory Medicine Brooke Mossman, Ph.D. A clinician, Davis spearheaded research involving granite workers using a novel tool called bronchoalveolar lavage to diagnose lung disease; Mossman published the first paper on asbestos exposure and lung injury and went on to become an internationally recognized expert on mesothelioma, an asbestos-related cancer.

*In the early 1970s, decades before the tragedy of 9/11 and the appearance of "World Trade Center cough," a few groundbreaking studies by a small interdisciplinary group of Lung Center-affiliated researchers were putting UVM on the map in the field of environmental impacts on lung function.*



The relationships forged between the Departments of Medicine, Physiology, Pathology, and Engineering during that time still remain today, says Dixon, and are critical to the Lung Center's success as "a forum for investigators from multiple departments to come together to collaborate on the science of pulmonary disease," says E. L. Amidon Chair and Professor of Medicine Polly Parsons, M.D.

### Chartering an ACRC and UVM's First COBRE

Despite a lull in the 1990s, the Center entered a revitalization phase in 1998 when UVM's Division of Pulmonary and Critical Care Medicine hired several "key recruits who really formed an incredibly

important nucleus," says Dixon. The first was David Kaminsky, M.D., an expert in pulmonary physiology and pulmonary function testing who'd just completed a fellowship at the University of Colorado who Davis—then chief of pulmonary—hired. Soon after, biomedical engineer and lung mechanics expert Jason Bates, Ph.D., D.Sc., came on board, followed by a new director for the Lung Center: Charles Irvin, Ph.D., an expert in the mechanisms of airway dysfunction in asthma.

Irvin, several of his UVM colleagues, and a small local chapter of the American Lung Association (ALA) took on the daring task of bringing an Asthma (now Airways) Clinical Research Center (ACRC) to Vermont in 1999. The following year, he secured a Center of Biomedical Research Excellence (COBRE) award, which provided 15 years of funding from the National Institutes of Health's (NIH) National Institute of General Medical Sciences and gave the Vermont Lung Center an international leadership reputation in basic and clinical respiratory and critical care disease research.

UVM's charter membership in the ACRC network played a pivotal role in moving asthma research to the forefront, and reinforced the Lung Center's position as a leader in the field. The network saw early



success with its first major clinical trial, which demonstrated the safety of the flu vaccine for children and adults with asthma. The study, which was published in the *New England Journal of Medicine*, led the Centers for Disease Control and Prevention to change their flu shot recommendations to include everyone six months of age and older.

Since then, the ACRC network has completed 16 studies and the medical world's understanding of asthma and lung diseases has evolved. "We've learned about the importance of some comorbidities—westernized lifestyle, nutrition, and obesity—and the effects that has on asthma, which has really transformed the epidemiology of asthma," Dixon says.

In 2016, the ACRC changed the network's name from "Asthma" to "Airways" to incorporate clinical research on COPD—chronic pulmonary obstructive disease—a condition closely linked to cigarette smoking that is now the fourth leading cause of death worldwide. Dixon and Kaminsky are leading several clinical trials relating to COPD. Surprisingly, "Vermont's ACRC is still the only ACRC site in New England," says Irvin.

The COBRE grant—the first ever received at UVM—helped establish state-of-the-art laboratories and jump-start the careers of now-senior faculty members like Dixon, Kaminsky, Matthew Poynter, Ph.D., and Yvonne Janssen Heining, Ph.D. Bates considers the milestone "the seminal event that really launched the entire lung research enterprise."

The structure of the grant encouraged clinical and basic scientists to work together, and that became the trademark

culture of the Vermont Lung Center. "The research environment established by the COBRE grant was critical in the research I conducted and led to my patent applications involving novel ways to assess lung function in both animal models and in patients with acute lung injury," Bates says.

Bates' expertise lay in the area of lung function assessment and for the COBRE, he oversaw the mouse phenotyping core facility, which houses a micro-CT scanner and several Flexivent computer-controlled mouse mechanical ventilators, which he developed at McGill University before coming to UVM.

"The Flexivent was subsequently commercialized by Scirec, a Montreal company, leading to a now widely-used device that is quite expensive," says Bates. "The COBRE funds allowed us to setup a phenotyping core based around these devices."

### Bringing Breakthrough Cystic Fibrosis Treatments to Patients

In 2019, UVM Medical Center's Adult Cystic Fibrosis Program, led by Charlotte Teneback, M.D., associate professor of medicine, was named a Cystic Fibrosis Foundation-accredited Care Center and received a Cystic Fibrosis Therapeutic Development Center Award. The Pediatric Cystic Fibrosis Program at UVM Children's Hospital, led by Thomas Lahiri, M.D., professor of pediatrics, received a Quality Care Award from the Cystic Fibrosis Foundation (CFF). The award recognizes CFF-accredited care centers that have continuously demonstrated a commitment to improving the quality of care they provide to people with cystic fibrosis.



“The CF Foundation partnered with pharmaceutical companies to form this [Cystic Fibrosis Therapeutic Development Center] network,” which investigated drugs to treat the molecular deficit in CF,” explains Dixon. “Those drugs have come to fruition and have transformed how CF looks. The CF team, who are members of the Vermont Lung Center, does an incredible job recruiting patients and involving patients.”

### A Culture of Collaboration

Gwen Skloot, M.D., Ph.D., a professor of medicine at Mount Sinai National Jewish Health Respiratory Institute and chair of the Assembly on Respiratory Structure and Function for the American Thoracic Society, is a longstanding research collaborator with many Vermont Lung Center members, including Dixon, Bates and Kaminsky. She considers these UVM researchers her “go-to people” in the U.S. for research expertise in the field of pulmonary physiology.

“In addition to understanding physiology, Dr. Bates, with his engineering background, has applied mathematical complexities and boiled it down to something simple that anyone can understand,” she says.

“Dr. Kaminsky has taken a lead role in establishing guidelines for various aspects of pulmonary function testing—he is a leader in the field. Dr. Dixon is a leader in understanding obese asthma.”

“Their work on the pulmonary pathophysiology of obesity and asthma has really made great strides in understanding the late-onset non-allergic obese asthma phenotype,” says Skloot, citing the multiple studies that demonstrated this phenotype may be characterized by increased collapsibility of the peripheral airways.

A key part of the Lung Center culture is its emphasis on training the next generation of researchers. In 2004, Irvin, with support from Parsons, was awarded a T32 training grant from the NIH’s National Heart, Lung and Blood Institute to fund the training and work of predoctoral students pursuing their Ph.D. or M.D. degrees and postdoctoral fellows seeking advanced research experience after earning an M.D. or Ph.D. The NIH training grant has just been renewed for a fourth cycle of funding.

“We’ve had some postdocs that have gone and done incredible things,” says Irvin. He points to Darcy Wagner, Ph.D., as an example. Wagner worked with Professor of Medicine Daniel Weiss, M.D., Ph.D., doing lung regeneration research. She now leads studies as a faculty member at Sweden’s Lund University and co-chairs the biennial international “Stem Cells, Cell Therapies, and Bioengineering in Lung Biology and Diseases” symposium at UVM.

