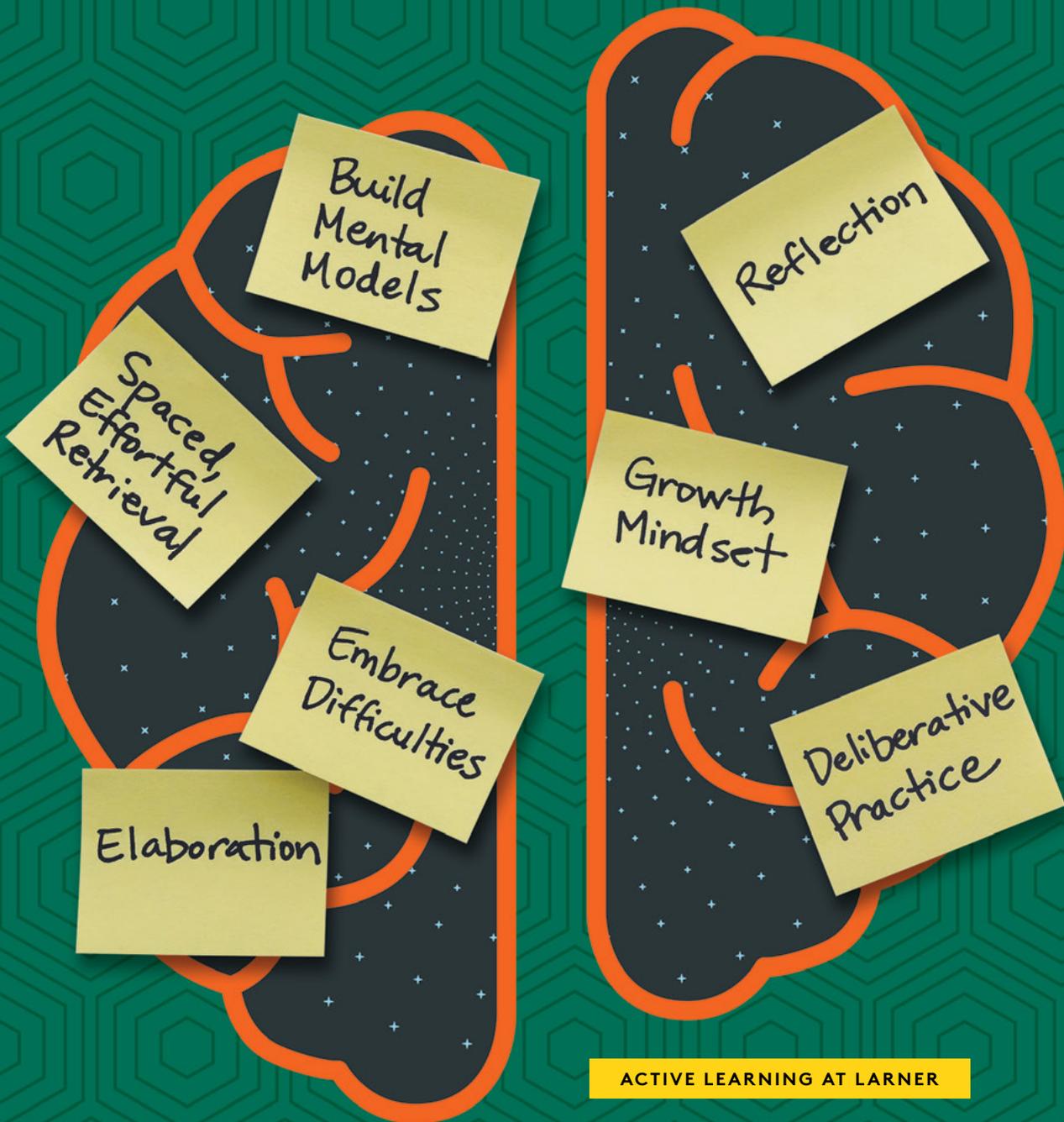


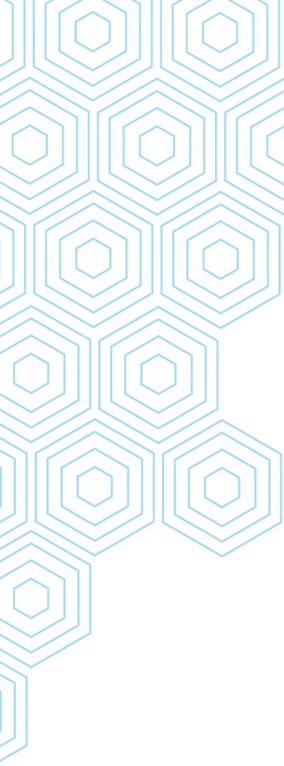
ART + SCIENCE

Medical Student Education Report 2018



ACTIVE LEARNING AT LARNER

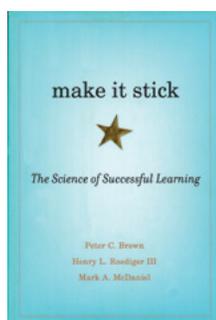
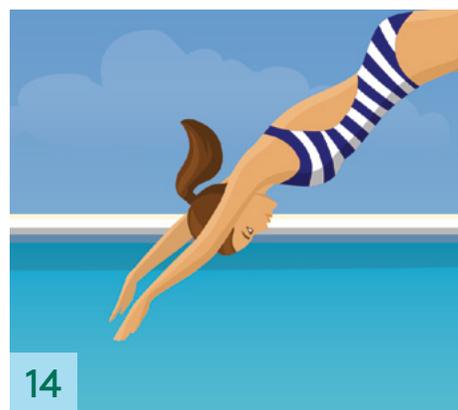
ROBERT LARNER, M.D. COLLEGE OF MEDICINE AT THE UNIVERSITY OF VERMONT



ART + SCIENCE

Medical Student Education Report 2018

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About the cover
 Every student in the incoming Class of 2022 received a copy of *Make it Stick: The Science of Successful Learning*, by Peter C. Brown, Henry L. Roediger III, and Mark A. McDaniel. The phrases on the cover of this report refer to lessons from the book on how to apply evidence-based techniques to become a more productive learner.