### New Frontiers

While some lung diseases of the past have improved over the last century, new diseases are on the rise, including the latest issue of acute lung injury related to e-cigarettes and vaping.

At left, clockwise: Prema Menon, M.D., Ph.D., Yvonne Janssen Heininger, Ph.D., Darcy Wagner, Ph.D. (left) and Daniel Weiss, M.D., Ph.D. and David Kaminsky, M.D.

*Over the past several years, Menon has brought a number of pulmonary fibrosis clinical trials to UVM, two of which became FDA approved treatments. This, in the end, is the key promise of the lung center, bringing new hope to patients.*

The VLC will be part of the American Lung Association’s new NIH Adult Cohort for Lung Disease. The objective of the six-year grant is to recruit 200 adults between the ages of 25-35 to perform a baseline of lung health, with the objective of identifying the determinants of ideal lung health and trying to detect early signs of abnormal lung health before it develops.

“I think the Lung Health cohort is going to be a great opportunity to fully understand the impact that nutrition and obesity have on lung health,” says Dixon, whose team will be recruiting patients in fall 2020. “We hope to eventually follow these people over time, but it’s just being formed,” she says, adding that “this is going to be an incredible part of what we do.”

In addition, she says, “Pulmonary fibrosis is going to be an important part of our future, with clinicians like Prema Menon, M.D., Ph.D., and basic scientists like Yvonne Janssen-Heininger, Ph.D., and Jos van der Velden, Ph.D., collaborating,” says Dixon.

Though decades have passed since Vermont Lung Center members’ research on the mechanism of pulmonary fibrosis—a disease which

causes a thickening and stiffening of lung tissue that complicates normal breathing—the condition persists, affecting more than 200,000 people in the U.S. and causing 40,000 deaths annually. About 50 percent of patients with pulmonary fibrosis die of the disease within three to five years. But there is good news, thanks to groundbreaking discoveries by an interdisciplinary collaboration among several Lung Center members. Janssen-Heininger and colleagues, including Associate Professor of Pathology and Laboratory Medicine Vikas Anathy, Ph.D., discovered and patented the use of glutaredoxin (GLRX)—an oxidant-controlling enzyme that shows promise as a treatment for patients with lung fibrosis

and other diseases, which has been shown to reverse fibrosis in mouse models. In 2019, the generous donation of lung tissue from recently-passed pulmonary fibrosis patients of Prema Menon, M.D., Ph.D., assistant professor of medicine and director of the Interstitial Lung Disease Clinic at the UVM Medical Center, allowed members of the team to do research with human tissue. Now, researchers like Jos van der Velden, Ph.D., assistant professor of pathology and laboratory medicine, are using that tissue to create mini lungs to test the potential of GLRX to repair damaged proteins in the lungs of pulmonary fibrosis patients.

Over the past several years, Menon has brought a number of pulmonary fibrosis clinical trials to UVM, two of which became FDA-approved treatments. This, in the end, is the key promise of the lung center, bringing new hope to patients.

The new pulmonary fibrosis treatments have given hope to one of Menon’s patients, Bruce Towne, from Colchester, Vt., who credits his participation in the trials and recent treatment regimens with keeping him alive years beyond his diagnosis.

“It took me probably six months to come to terms that I was going to die from this disease,” Towne said, when interviewed for a WCAX-TV report in 2019. Now, he says, his future has expanded. “[I’m] feeling like I’d like another 15 years. I’m greedy now.” VM





**BETSY SUSSMAN, M.D.'81**  
President  
UVM Medical Alumni Association

## President's Corner

It has been an honor to serve as your Medical Alumni Association president for the past two years. I've enjoyed seeing many of you at reunion and other events; I encourage you to stay engaged with the Larner College of Medicine by sending class notes, nominating classmates for alumni awards, and returning to campus for Medical Reunion, which now takes place in October, the height of foliage season in Vermont. A warm welcome to **Omar Khan, M.D.'03**, your new president as of July 1, 2020! A practicing family physician, he is currently president and CEO of the Delaware Health Sciences Alliance and is also a physician leader for Christiana Care. Dr. Khan resides in Chadds Fords, Penn., with his wife **Salwa Khan, M.D.'05**, and their son, Zareef. He's been a joy to work with during his tenure as president-elect, and I look forward to seeing him take on this new role.

As we prepare to celebrate Commencement for the Class of 2020, I want to thank all of you who have supported our students during their four years. They appreciate it—we are continuing to feature

a thank you note to alums from a current student in each issue of *Vermont Medicine*. And once again, our annual White Coat Note Project was a resounding success. Over 100 alums participated by writing words of encouragement to our newest medical students, notes they received during their White Coat Ceremony in October. We're proud of this community engagement, both through initiatives like the White Coat notes or through financial support. We strive to maintain our place in the top 10 medical schools nationally for alumni participation. Gifts of any size help us stay there.

Lastly, the College has announced a major new project: construction of the Firestone Medical Research Building here on campus. With the lead gift from **Steve Firestone, M.D.'69**, in honor of his parents and classmates back for their 50th reunion, we're looking forward to engaging more alums in this initiative. More to come as the project to boost the College's lab space and modernize our research facilities unfolds!

## University of Vermont Medical Alumni Association

### Alumni Executive Committee

#### OFFICERS (TWO-YEAR TERMS)

##### PRESIDENT

Betsy L. Sussman, M.D.'81 (2018–2020)

##### PRESIDENT-ELECT

Omar A. Khan, M.D.'03 (2018–2020)

##### SECRETARY

Mary Cushman, M.D.'89 (2018–2020)

##### EXECUTIVE SECRETARY

John Tampas, M.D.'54 (Ongoing)

#### MEMBERS-AT-LARGE (SIX-YEAR TERMS)

Annie Coates, M.D.'07 (2018–2024)

Sean Diehl, Ph.D.'03 (2016–2022)

Seth Dorsky, M.D.'10 (2016–2022)

Janice M. Gallant, M.D.'89 (2015–2021)

Albert J. Hebert, Jr., M.D.'74 (2015–2021)

Christopher J. Hebert, M.D.'02 (2015–2021)

Danie Leahy, M.D.'17 (2018–2024)

Gus Papadakis, M.D.'92 (2018–2024)

Suzanne R. Parker, M.D.'73 (2016–2022)

Heidi K. Schumacher, M.D.'10 (2015–2021)

Michael D. Upton, M.D.'94 (2015–2021)

Pramila R. Yadav, M.D.'99 (2015–2021)

#### EX OFFICIO MEMBERS

Richard L. Page, M.D., Dean

Kevin McAtteer, UVM Foundation

## REMEMBER INVEST INSPIRE

Do you remember when you received your first white coat? Do you recall the pride and excitement you felt on that day? Invest and inspire the newest members of the UVM Larner College of Medicine community with your gift and a special note of welcome and encouragement, which each student will discover in the pocket of their white coat next fall.