Here at the Larner College of Medicine, we're in the midst of an important transition. By 2019, every course in all three levels of the Vermont Integrated Curriculum will be based on active learning. Faculty members are currently working with our team of instructional designers and IT professionals to continue to develop classes focused on case-based learning, small group work, simulation, and other modalities. We're committed to the task because we know that shifting our curriculum in this way will foster physicians with the skills they need to excel in today's healthcare environment.

One important focus is teamwork: Physicians today work in teams more than ever. They're communicating with nurse practitioners, physical therapists, social workers, mental health professionals and others every day, all of the time. They have to be adept at leading a team; they need to clearly communicate and understand how to come to decisions as a group. Active learning prepares students to thrive in this environment.

We also need a diversity of students entering the field, both to fill widening gaps in certain specialties, and to better represent the patients we serve. Research shows that first generation college students, women and underrepresented minorities all do well in a learning environment that employs active learning principles. When we move away from lecture-based classes, we are helping to close the achievement gap that has been a challenge in medicine, science and technology fields.

The Larner College of Medicine is the perfect place to be making this leap into active learning. We've long been committed to scholarship in education — our faculty are continually devising new solutions and rigorously evaluating results — all in the name of sending out into practice the most compassionate and skilled physicians we can. Our Teaching Academy has become a key resource as we continue to train faculty to conduct research and share new knowledge with colleagues.

Another important collaborator as we move forward with our agenda: our students. They come to medical school ready for the challenging career path ahead. They also come with a wealth of ideas about how to improve medical education, and we invite their energy and enthusiasm into the process. Not only do they propose ideas, they work with faculty to implement them, and then rigorously evaluate the results. Resulting scholarly projects inform the national conversation.

As we look to the next academic year, we're excited to continue to evolve and improve, while staying true to our mission of educating a diverse group of physicians who are eager to improve patient care and save lives.

William B. Jeffries, Ph.D.

Senior Associate Dean for Medical Education

“THE LARNER COLLEGE OF MEDICINE IS THE PERFECT PLACE TO BE MAKING THIS LEAP INTO ACTIVE LEARNING. WE’VE LONG BEEN COMMITTED TO SCHOLARSHIP IN EDUCATION — OUR FACULTY ARE CONTINUALLY DEVISING NEW SOLUTIONS AND RIGOROUSLY EVALUATING RESULTS — ALL IN THE NAME OF SENDING OUT INTO PRACTICE THE MOST COMPASSIONATE AND SKILLED PHYSICIANS WE CAN.”

HIGHLIGHTS



Dean Rick Morin, M.D.

Transition in College Leadership

ELEVEN YEARS
AT THE HELM

During his tenure, **Dean Rick Morin, M.D.**, has helped to shepherd major changes to medical student education curriculum and infrastructure, with deep alumni support. He stepped down in August of 2018, after 11 years as dean.

Q: *Eleven years is a long tenure for a dean. You've been involved in so much, but when you look back on your time here, are there a few high points that stick out above the rest?*

A: Well, of course, the biggest is the fact that we've named the College. That was the culmination of years of relationship building with a dedicated donor. Very few deans get to experience that sort of change in the course of their deanship, so I feel fortunate to have been able to. Two major alumni in the last ten years have left the College the bulk of their considerable fortunes — Dr. Lerner and Dr. Tom Sullivan, for whom the Sullivan Classroom is named. That's a very seldom-seen occurrence, and a measure of the gratitude these men felt toward their alma mater. And we've used their support to build an innovative educational program.

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“ THERE IS NO COLLEGE OF MEDICINE THAT IN THE LAST FEW YEARS HAS RECEIVED AS MUCH NATIONAL AND INTERNATIONAL RECOGNITION FOR THEIR EDUCATIONAL PROGRAM... WE HAVE A COMPELLING STORY.”

— DEAN RICK MORIN, M.D.



Dean Richard Page, M.D.

Richard L. Page, M.D., has been appointed as the 18th dean of the Larner College of Medicine at the University of Vermont, effective October 1, 2018. He succeeds Rick Morin, M.D., who has served as dean of the Larner College of Medicine since August 2007. A nationally-recognized specialist in cardiac arrhythmias with interest in treatment of atrial fibrillation and sudden cardiac arrest, Page comes to UVM after serving as the George R. and Elaine Love Professor and Chair of the Department of Medicine at the University of Wisconsin School of Medicine and Public Health.

COLLEGE
APPOINTS NEW
DEAN

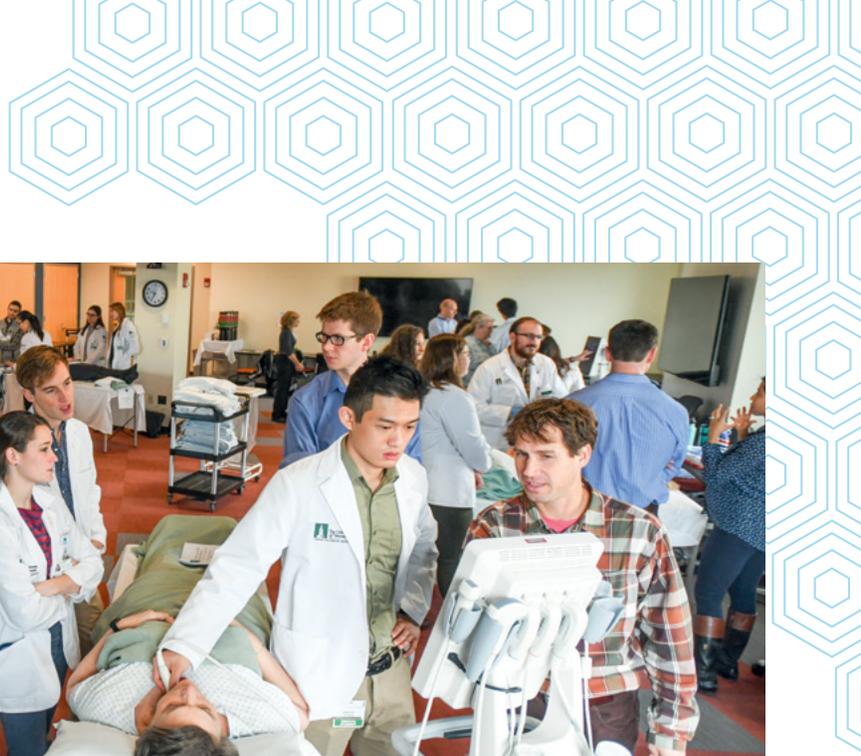


Faculty, students and staff celebrate what would have been Dr. Robert Lerner's 100th birthday.

CELEBRATING DR. LARNER'S LEGACY

On January 29, 2018, faculty, students, and staff gathered to celebrate the legacy of **Robert Lerner '39, M.D.'42** on what would have been his 100th birthday.

Dean Rick Morin, M.D., expressed gratitude for the forward-looking philanthropy of Lerner and his wife, Helen. Their \$100 million of lifetime giving has supported key new infrastructure as the College makes the transition to 100 percent active learning, including the Larner Learning Commons, the Larner Classroom, and the renovation of the Reardon Classroom. In September of 2016, in honor of a \$66 million estate commitment from the Larners, UVM became the first medical school in the nation to be named for an alumnus physician and donor. Lerner died on April 20, 2017, at the age of 99.



College's Active Learning Infrastructure Focus of National Presentation

Students participate in an active learning session in the Reardon Classroom.

As one of three schools selected to present an Innovation Educational Space Transformation at the Association of American Medical Colleges (AAMC) national meeting in November of 2017, the Larner College of Medicine had the opportunity to showcase the dynamic work happening to support active learning. The College's video presentation, hosted by Senior Associate Dean for Medical Education **William Jeffries, Ph.D.**; Assistant Dean and Teaching Academy Director **Kathryn Huggett, Ph.D.**; and Chief Information Officer for Health Sciences **Jill Jemison**, was unique as it focused on working within a current physical footprint to adapt space for this new purpose.

The Larner Learning Commons and the Larner Classroom were both featured in the video. The commons co-locates the Teaching Academy, Instructional Technology, the Dana Medical Library and study space, while the Larner Classroom was created from former library space that was reconfigured for active learning. The video also featured the renovated Reardon Classroom and a new quiet study space. Co-presenters at the meeting included the University of Texas Dell Medical School and the David Geffen School of Medicine at UCLA.

Watch the video: <https://youtu.be/rxhCo9Le2go>

A Leader in Active Learning

The Larner College of Medicine has become a key partner for medical schools across the country looking to incorporate active learning into their curricula. Medical educators have visited Vermont to see our innovative programs, and Larner faculty have presented at medical schools across the nation:



- University of Arkansas
- University of North Dakota
- Meharry Medical College
- Warren Alpert Medical School at Brown University
- Johns Hopkins University School of Medicine
- Midwest College of Veterinary Medicine

As the Larner College of Medicine's leadership on active learning continues to garner national media attention, Senior Associate Dean for Medical Education **William Jeffries, Ph.D.**, has been helping to educate the public and share best practices through a variety of outlets:

- For the August 3, 2017, broadcast of NPR's All Things Considered, Jeffries spoke with host Audie Cornish about the future of active learning in medical education.
- On November 19, 2017, an interview with Jeffries was featured on a Healthcare Education Transformation podcast segment, titled "The No Lecture Medical School Model."
- An article in the AAMC News on March 21, 2018, titled "New Schools of Thought," featured comments from Jeffries on the College's new active learning space.

HIGHLIGHTS



Valerie Staradub, M.D. (at right), a faculty member from Western Connecticut Health Network, teaches medical students completing a rotation in Connecticut.

“THE CONNECTICUT CAMPUS PROVIDED A WELCOMING LEARNING ENVIRONMENT. I WAS GIVEN MANY OPPORTUNITIES TO INTERACT WITH PATIENTS FROM DIFFERENT CULTURAL AND LANGUAGE BACKGROUNDS, WHICH FURTHER ENRICHED MY EDUCATION.”