**Sponsor a White Coat and Support the Larner College of Medicine today!**

Learn more and give online at [go.uvm.edu/givewhitecoat20](http://go.uvm.edu/givewhitecoat20)



Share your news or updated contact information at [go.uvm.edu/infoupdate](http://go.uvm.edu/infoupdate), or contact your class agent, or the Larner Development & Alumni Relations office at [medalumni.relations@med.uvm.edu](mailto:medalumni.relations@med.uvm.edu) or (802) 656-4014.

## 1950s

REUNION 2020: 1955 + 1960

'58 **Paul Stevens** writes: "Still alive and well so far at age 85. Enjoying life with my wife, MaryEllen, and my two married daughters. Have lost track of most of whichever classmates are still living, save for Peter Goodhue who was well when last I heard from him a few months ago. Would love to hear from anyone else at [pmstevens@yahoo.com](mailto:pmstevens@yahoo.com)."

## 1960s

REUNION 2020: 1965 + 1970

'63 **Joan and Arnie Kerzner** moved to Edgewood, a retirement community in North Andover, Mass. They happily settled in and are embracing their new lifestyle and friends. There are plenty of intellectual, artistic, and outdoor activities there, including kayaking and 100 acres of trails and woods to explore. Joan continues to teach English to refugees and immigrants in Lowell, and Arnie still works part-time at a school for children with special needs in North Chelmsford. Their granddaughter, Elana, is a sophomore at UVM.

## 1970s

REUNION 2020: 1975 + 1980

'74 After 40 years of service to the Department of Neurology at University of North Carolina at Chapel Hill as chief of the neuromuscular section, **James Howard** has transitioned to partial retirement. He will focus his efforts on therapeutic trials and translational research in myasthenia gravis.

'79 **Thomas Boduch** writes: "I'm still in solo private family practice in Kingston, Tenn., and serve as our county's medical examiner. I have just been reappointed as M.E. for my second five year term."

## 1980s

REUNION 2020: 1985 + 1990

'80 **Robert M. and Jeryl D. Kershner** write: "We are planning on attending our 40th medical school reunion, and hope that other members of our Class of 1980 are still alive and able to travel to Vermont to attend. Just an update on us, Jeryl has relocated her private practice of child psychiatry and behavioral and developmental pediatrics to West Palm Beach, Fla. Robert continues with his global ophthalmic consulting practice while serving as professor and chair of the Department of Ophthalmic Medical Technology at Palm Beach State College in Palm Beach Gardens. Ranked number one in the world, the program has achieved international recognition as Dr. Kershner oversees the construction of the nation's first Center for Innovation in Health Science Ophthalmic Medical Technology Education Center scheduled for completion in, what else, the year 2020!"

'81 **Ernest Bove** has been elected president of the American Urological Association - New England Section. He is a urologist at Rutland Regional Medical Center in Rutland, Vt.

'81 **Jocelyn Chertoff**, a powerful advocate for improving resident education, faculty development and workforce issues in radiology, was named an Outstanding Educator by the Radiological Society of North America. She is the radiology department chair and professor of radiology and obstetrics and gynecology at Dartmouth Hitchcock Medical Center.

'82 **Robert Harris** is a professor of clinical radiology at USC-LAC in Los Angeles, Calif.

'89 **Judith Baumhauer** of Rochester, N.Y., was named the 2019 Women's Leadership Award recipient by the Orthopaedic Foot & Ankle Foundation, the philanthropic

arm of the American Orthopaedic Foot & Ankle Society® (AOFAS). The award recognizes Dr. Baumhauer's work as an orthopaedic educator, mentor, clinician, researcher, and humanitarian. She currently serves as professor, foot and ankle fellowship director, associate chair of academic affairs, and PROMIS medical director at the University of Rochester School of Medicine in New York.

'89 **Sarah Sally Ormsby** writes: "Sorry to miss seeing everyone for Reunion 2019! I retired in August and am looking forward to a new chapter now that kids are at college (Callie at University of Chicago and Izzy at Howard University), volunteering at the Maleh Free Clinic, and getting into animal rescue."

## 1990s

REUNION 2020: 1995 + 2000

'91 The American Board of Pathology (ABPath) appointed **Philip Katzman** to the 2020 ABPath's Test Development and Advisory Committee for Pediatric Pathology. To be appointed to a TDAC means a physician is an established subject matter expert in their subspecialty field and is current on the latest advances in the continually evolving field of pathology and patient care. Dr. Katzman is a professor of pathology and director of pediatric pathology in the Department of Pathology and Laboratory Medicine at the University of Rochester Medical Center, Rochester, N.Y.

'92 **Susan Long** received the Human Rights Award from the West Virginia Church Women United States Assembly for her dedication to mission work with Hands and Hearts for Christ, which she has been doing for the past 22 years. She is a general surgeon at St. Joseph's Hospital in Buckhannon, W.V.

## COLLEGE EVENTS

**MAY 17, 2020**  
Medical Commencement  
View online at [med.uvm.edu](http://med.uvm.edu)

**OCTOBER 2-4, 2020**  
Medical Reunion  
UVM Campus

**ANY ON-CAMPUS EVENTS IN THE NEAR FUTURE MAY BE SUBJECT TO CHANGE DUE TO COVID-19 PRECAUTIONS.**

For updates on events, visit: [med.uvm.edu/alumni](http://med.uvm.edu/alumni)

Larner College of Medicine graduates are also members of the UVM Alumni Association. See those events at: [alumni.uvm.edu](http://alumni.uvm.edu)

## SUBMIT CLASS NOTES ONLINE

The UVM Alumni Association now offers an easy-to-use online form to submit class notes. You can also browse class notes by year, school or college, or note type.

Submit your class note and read more from classmates: [go.uvm.edu/medclassnotes](http://go.uvm.edu/medclassnotes)

## UVM CONTINUING MEDICAL & INTERPROFESSIONAL EDUCATION

UPCOMING CONFERENCE SCHEDULE

### VERMONT GERIATRICS CONFERENCE

April 2, 2020  
DoubleTree by Hilton Hotel  
Burlington, Vt.

### UVM MEDICAL CENTER CARDIOVASCULAR/VASCULAR FORUM

April 6, 2020  
DoubleTree by Hilton Hotel  
Burlington, Vt.

### WOMEN IN MEDICINE 2020

April 30-May 3, 2020  
Suquamish Clearwater  
Casino Resort  
Puget Sound, Washington

### 14TH ANNUAL CHILD PSYCHIATRY IN PRIMARY CARE CONFERENCE

May 8, 2020  
UVM Dudley H. Davis Center  
Burlington, Vt.

### INTEGRATIVE PAIN MANAGEMENT CONFERENCE

May 30, 2020  
UVM Dudley H. Davis Center  
Burlington, Vt.

### FAMILY MEDICINE REVIEW COURSE

June 9-12, 2020  
DoubleTree by Hilton Hotel  
Burlington, Vt.