— PAIGE WOOD '19

A Focus on Diversity: Western Connecticut Health Network Branch Campus

Beginning in 2019, 35 third-year medical students from the Larner College of Medicine will complete the Clerkship and Advanced Integration levels of the Vermont Integrated Curriculum at the new Western Connecticut Health Network (WCHN) branch campus. Moving forward, a total of 70 students will complete the final two levels of the Vermont Integrated Curriculum in Connecticut. The location opens up additional learning opportunities for

students with a particular interest in global health and public health, as the campus serves as the home base for the innovative UVM/WCHN Global Health Program, and its more urban location translates into a patient population that is ethnically and socio-economically diverse. With leadership from **Jonathan Rosen, M.D.**, associate dean for undergraduate medical education at WCHN, a medical education infrastructure has been built that mirrors the main campus in

Vermont. The branch campus builds on the long-standing relationship between UVM and WCHN, as Danbury Hospital has been an affiliate clinical site for clerkship rotations since 2010. In 2019, WCHN plans to merge with Health Quest Systems, creating additional learning opportunities for students. The new system will serve 1.5 million residents across western Connecticut and the Hudson Valley of New York.

COLLEGE TO OFFER LONGITUDINAL INTEGRATED CLERKSHIP IN CENTRAL VERMONT

Building on the success of a Longitudinal Integrated Clerkship (LIC) at Hudson Headwaters Health Network launched in 2017, the College plans to pilot an LIC at Central Vermont Medical Center. Beginning in March of 2019, four students will spend their clerkship year based in Berlin, Vt., where they will progressively develop a panel of patients to satisfy all required clinical encounters for the clerkship level. The curriculum has the same core educational objectives, course requirements and similar instructional and assessment methods as the traditional block clerkships; the difference is that students work with a primary care preceptor for the 12 months of the clerkship and become an important



Sunit Misra '19 during the Longitudinal Integrated Clerkship at Hudson Headwaters Health Network.

member of an interdisciplinary team over time. Although a valuable experience for any medical student, the LIC is particularly appealing for those planning careers in primary care or rural medicine.

The College is now in the second year of a successful partnership to offer an LIC with Hudson Headwaters Health Network, a non-profit system of 17 community health centers providing care to patients in upstate New York.

A LEADER IN GLOBAL HEALTH EDUCATION

A global health celebration in April of 2018 honored Larner College of Medicine physicians who are addressing health disparities around the world and educating the next generation of global health leaders. Hosted by the Global Health Program at the Larner College of Medicine and the Western Connecticut Health Network (WCHN), the event brought international faculty and students together with U.S.-based participants, including **Marat Mukhamedyarov, M.D., Ph.D., D.Sc.**, head of the International Department at Kazan State Medical University in Russia, and **Tendai Machingaidze, M.Div., M.A.**, a medical student and author studying in Russia who hails from Zimbabwe.

Dean Rick Morin, M.D., and Trefz Family Endowed Chair in Global Health **Majid Sadigh, M.D.**, presented the following awards:

Bruce Leavitt, M.D., professor of surgery, received the 2018 Patricia O'Brien, M.D. Global Health Leadership & Humanitarian Award. Inspired by O'Brien, an assistant professor of medicine in the Division of Hematology/Oncology, the award recognizes an individual who is passionate about health equity and works towards addressing disparities, combating marginalization and helping the under served.

Kristen DeStigter, M.D., Tampas Green and Gold professor and chair of radiology, received the 2018 Beth Kirkpatrick, M.D. Citizen of the World Award. This award recognizes an outstanding leader and scholar who dedicates their work towards the advancement of humanitarian pursuits, inspired by Kirkpatrick, chair of



GLOBAL HEALTH

L to R: Bruce Leavitt, M.D.; Kristen DeStigter, M.D.; Dean Rick Morin, M.D.; Anne Dougherty, M.D.; and Majid Sadigh, M.D.

microbiology and molecular genetics and director of the Vaccine Testing Center.

Anne Dougherty, M.D., assistant professor of obstetrics, gynecology and reproductive sciences, received the 2018 Majid Sadigh Global Health Education Award, named for Dr. Sadigh, Global Health Program Director and Christopher J. Trefz Family Endowed Chair in Global Health at Danbury Hospital. This award recognizes an outstanding global health educator who inspires students to become leaders in global health.

UVM Team Wins Poster Award from *The Lancet Global Health*

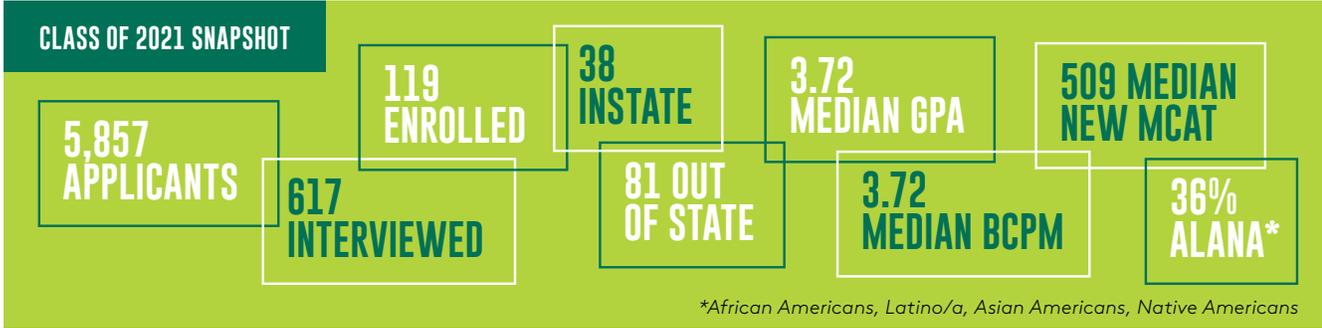


An electronic poster from **Alexandra Miller, M.D.'18** and her team was one of 25 award winners in an international competition sponsored by the medical journal *The Lancet Global Health* at the Consortium of Universities for Global Health Conference in Washington, D.C. Their poster, "Cervical Cancer Screening in Rural Tanzania; A Capacity Building Project," was one of over 500 submitted to the contest. It won *The Lancet Global Health*-CUGH Best Student Poster award. During a global health elective in Tanzania, Miller, **Kelley Collier, M.D.'18** and UVM Assistant Professor of Obstetrics, Gynecology, & Reproductive Sciences **Anne Dougherty, M.D.**, worked with Wasso District Hospital to bring cervical cancer screening and treatment to women in low resource settings. The program builds capacity and delivers healthcare founded in local customs, incorporating language and cultural interpreters to guide communication.



In February of 2018, Trefz Family Endowed Chair in Global Health **Majid Sadigh, M.D.**, climbed Mt. Kilimanjaro to raise funds for a microbiology laboratory at St. Francis Naggalama Hospital, one of the global health program's key partner institutions in Uganda. Dubbed Climb for a Cause, the effort exceeded its goal to raise \$19,341, one dollar for each foot of the climb.

HIGHLIGHTS



Engaging the College and the Community

Dedicated volunteers from the Larner College of Medicine and its alumni network, as well as the greater community, play a key role in introducing prospective medical students to the College, and shaping incoming classes:

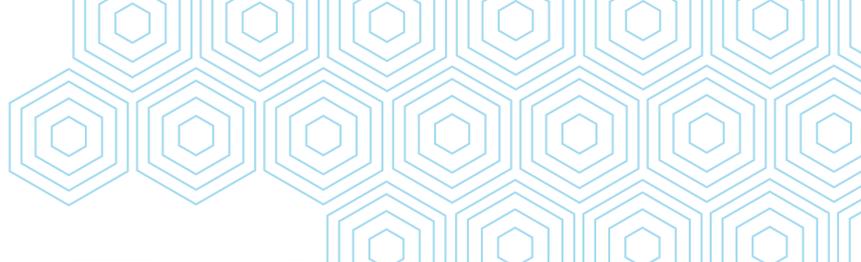
- The College boasts 120 active interviewers for the Multiple Mini Interview process (MMI), including one-third faculty, one-third community members, and one-third students.
- Patient/family advisors from UVM Medical Center continue to serve as MMI interviewers, providing valuable insights thanks to their deep knowledge of the healthcare system.
- One-fourth of the student body is involved in the admissions process, including MMI interviewers, overnight hosts, Closer Look Day volunteers, tour guides, admissions committee, scholarship related to admissions.



Closer Look Day

One hundred and forty-five prospective students and family members attended Closer Look Day, an opportunity to get to know the Larner College of Medicine, including the Vermont Integrated Curriculum, diversity initiatives, and clinical opportunities, as well as meet students and faculty. Professor of Medicine **Laurie Leclair, M.D.**, led students and their families through an active learning exercise, aided by current medical students.





LEADING-EDGE SPEAKERS

The Larner College of Medicine’s leadership on health equity and social justice in medicine continues to attract nationally recognized speakers to campus. Keynote talks over the past year have

focused on race in medicine and transgender care.

On January 17, 2018, in honor of Martin Luther King Jr. Day, the Office of Diversity and Inclusion presented the Health Equity Lecture, titled “What’s Race Got to Do with Medicine?” by **Dorothy Roberts, J.D.**, of the University of Pennsylvania. Roberts is an acclaimed scholar of race, gender and the law who holds joint appointments in Penn’s Departments of Africana Studies and Sociology and the Law School. She is author of *Fatal Invention: How Science, Politics, and Big Business Re-create Race in the Twenty-first Century* (New Press, 2011); *Shattered Bonds: The Color of Child Welfare* (Basic Books, 2002) and *Killing the Black Body: Race, Reproduction, and the Meaning of Liberty* (Pantheon, 1997). Her lecture was in conjunction with the presentation of the Class of 2021’s public health projects.



HEALTH EQUITY & SOCIAL JUSTICE

Dorothy Roberts, J.D.



Henry Ng, M.D., M.P.H.

Trans 101, creating a welcoming environment of care, hormone therapy and its impact on health and medical monitoring were among the areas touched on by national LGBTQ health expert **Henry Ng, M.D., M.P.H.**, during the fourth annual Vito Imbasciani, Ph.D., M.D.’85 and George DiSalvo LGBTQ Health Equity Lecture on “Incorporating Transgender Care into Everyday Primary Care.” The chair of the Department of Internal Medicine/ Pediatrics at MetroHealth Medical Center in Cleveland, Ohio, Ng is also an associate professor and assistant dean for admissions at Case Western Reserve University School of Medicine. In 2007, he co-founded and has since served as the clinical director of the PRIDE Clinic, Ohio’s first medical home for LGBT patients. Ng’s academic interests focus on LGBT health, health disparities and public/population health. Ng’s talk was hosted by the Office of Diversity and Inclusion.

ONE YEAR OUT: OUTSTANDING RESIDENTS

Graduates begin their residency programs with communication skills, systems-based knowledge, and a sensitivity to diversity that prepares them well for practice, as reflected in the Accreditation Council for Graduate Medical Education (ACGME) survey for the Class of 2017 and their residency directors.

“Overall, I am satisfied with the preparation of this resident.”

— 93.24 percent of residency program directors agreed or strongly agreed

“Overall, I felt well-prepared for residency.”

— 93.22 percent of students in the Class of 2017 agreed or strongly agreed

An Emphasis on Wellness

Results from the 2017 Year Two Questionnaire from the Association of American Medical Colleges show students develop a strong support network and positive self-care habits during their four years at the Larner College of Medicine, both key to promoting resilience and preventing burnout.

“What I most appreciate about our school is its insistence on cultivating a sense of community. It is clear that we are all in this journey together, and that although it is challenging at times, we are here for each other.”