ANY ON-CAMPUS EVENTS IN THE NEAR FUTURE MAY BE SUBJECT TO CHANGE DUE TO COVID-19 PRECAUTIONS.

For information contact:

### UNIVERSITY OF VERMONT CONTINUING MEDICAL EDUCATION

401 Water Tower Circle  
Suite 102  
Colchester, VT 05446  
(802) 656-2292  
[UVMCME@med.uvm.edu](mailto:UVMCME@med.uvm.edu)  
[www.med.uvm.edu/cme](http://www.med.uvm.edu/cme)

## 1990s *continued*

REUNION 2020: 1995 + 2000

'97 **Clifford Chapin** says: "I jumped off of the treadmill I was on for six years, where I was ER chief and a member of the board of directors at my small community hospital, working 1.5 to 2 FTE's. In my new position in Nome, Alaska, I work every other month. I now have time to get to know better my TEN grandchildren! If any of my classmates are feeling the need for a career change with rejuvenation potential, I'd be happy to share my Nome experience! Regards to all!"

'99 **Eva Lathrop** has been named global health director for Population Services International (PSI). She was previously an associate professor and assistant fellowship director at Emory University School of Medicine Department of Obstetrics and Gynecology, Division of Family Planning.

'99 **Gwendolyn Shelton**, a pediatrician at Central Vermont Medical Center in Berlin, Vt., shared first place honors in the Vasculitis Foundation's (VF's) 2019 Recognizing Excellence in Diagnostics (V-RED) award program. With her diagnosis, doctors started treatment early enough to prevent a young woman's vasculitis from progressing and causing more systemic damage.

## 2000s

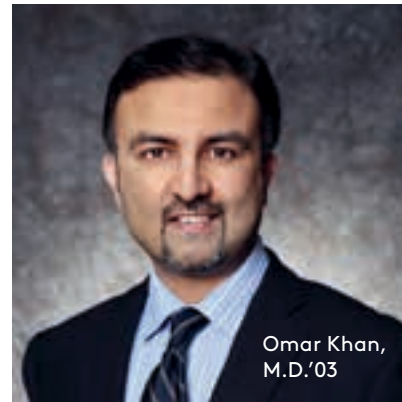
REUNION 2020: 2005 + 2010

'01 **Damon A. Tohtz** has joined the Department of Behavioral Health Services at Oswego Health in Oswego, N.Y. He completed his fellowship in forensic psychiatry and his residency in psychiatry, both at Tulane University in New Orleans, La.

'03 **Christopher Terrien III** has joined the cardiothoracic surgical staff of Portsmouth Regional Hospital in Portsmouth, N.H. He specializes in cardiothoracic surgery, as well as complex mitral and tricuspid valve repair and reconstruction.

'05 **Katherine Brownlowe** and her sons, Parker and Elliott, are enjoying life in Columbus, Ohio! She is a neuropsychiatrist and assistant professor of neurology and psychiatry at Ohio State. In the last year, she has been named medical director for both inpatient psychiatry as well as psychiatric emergency services at OSU. Her biggest academic joy has been teaching and inspiring medical students and residents to care for neuropsychiatrically ill patients.

'09 **Emily Glick** has joined the Department of Internal Medicine at Corvallis Clinic in Corvallis, Ore. She completed her residency training at UVM Medical Center.



Omar Khan, M.D.'03

## Khan Serves as Co-Editor for New Book

**Omar Khan, M.D.'03**, has co-edited a new book, titled *Control of Communicable Diseases: Clinical Practice*. Published by APHA Press, *Clinical Practice* is "an essential reference for physicians and other health care practitioners, especially those working in global health infectious disease, epidemiology, travel medicine, and tropical medicine," according to the publisher. *Clinical Practice* is a new complement to *Control of Communicable Diseases Manual*, which has been published by APHA Press for over 100 years. A practicing family physician, Khan is president and CEO of the Delaware Health Sciences Alliance, and a physician leader for Christiana Care. He's also the incoming president of the UVM Medical Alumni Association.

## 2010s

REUNION 2020: 2015

'11 **Whitney A. Young** has joined Trinity Health Of New England Medical Group at Saint Francis Hospital as a breast surgeon for the Karl J. Krapek, Sr. Comprehensive Women's Health Center. She completed her residency at Rhode Island Hospital/Alpert School of Medicine of Brown University in Providence, R.I., in general surgery. She then completed fellowship training at Mayo Clinic in Rochester, Minn., in breast surgical oncology.

'16 **John Nesbitt** has joined the medical staff of the emergency department at Cheshire Medical Center in Keene, N.H. He completed his residency in emergency medicine at Hartford Hospital through the University of Connecticut.

In this ongoing series, Vermont Medicine shares a note of thanks from a current student for the support they've received from alumni. **Delaney Curran '22** gives thanks for summer research support in her letter:

Hi Alumni!

Thank you for your generous contribution to my stipend for my research fellowship for the summer through the Larner College of Medicine Summer Research Fellowship. My project is in the Ophthalmology Department and it involves analyzing the cost-effectiveness of an intervention that aims to prevent the development of blindness in diabetic patients due to retinopathy.

I will be trying to prove that telehealth screening and treatment for diabetic retinopathy will both save money and prevent the progression of blindness in patients. Specifically, my research focuses on saving in the context of the evolving economic environment that involves Accountable Care Organizations. OneCare Vermont is an example of one of these organizations that consists of a network of doctors and hospitals that share financial and medical responsibility for providing high-quality care while limiting unnecessary spending. With your generous assistance, I will have the privilege to work on this project and help understand how to improve the quality of eye care in Vermont.

Thanks again,  
Delaney Curran '22



## New Documentary Features Alum's Work in Nigeria

**Ryan Winters, M.D.'08**, is featured in a recent documentary titled "Restoring Dignity," for his work as a surgeon with Medecins Sans Frontieres/Doctors Without Borders in Nigeria. He provides facial reconstruction to survivors of noma, a gangrenous disease of extreme poverty. According to the WHO, noma affects roughly 140,000 people annually, and nearly 90

percent of patients die as a result of the disease. The documentary, by Claire Jeantet and Fabrice Caterini, details the journey of several patients throughout their reconstruction. Winters is in academic practice as a facial plastic and reconstructive surgeon and head and neck surgeon in New Orleans, La., and serves as a regional coordinator for MSF USA. Read more about the documentary: <http://www.inediz.net/multimedia/restoring-dignity-documentary/>

## A Note of Thanks

Delaney Curran '22



To support students like Delaney, visit [go.uvm.edu/givemed](http://go.uvm.edu/givemed)



## Residency Graduate Pens Children's Book

**Matthew Zavod, M.D.**, a 2005 graduate of the UVM Medical Center Otolaryngology/Head and Neck Surgery Residency Program, has authored his first children's book, titled *Dr. Ridiculopickulopot and the Shot*. He says that the book "uses slapstick humor to tell the story of how a boy overcomes his fear of shots and how a bumbling but endearing doctor is reminded of what it's like to be a patient. The importance of public health is emphasized through the theme of vaccination." Zavod is an ear, nose and throat specialist and facial plastic surgeon with Dignity Health in California.