“[There is an] unbelievable emphasis on the importance of mental health during medical school. I think UVM is unparalleled in their ability to create smart physicians who are also happy, and I think it really dispels the stereotype that those two qualities are mutually exclusive.”



Making the leap from lecture to active learning

Plan

Determine course objectives and competency outcomes. Identify course assessments.

Choose

Choose a classroom method that emphasizes application and synthesis.

- **Team-based**
- **Problem-based**
- **Case-based**
- **Workshop**
- **Reflection**
- **Lab**
- **Simulation**
- **Integrative Review**

Design

Design pre-learning modules that establish foundational knowledge in preparation for class application.

- **Quiz**
- **Concept Map**
- **IRAT***

Setting the Stage for Active Learning

Q&A with Jesse Moore, M.D.

As the College's new director of active learning, **Jesse Moore, M.D.**, associate professor of surgery, leads the effort to transition the Vermont Integrated Curriculum away from lectures and towards evidence-based active learning methods that show better retention and increased engagement. Along with a team of four instructional designers and a project manager, Dr. Moore is setting up the infrastructure to help faculty make the transition, and is guiding the process from start to finish.

LCoM *The College has committed to a curriculum that is 100 percent active learning by August of 2019. Where is the College in the process of making that transition?*

JM In the first two years of the curriculum, the percentage of each course that has transitioned to 100 percent active learning varies. We have one course that is already 100 percent active learning. Others completed the transition in August of 2018, and there are some that will complete the transition in August of 2019. Our current average across the first two years of the curriculum is 67 percent active learning. In the clerkship year we also have a range. Dr. Kathleen MacDonald just converted the anesthesiology bridge week to 100 percent active learning.

LCoM *Who is on the College's active learning team? What staffing and institutional commitment does it take to make the shift to 100 percent active learning?*

JM I devote 40 percent of my time to my role as director of active learning. Dr. Mitchell Norotsky, chair of the Department of Surgery, has been very supportive of me in this new role. Cara Simone, M.A., our active learning project manager, brings over 20 years of educational and administrative experience to the team. There are four instructional designers whose main focus is on supporting faculty in the transition. Although it's a significant shift for the College, faculty have stepped up to the challenge and are enthusiastic about the work ahead.

LCoM *How is the College measuring outcomes? How do we know what we're doing is working?*

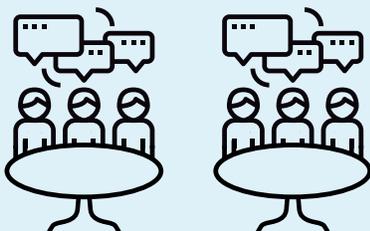
JM We are very focused on outcomes. We have not changed the courses, sequence, or assessment methods, which means we can compare student's performance on quizzes and exams from year to year. We monitor for changes in USMLE Step 1 scores as well. Student input and satisfaction are vitally important. We know that student preparation is key to the success of active learning, but we need to be very careful about how much we are expecting from them each night and each week. Our course

evaluations include questions related to the delivery of the curriculum in the classroom as well as the density of instruction each week and in a course.

LCoM *Why are you and your team excited about active learning? How does this approach help advance medical education?*

JM There is ample evidence that students learn better with active learning modalities compared to traditional lecture. Much of this evidence comes from undergraduate science, technology, engineering and mathematics literature, so we have a real opportunity to be innovators within medical education and to study and publish our outcomes. Most of us can remember those moments in our education when we were grappling with ideas, often with colleagues, and had a concept suddenly "click." Active learning does a much better job of fostering those moments in the classroom. As an educator it is much more rewarding to be in a class that is making connections compared to one in which people are struggling to remain focused and engaged. Additionally, research has shown that as compared to lecture, active learning more effectively closes the achievement gap experienced by groups underrepresented in science, technology, and medicine. Our diverse student body will benefit from the shift we're making in our teaching methods. ■

Launch the active learning session!



Assess

Students reflect on their learning, and complete formative and summative quizzes and exams.

Evaluate

Review student evaluations, test scores, and performance.

Part of the Community

Impacting Rural Health

When **Harshal Athalye '20** began a pediatrics rotation at North Country Hospital in Newport, Vt., in the upper reaches of Vermont's Northeast Kingdom, he was worried the rural location would make him feel isolated, or that he wouldn't see the diversity of patients he might in a more urban setting.

The two weeks he spent in Newport during his third-year pediatrics clerkship changed his mind. Working alongside **Alexandra Bannach, M.D.**, a clinical assistant professor of pediatrics, he found a complex caseload that required not only clinical skill, but an ability to build relationships with families over time.

"It was an amazing experience to see her work," says Athalye. "She has such a calm, optimistic, healing personality. Many of the patients we saw had a troubled history, and Dr. Bannach knew the idiosyncrasies of each patient."

Athalye is not alone: **William Raszka, M.D.**, professor of pediatrics and director of the pediatrics clerkship, says students who spend time in a rural location often walk away with a newfound appreciation for the complexities and rewards of rural practice. During the seven-week pediatrics clerkship, most students have the opportunity to practice in rural settings across Vermont, as well as in northern New York and Connecticut.

"Physicians in rural environments provide home visits; they staff high school football games and school clinics; sometimes they go to hospitals for deliveries as there may not be a hospitalist service," he says. "They learn how a physician is incorporated into the community."

Primary care physicians equipped to practice in rural locations are in dire need across the country. According to

the Centers for Disease Control, there's a "striking gap" in health between rural and urban Americans. The causes are complex, but socioeconomic conditions and access to healthcare play a role. Rural Americans have higher rates of cigarette smoking, high blood pressure, and obesity, according to the CDC. They also have higher rates of poverty, and are less likely to have health insurance. All of this translates into patients who are more at risk for death from preventable causes as compared to their urban counterparts.

The family medicine clerkship at the Lerner College of Medicine is designed to introduce students to these health disparities and prepare them to address unmet needs, says **Candace Fraser, M.D.**, associate professor of family medicine and family medicine clerkship director. More than 50 preceptors across Vermont, northern New York, Connecticut, New Hampshire, Massachusetts, and Maine ensure students experience what it's like to practice at a rural site without quick access to a tertiary care setting. No matter what specialty a student chooses, they benefit from this experience. But for some, it's the beginning of a career they previously hadn't considered.

"We have students say 'I had no idea how important the family doctors are to the community and the extent of the care they provide,'" says **Martha Seagrave, PA-C**, associate professor of family medicine and director of medical student education programs. "If you don't experience rural medicine, you wouldn't necessarily seek it out."

During the six-week family medicine clerkship, along with caring for all age groups and diverse medical conditions, students complete a community health project focused on a range of topics that address a community need. Past topics

A Tradition of Primary Care

CLASS OF 2018 MATCHES
FROM 109 STUDENTS:

17 Family Medicine
21 Internal Medicine
14 Pediatrics

CLASS OF 2017 MATCHES
FROM 110 STUDENTS:

11 Family Medicine
14 Internal Medicine
11 Pediatrics

CLASS OF 2016 MATCHES
FROM 104 STUDENTS:

8 Family Medicine
16 Internal Medicine
14 Pediatrics

have included access to dental care, transportation issues, food insecurity, and drug addiction. This work gets them thinking about how they can have an impact if they choose rural primary care.

"If we're going to influence population health, we need to have physicians in these locations," says **John King, M.D.**, professor and vice chair of family medicine.

For **Jennifer Boccia '20**, the call of rural medicine is strong. After completing her family medicine clerkship at Mad River Medical Center in Waitsfield, Vt., just down the road from where she lives in Moretown, she's confident that practice in a rural community is right for her.

"The people I see in the office are neighbors, they work in or own the local businesses that I frequent, they are the relatives of people I know well," she says. "It's a very profound feeling to be trusted with the health and well-being of so many people in such a tight-knit community." ■



Harshal Athalye '20 during his pediatrics clerkship at North Country Hospital in Newport, Vt.

“ IF WE’RE GOING TO INFLUENCE POPULATION HEALTH, WE NEED TO HAVE PHYSICIANS IN THESE LOCATIONS.”

— JOHN KING, M.D., PROFESSOR AND VICE CHAIR OF FAMILY MEDICINE



Jennifer Boccia '20 during her family medicine clerkship at Mad River Medical Center in Waitsfield, Vt.

Larner College of Medicine faculty, like UVM Associate Professor of Family Medicine Anya Koutras, M.D. (pictured here in Uganda), are a consistent presence at UVM/WCHN global health partner sites. They mentor medical students and work with patient care teams.



No Easy Answers

Driving the Discussion on Global Health Ethics

A new discussion series from the UVM Larner College of Medicine/Western Connecticut Health Network (WCHN) Global Health Program explores the range of ethical dilemmas encountered in global health work. Led by two renowned physicians — one from the Global South, and one from the Global North — the series has generated interest in teaching hospitals and universities around the world. In this excerpt from an exchange published on global health program's blog in December of 2017, **Stephen Winter, M.D.**, director of the UVM/WCHN global health program at Norwalk Hospital, and **Robert Kalyesubula, M.D.**, president and founder of ACCESS Uganda, discuss a student's role as related to a difficult patient situation.

A young patient with tetanus suffers from painful generalized muscle contractions every five minutes. The medication that would ease these symptoms is neither accessible nor affordable. A global health participant may be inclined to prescribe this medication for this patient even with a fatal prognosis, thereby hindering access to this medication for another patient who may need it for a nonfatal condition. How should this ethical matter be best discussed with a medical student or resident?

Dr. Winter: This is a good example of a dilemma that we do not yet frequently confront in the Global North: the means of allocating scarce resources in a way that meets the ethical principle of justice. Resource triage lies outside of the traditional doctor/patient relationship and is a societal construct that must be adjudicated by local law, cultural practice or organizational policy. It is not an appropriate decision for a visiting medical student, resident or faculty member. What would you think if a Ugandan Global Health Scholar visiting Norwalk Hospital argued against, or even tried to prevent, the transfer of a ninety-year-old patient with metastatic cancer to the Intensive Care Unit in accordance with the patient's clearly expressed wishes, as an inexcusable waste of resources that could be better used in East Africa?

Dr. Kalyesubula: The drug is not available in the first place and needs to be purchased by the patient's family. Therefore, I think the global health participant needs to assess the family's needs and capacity depending on the context. After losing a loved one, most African families would find solace knowing they did all they could to save them.

If this drug were purchased by the hospital, the discussion should be centered on resource allocation. Shortly after returning from the United States, I proposed purchasing a dialysis machine to save critically ill patients in urgent need of dialysis. The permanent secretary to the Ministry of Health asked me how many malaria cases could be treated with that money. I stared at him straight in the face and left... But of course I understood him well. Thanks to the Kidney Foundation I founded shortly afterwards, we now have eighty dialysis units in the country, fifteen of which were purchased by the Ugandan government.