Positive Change continued from page 23

is available on the College's website. And mindfulness has been integrated into the curriculum; several courses feature pre-exam mindfulness sessions in the classroom. A biannual survey from the Wellness Committee offers opportunities to check in with the student body and improve offerings.

A Student Well-being Research Group meets regularly to look at outcomes related to wellness and share knowledge with other medical schools. In 2019, Rosen and Holterman presented a poster on the student mental health panel at the AAMC's Northeast Group on Educational Affairs annual meeting that was nominated for an Excellence in Medical Education Award. And although it's in the early stages, the group is working on a well-being index that would quantify student rates of depression, anxiety, stress, and other markers of wellness over time.



Left: The Yoga Student Interest Group hosts weekly sessions on campus.

Ultimately, the goal is to bring intention and focus to the question: "What kind of doctor do I want to be?" As she begins her life as a physician, Sidney Hilker '21 sees benefit in naming the challenge.

"I think it's a new frame to say, 'How do I become exceptionally professional or known for my professionalism?' she says. "I have a definition for what that means to me. I think it's a little different for every person, whether it's about being a team member everyone wants to work with, or someone who's excellent at giving feedback and people look to for feedback, or people look to as a mentor."

It's okay to ask the question over and over again, says Feldman. "This is a process, an evolution—a lifelong journey." VM

## Alums Publish Paper on Footwear and Parkinson's Disease

**Alums Ross Sayadi, M.D.'17** (pictured at left) and **Mustafa Chopan, M.D.'17** (pictured at right) are co-authors on a paper published in *NeuroRehabilitation* that focuses on the challenges patients with Parkinson's disease face regarding footwear. A majority of the patients they surveyed—64 percent—reported "experiencing difficulties wearing shoes on their own," as the progressive nervous system disorder affects fine motor control and balance. A shoe prototype the team developed uses magnets instead of laces, allowing patients to wear dress shoes "without having to fight the heel," said Sayadi in an Instagram post about their publication. Sayadi and Chopan began their work on the shoe prototype as medical students, inspired by Sayadi's father, who was diagnosed with Parkinson's disease in his 30s. Sayadi is a plastic surgery resident at University of California-Irvine. Chopan is a plastic and reconstructive surgery resident at University of Florida.



### Sayadi and Chopan began their work on the shoe prototype as medical students, inspired by Sayadi's father, who was diagnosed with Parkinson's disease in his 30s.



L to R: Dean Page, Cathleen Gleeson, Kate Pond and David Maughan

## COLLEGE TO HOST SCULPTURE BY KATE POND

A sculpture that once graced the grounds of the University of Vermont will be returning to campus thanks to the generosity of former director of admissions **Cathleen Gleeson, Ph.D.**, and UVM Professor Emeritus of Molecular Physiology and Biophysics **David Maughan, Ph.D.** Titled "Five and Eight," by renowned Vermont sculptor **Kate Pond**, the painted steel work of art features "open curves" that add "lightness and whimsy" and "welcome people to relax within the sculpture." Pond created "Five and Eight" in 1978; it has been exhibited at Skidmore College, Castleton University, and Wood Art Gallery in Montpelier. It was also previously displayed at UVM outside of the Royall Tyler Theater. With planned construction of the Firestone Research Building, Gleeson and Maughan saw the opportunity to enhance the College of Medicine green space with their beloved pieces. Gleeson retired as an associate professor of family medicine in 2003; Maughan was granted emeritus status in 2009.



## DELIVERY TRUCK RAISES AWARENESS FOR UVM CANCER CENTER

The delivery truck for Ashley Homestore and the Superstore in Williston, Vt., has gone pink for a good cause. Business owners **David Powell** and **Steve Kidder** offered up the outside of the vehicle to raise awareness

for Steps to Wellness, an oncology rehabilitation program of the UVM Cancer Center. The campaign honors Kidder's sister-in-law, Cynthia Cardillo, who died from breast cancer in 2017 and was a champion for increasing awareness around the importance of 3D mammograms for women with dense breast tissue. Kidder's three stores, including Novello Furniture in Barre, Vt., also hosted in-store fundraisers in the fall of 2019 that raised approximately \$5,000 for the UVM Cancer Center and its programming.

## REMEMBERING CELEBRATED PHILANTHROPIST ROBERT "BOBBY" MILLER

Vermont philanthropist **Robert "Bobby" Miller** died February 4, 2020 at the age of 84, leaving a decades-long legacy of support for causes that benefit the health and well-being of Vermonters. Over the past 40 years, he and his wife, Holly, contributed over \$40 million to Vermont nonprofits, including their donation of property valued at \$13 million to UVM Medical Center in 2013, the largest gift in the history of the institution. As a result of that philanthropy and additional community support, the Robert E. and Holly D. Miller Building opened its doors at UVM Medical Center in June of 2019. A transformative project, the Miller Building offers four floors of single-occupancy rooms and a multitude of patient- and family-centered features. The couple also helped to build the McClure Miller Respite House, and the more than \$9 million they donated



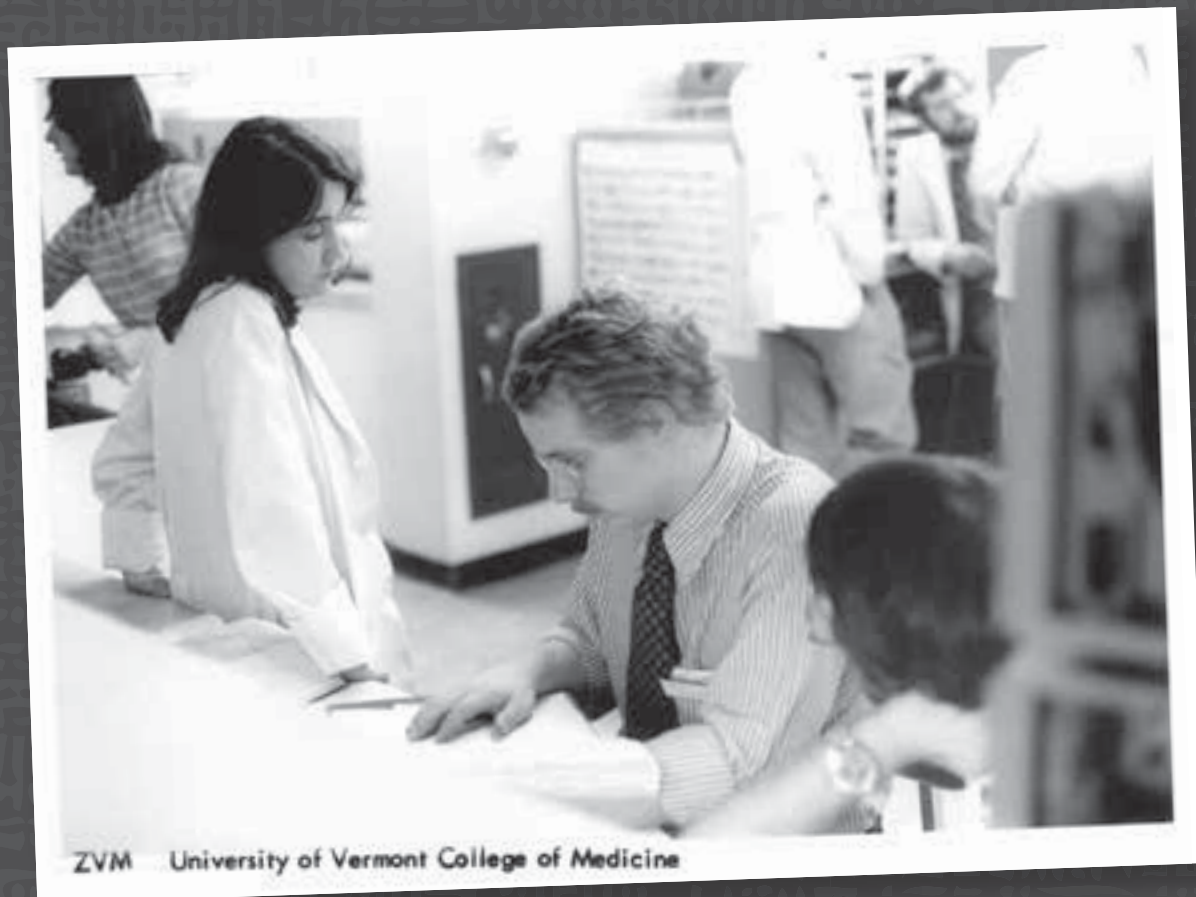
to UVM enabled, among other things, the establishment of several endowed professorships, including the Miller Chair in Memory and Aging and the Miller Chair in Palliative Medicine. Bobby Miller's roots in Vermont ran deep. Born in Rutland, Vt., on August 9, 1935, he was the third of six children. Despite the amputation of his left forearm at birth, he developed a love for auto mechanics and as a young man worked on cars to earn money. With just a high school education—he said college "was out of the question—I couldn't afford it"—he went on to establish multiple businesses, including a successful commercial and industrial real estate development firm, REM Development. Bobby Miller's commitment to community has been recognized with numerous awards, including an honorary doctorate from UVM that he received, along with Holly, in 2015. He is survived by his wife of 35 years, as well as three children, eight grandchildren, and one great-grandchild.

### Over the past 40 years, he and wife Holly, contributed over \$40 million to Vermont nonprofits, including their donation of property valued at \$13 million to UVM Medical Center.



Read the College's Meditation Guide for Students and learn more about the learning environment curriculum developed by faculty: [med.uvm.edu/vtmedicine/web-extras](http://med.uvm.edu/vtmedicine/web-extras)

The University of Vermont Larner College of Medicine | Medical Development & Alumni Relations Office  
(802) 656-4014 [medical.giving@uvm.edu](mailto:medical.giving@uvm.edu) | [www.med.uvm.edu/alumni](http://www.med.uvm.edu/alumni)



## Penny for Your Thoughts

The lateness of the hour, or the number of hours on her feet, is likely the cause of the pensive look on the unidentified person leaning against the desk in the left of this photo. But when and where did this scene take place, and who are the others in this photo likely to be?

Send your thoughts to [erin.post@uvm.edu](mailto:erin.post@uvm.edu) and we'll include them in the next issue of *Vermont Medicine*.

### FROM THE PREVIOUS ISSUE



◀ It wasn't unanimous, but the vast majority of respondents to last issue's Flashback agreed with Tom O'Meara, who wrote: "The three students in this photo who were all member of the class of 1984, as was I. From left to right: Dan Root, Debbie Kennedy and Meredith Stempel. One of my recollections of Dan Root is from a time when a group from either an anatomy or pathology class made a trip over to the hospital

morgue. The pathologist was in the midst of a post-mortem exam when the sights and smells of the moment sort of overwhelmed Dan and he fainted straight away."

Thanks Dr. O'Meara, and to fellow respondents Jeff Darrow '84, Debbie Kennedy '84, Kate Sheeline (Limanek) '84, Jody Scala '84, Gary York '84, and Maureen McGovern '83.



▲ And the Match Day 1999 Baby (and her daddy) have at last been identified! Betsy Flaherty wrote in to point out Sean Flaherty '99, holding daughter Hannah while reading that he's matched to Yale/New Haven Hospital.

**'43 Arnold H. Becker, M.D.**  
Dr. Becker died August 29, 2019, at The Residence at Brookside in Avon, Conn., at the age of 100. Born June 13, 1919, in Burlington, Vt., he was a veteran, proudly serving in the United States Army during World War II. Dr. Becker established Pediatrics Associates in Bristol, Conn., in 1948, where he practiced medicine until his retirement in 1986.

**'48 Noel C. Galen, M.D.'48**  
Dr. Galen died on January 6, 2018, at the Kensington Senior Living Facility in White Plains, NY, where he had lived for a year and a half. He was born in December 1924, in New York City. He joined the U.S. Navy at age 18, which helped put him through Middlebury College and then UVM College of Medicine. He did his psychiatric residency at Bellevue Hospital, where he became Chief Resident. Dr. Galen practiced psychiatry in New Jersey, New York, Belize, and Zimbabwe. Among his many accomplishments, he served as the president of the medical staff at Englewood Hospital and was an adjunct professor of psychiatry at NYU Medical School. In the 1980s, he taught at the University of Zimbabwe medical school while his wife Doris taught law. He also worked in psychiatric clinics in rural areas, tending to underserved patients.

**'53 Philip Adler, M.D.**  
Dr. Adler, 92, of Tampa, Fla., died November 2, 2019. A World War II veteran, he came to Tampa after his medical fellowship at the Henry Ford Hospital in Detroit, Mich., in 1958, and was a beloved pediatrician who served three generations of children of Tampa Bay for the next 50 plus years. He completed his residency at Boston Children's Hospital.

**'54 Allyn B. Dambeck, M.D.**  
Dr. Dambeck, 91, of Clinton, N.C., died November 7, 2019. He served an internship at Beverly Hospital, in Beverly, Mass., and an intern residency in Meridon Hospital, Meridon, Conn. In addition to serving as a physician in the Navy, he was a physician at Rockville Hospital in Rockville, Conn., as well as chief of general practice and president of Tolland Medical Society. After 20 years of private practice, he joined the ER staff of Sampson Memorial Hospital, in Clinton, N.C., where he was chief of ER for eight years and

medical advisor for Sampson County EMS. He was medical director for Sampson County Medical Health Department, and Goshen Medical Center.

**'56 Edward Okun, M.D.**  
Dr. Okun, 87, a world-renowned retina specialist, died from complications of cancer on June 14, 2019. Born in Springfield, Mass., in 1931, he attended Dartmouth College, and earned his medical degree at UVM. His education and training continued at the University of Chicago, the National Institutes of Health, and Washington University in St. Louis. Dr. Okun was a pioneer in the treatment of diabetic retinopathy and in vitreoretinal surgery. As a professor of clinical ophthalmology at Washington University, he trained over 50 retina fellows who went on to practice around the world.

**'59 Stanley I. Stein, M.D.**  
Dr. Stein, 85, of Allentown, Penn., died December 30, 2019 at St. Luke's Hospital in Bethlehem, Penn. In 2019 he celebrated 56 years of practice. Dr. Stein completed his pediatric internship at New York Bellevue Hospital, followed by a residency in pediatrics at Babies' Hospital, a part of Columbia University Medical Center. Dr. Stein then served in the U.S. Coast Guard, where he established the pediatric ward on the undergraduate campus of Johns Hopkins University at the U.S. Public Health Hospital. In 1964, he started his private practice in Pennsylvania. Three years later, he became chief of pediatrics at St. Luke's, a position he held for 32 years.

**'62 Ralph David Aserkoff, M.D.**  
Dr. Aserkoff of Brookline, Mass., formerly of Weston, Mass., died December 27, 2019, at the age of 82. Born in Boston, Mass., on June 1, 1937, he received his medical degree from UVM in 1962 and was commissioned as a lieutenant in the United States Navy and as a captain in the United States Marine Corps. He received a master's degree in public health from the Harvard School of Public Health. Dr. Aserkoff was an obstetrician-gynecologist at the Beth Israel Deaconess Medical Center for nearly 50 years, where he delivered as many as 10,000 babies and educated and mentored scores of physicians. He was renowned and loved by his colleagues for his

patience, dedication, wisdom, and calm demeanor.

**'63 Neil N. Mann, M.D.**  
Dr. Mann died September 5, 2019, at the age of 83. Born in Boston, Mass., he received his medical degree from UVM in 1963 and completed his residency at SUNY in upstate New York. He was a doctor and captain in the U.S. Army from 1966 to 1968 in San Antonio, Tex., and Glen Burnie, Md. In 1968 and 1969, he was the chief medical resident at Addison Gilbert Hospital (AGH). Also in 1969, he became a founding partner of the Cape Ann Medical Center, where he worked until 2005. Dr. Mann was a self-taught toxicology expert for all of Cape Ann. He was also instrumental in bringing the Veterans' Clinic to Gloucester. Dr. Mann served on several committees at Addison Gilbert, where he was also the chief of medicine. Later in his career, he shifted his focus to geriatric care, working at the senior adult unit at AGH, the Center for Healthy Aging in Danvers, as well as with Seacoast Rehabilitation Center.

**'68 Charles F. Belanger, Jr., M.D.**  
Dr. Belanger, Jr., 79, of Holden, Mass., died November 15, 2019, after a sudden stroke. Born in Winchendon, Mass., and raised in Holden, Mass., he received his bachelor of medical science degree from Dartmouth and his medical degree from UVM. His distinguished medical career began in pediatrics at Buffalo Children's Hospital, and he served as a major in the Army Medical Corps in Columbus, Ga. In Massachusetts, he worked as associate director of the emergency department at Hahnemann Hospital before joining the medical staff at Paul Revere Insurance Company, rising to vice president and medical director.

**'72 Adrienne B. Butler, M.D.**  
Dr. Butler died April 29, 2019, at her home in Blackshear, Ga., at the age of 72. Born September 12, 1946, in Cambridge, Mass., she graduated from Regis College in 1968 and received her medical degree from UVM in 1972. She was commissioned as an officer in the U.S. Army in 1970 and served on active duty until 1982. She was an accomplished pediatrician who served in private practice and public health in Waycross, Ga., for many

years. Dr. Butler was a leader in helping establish the DAISY and DAFFODIL public health programs and the McKinney Medical (formerly Community Health) Center. After being diagnosed with Parkinson's Disease, she helped to found the People with Parkinson's support group and the Rock Steady Boxing program in Blackshear.

**'72 Alan Brian Feltmarch**  
Dr. Feltmarch died November 11, 2019, at the age of 75. Born March 5, 1944 in Gardner, Mass., he attended Bates College and University of Maine at Orono before receiving his medical degree from UVM. Dr. Feltmarch served as a physician in the emergency department at North Country Hospital from 1975 to 2004. He was a very dedicated doctor and well-liked by many whom he treated.

**'06 Peter Dahl**  
Dr. Dahl of Bryn Mawr, Penn., died unexpectedly on December 7, 2019. Born July 19, 1973, in Wilmington, Del., he received his undergraduate degree from SUNY Buffalo and medical degree from UVM. He completed his residency at Northwell Health in New York and his endocrinology fellowship at New York-Presbyterian/Weill Cornell in New York. He practiced medicine at Pennsylvania Hospital in Philadelphia and Mainline Health at Riddle Hospital in Media, Penn.

### Faculty

#### Richard S. Heilman, M.D.

Dr. Heilman, a longtime professor of radiology at UVM, died February 7, 2020. He earned his undergraduate degree from Amherst College and his M.D. from the University of Pennsylvania, and completed internship and residency at Mary Fletcher Hospital and UVM. A pioneer in air contrast barium radiography, he joined the UVM faculty in 1970 and devoted the next 31 years of his professional life to gastrointestinal radiology, serving as an outstanding teacher and clinician. He was also internationally recognized for his contributions to literature in radiology. Dr. Heilman retired in 2001.



## Remembering Molly Hubbard, M.D.'12

It is with tremendous sadness that we share news of the tragic passing of Molly Hubbard, our beloved friend and classmate. Just months after completing a neurosurgery residency at the University of Minnesota, beginning her pediatric neurosurgery fellowship at Oregon Health & Sciences University (OHSU) and accepting a faculty position there, Dr. Hubbard was killed in an avalanche while skiing at an Idaho resort on January 7, 2020.

Molly was one of a kind. Well known for her sarcastic wit, intellect, and passion for wellness, Molly had the unique ability to connect with everyone around her. Her classmates recall her famous “Molidays,” the term she coined to describe her local, national and international adventures, which usually included a highly impressive athletic conquest. At the time of her passing, Molly was preparing to summit Mount Rainier in order to raise money for SheJumps, a nonprofit organization that mentors young girls and teaches technical survival skills for outdoor adventuring.

“(Molly) was a great person, an excellent physician, and a superb neurosurgeon,” wrote Stephen Haines, M.D.'75, her former residency program director at the University of Minnesota. During her residency, she authored more than 15 peer-reviewed publications, presented more than 20 abstracts at local, national, and international meetings, delivered more than 10 oral presentations, and was awarded greater than \$130,000 in grant funding as principal investigator for researching advances in traumatic brain injury. She was also the recipient of numerous awards for research achievements, and most recently an award for professionalism, research, patient care, and humanism in neurosurgery.

“Molly Hubbard was a superlative physician and surgeon with exceptional

judgment, technical skills and deep compassion for her patients and colleagues. She was also an extraordinary human being who was loved and valued by all who knew her,” wrote Nathan Selden, M.D., Ph.D., chair of the OSHU Department of Neurosurgery.

Among those who loved and treasured Molly were her UVM Larner College of Medicine classmates.

“Molly made a positive and lasting impression on everyone she met,” wrote Meghan Small Zimmerman, M.D.'12. “In her short 33 years on this earth she influenced more people with her kindness, sincerity, and incredible intelligence than most people do in a lifetime. She was a loyal and trustworthy friend who embraced differences and withheld judgement. She was strong, passionate, extremely hard-working, yet knew so well how to let loose and enjoy life, especially in nature. Molly will be remembered for so many things, especially for how much joy she brought to our lives and how much she made us laugh with her witty jokes and infectious giggles.”

Martha Monson, M.D.'12, notes: “Molly was the definition of a ‘renaissance woman’ and very much a role model for embodying work-life balance. Everything Molly did, she did so well—from being an accomplished physician scientist and world traveler to being a culinary artist and skilled outdoor enthusiast. She will of course be remembered for her incredible academic and clinical achievements, but I think what Molly will be remembered for the most will be her devotion to her friends, family members and colleagues. Molly was the best kind of friend—the one that always showed up for you—and



Molly Hubbard, M.D.'12

usually with humor, delicious food/spirits, and usually a well thought out solution to ‘whatever ails you.’ Her absence from our daily lives is palpable, and she is and will be sorely missed.”

Louisa Salisbury, M.D.'12, recalls Molly as “someone who could put you instantly at ease with her self-deprecating humor. She made you feel brave and could bring out your goofiest side while also pushing you to be the best version of yourself. Brilliant and disciplined, she took her academics and career aspirations extremely seriously and worked harder than almost anyone I know. And yet, she could find a way to make every step of the journey joyful, a little silly and worthy of a celebration.”

Molly’s family has organized a celebration of her life in her hometown of Logan, Utah, at Beaver Mountain Lodge on May 30. For more information, email: parentshubbard@gmail.com The Class of 2012 agents will also be organizing a “Moliday” in Burlington, Vt., on May 30. **VM**

— Meghan Beucher, M.D.'12; Melissa Marotta Houser, M.D.'12; Auna Otts Leatham, M.D.'12; Martha Choate Monson, M.D.'12



Gordie Page, M.D.'45, and James Hebert, M.D.'77

## Remembrance of H. Gordon ‘Gordie’ Page, M.D.'45

It is with sadness that I report the passing of Dr. H. Gordon (Gordie) Page, an alumnus and longtime professor of surgery at UVM. MaryJane (MJ), his beloved wife, said he died peacefully at home on February 9, 2020, having just turned 101 years young this past November. All who knew him will remember Gordie for his love of surgery, his warmth and generosity, his sense of humor, and the wonderful anecdotes he so freely shared.

I first met Dr. Page when I was a medical student doing my core rotation in surgery. The residents referred to him as “Flash” because of the speed with which he operated. “Don’t blink, or you’ll miss the case,” a chief resident once warned me. After scrubbing on a couple of cases with him the sobriquet seemed very appropriate. He paid me a backhanded compliment once when I

was a chief resident performing a common duct exploration when he exclaimed, “Slow down, you’re making me nervous.” I stopped and replied, “Dr. Page, that is the nicest thing you’ve ever said to me.” We both often recalled that memory with a hearty laugh. Throughout medical school and residency I learned many things from him about the art of surgery and how to treat patients.

Like all of us, Dr. Page was not without his idiosyncrasies, many of which came

to light when he was performing surgery. He often referred to himself in the third person. “Dr. Page is always on time,” he would state should the first case be even a minute late in getting started. “He preferred sponges to laparotomy pads, and at times the operating field was like a popcorn machine with sponges flying all over. The patients all did well. Like Yogi Berra, Gordie had plenty of memorable quotations. One day when the resident team presented him some literature suggesting that we manage a problem in a different way he told us to always remember that “figures can lie and liars can figure.” At medical school reunions, a number of alumni from different classes have related that he taught them the five Ps of an ischemic limb—“pain, pallor, paresthesia, pulseless, and (call) Page.”

During our weekly department lunch meetings, Gordie would entertain us with many humorous stories about himself, usually told in a self-deprecating manner. He was a great practical jokester, and would recount his pranks with that

mischievous smile that we knew well. He also would share stories about the many great surgeons he observed. He was especially fond of his friend and mentor, Dr. Mackay, whom he classified as a “very clever surgeon,” which was his highest praise. He always had kind things to say about the residents he trained, and took great joy in hearing of their accomplishments.

Gordie loved Vermont and the University of Vermont. He created a prize for medical students and endowed the Albert G. Mackay M.D.'32 and H. Gordon Page M.D.'45 Professorship in Surgical Education. I consider it the highlight of my career to have been named the first Mackay-Page Professor of Surgery. His legacy to the department and the school is much more, however. During the years when the school was at risk for losing accreditation, he was a staunch supporter. He encouraged the other private surgeons in town to join ranks with the university to help solidify a clinical base for education and research. It is no wonder that in 2004 he was awarded the A. Bradley Soule Award for loyalty and dedication to the College of Medicine.

During the past many years, Gordie has been a highlight at Nostalgia Hour during medical reunion. He always led off with a slightly off-color joke and a few of his famous stories. The alumni often responded with many humorous anecdotes about Dr. Page to which he took great pleasure. Despite his failing health, Gordie often tried to attend the Tuesday morning breakfast with a group of retired physicians. Since my retirement I have been part of the group as well. While I had heard most of his stories, a few new ones often came to light. We will all miss him, but I’m sure his spirit will live on. **VM**

— James Hebert, M.D.'77, retired professor of surgery at UVM Larner College of Medicine

**STORYSLAMRX**  
VOICES IN MEDICINE: LOST & FOUND

The Robert H.

**January 23, 2020**  
**8:08 P.M.**

About 80 people attended the second annual "StorySlamRX – Voices in Medicine" event hosted by the Wellness Committee, UVM Medical Alumni Association, Alpha Omega Alpha Medical Honor Society, and Gold Humanism Honor Society. With a theme of "Lost and Found," faculty, staff, and students shared true stories live.

PHOTO: DAVID SEAVER





The University of Vermont  
LARNER COLLEGE OF MEDICINE

**VERMONT MEDICINE**

89 Beaumont Ave.  
Burlington, VT 05405

Non-Profit Org.  
U.S. POSTAGE  
**PAID**  
Burlington VT  
Permit No. 143



PHOTO: KRISTIN CARR, M.D.'15



*Save the Date!*



**UVM 2020**  
MEDICAL REUNION  
**OCTOBER 2-4**  
[med.uvm.edu/alumni/reunion](http://med.uvm.edu/alumni/reunion)