Palliative care should always be an option in medical care, but there are exceptions that should be approached with care and contextual and cultural understanding. Global participants should understand that whenever a pen is put to paper someone has to pay and it is, more often than not, an out-of-pocket expense. This simple fact can help guide the practices of global health participants. ■

Global Health Program Fast Facts

20 physicians and health professionals from international partner sites trained in the U.S. in 2017

102 UVM/WCHN faculty, residents, and medical students participated in the global health program in 2017

28 first- and fourth-year medical students completed global health rotations in 2017

409 weeks that faculty, residents, and medical students from the U.S. spent at partner sites for global health rotations

162 weeks that global health leaders and scholars from around the world spent on visits and global health rotations in the U.S.

“ IN 2017, WE ESTABLISHED OURSELVES AS OUR OWN UNIQUE BRAND IN GLOBAL HEALTH FOCUSED ON HUMANISM, BIDIRECTIONALITY, AND RESPECT, WITH ONE OVERARCHING THEME: TO ADVOCATE FOR THE VOICELESS.”

— MAJID SADIGH, M.D., TREFZ FAMILY ENDOWED CHAIR IN GLOBAL HEALTH

Read more:

uvmmedicineglobalhealth.wordpress.com

Diving into the Data

Admissions Research Wins Award

How do years of life experience affect a medical school applicant's performance during the Multiple Mini Interview (MMI) process? Do gender differences come into play? In research led by Teaching Academy Director of Education Program Outcome Analysis **Alison Howe, M.S.**, a team dove into three years of data to begin to suss out answers to these important questions, work that resulted in a major poster prize from the Northeast Group on Educational Affairs (NEGEA), one of four regional groups from the Association of American Medical Colleges (AAMC). The project also laid the groundwork for more research to come.

The goal is to continually assess and better understand outcomes as the College is now in its fifth year using the MMI, says Associate Dean of Admissions **Janice Gallant, M.D.** A tool that is backed by evidence and employed by medical schools nationwide, the MMI at the Larner College of Medicine includes a series of six-minute interviews with nine people. Through contemplating different scenarios and interacting with a range of interviewers, the College has the opportunity to assess a student's readiness for medical school through the lens of the core personal competencies identified by the AAMC. These competencies include qualities like a sense of ethical responsibility, a capacity for improvement, and an ability to communicate effectively with patients. Although previous studies have demonstrated that female applicants tend to perform better than male applicants on the MMI overall, this study is one of the first to look at how life experience correlates with gender and MMI outcomes.

The admissions research team analyzed

MMI scores from a three-year cohort of 1,795 applicants to the College. They found that years since undergraduate degree was associated with higher MMI scores, particularly in female applicants. This suggests that "females are more likely to transform experience into traits that are assessed during the MMI." Another possible conclusion is that "gender differences in interpersonal skills are enhanced by experience."

"We want to continue to serve our applicant pool well and reduce bias," says Howe. "The MMI assesses those non-cognitive traits and levels of professionalism that we want in our medical students."

For **Gayathri Prabhakar, M.D.'18**, who has served as a volunteer for admissions since her first year, the research opens up interesting new questions to explore, including whether the type of experience applicants gain in between their undergraduate degree and medical school makes a difference in the application process.

"The trend is to take time off between undergrad and medical school," she says. "What do the different experiences that people have mean for them?"

The poster was one of two to receive a 2018 Excellence in Medical Education Award at the NEGEA annual meeting, held this year at the Zucker School of Medicine at Hofstra/Northwell.*

The admissions research team, which includes admissions staff as well as Teaching Academy and Admissions Committee leaders, plans to build on the study's results. Next they'll be looking at MMI interviewer and applicant gender dyads to determine whether different combinations have any correlation with MMI scores. ■

“ THE TREND IS TO TAKE TIME OFF BETWEEN UNDERGRAD AND MEDICAL SCHOOL... WHAT DO THE DIFFERENT EXPERIENCES THAT PEOPLE HAVE MEAN FOR THEM?”

— GAYATHRI PRABHAKAR, M.D.'18

*Howe AK; Greene LA; Prabhakar G; Jewkes CR; McElhinney E; Barlow RD; Rosen L; Gallant J; Huggett K. *Impact of Gender and Years of Experience on Multiple Mini Interview Scores at the UVM Larner College of Medicine.*



influence of experience
type of experiences
reflective ability
critical thinking skills
emotional intelligence

Vermont Integrated Curriculum

Divided into three levels of increasing complexity and breadth of study, the **Vermont Integrated Curriculum (VIC)** fully integrates primary education in the basic sciences with a solid foundation in basic health science knowledge and clinical skills. Also included are programs in leadership skills, professional development, research, and teaching skills. Clinical correlations are prominent in the curriculum at all levels, beginning with meeting a patient on the first day of medical school.

Years 1 & 2: Foundations Level

The purpose of Foundations is for students to develop a fundamental understanding of health and illness as framed by systems from single genes to entire populations. Longitudinal courses support the development of professionalism and communication, clinical practice, community engagement, and public health awareness.

Years 2 & 3: Clerkship Level

The Clerkship Level focuses on development of the knowledge, skills and attitudes needed for clinical care and decision-making in a variety of medical settings. Students complete the clerkship year through either the Traditional Clerkship or the Longitudinal Integrated Clerkship.

Traditional Clerkship features block rotations in eight specialties, as well as Bridge Weeks that cover a range of topics including patient safety, pharmacology, and nutrition.

In the Longitudinal Integrated Clerkship, students meet core educational objectives by being embedded in primary care clinics and providing comprehensive care to a panel of patients.

Years 3 & 4: Advanced Integration Level

The Advanced Integration Level comprises required activities that enhance the student's clinical skills and knowledge of basic and clinical science, and elective activities that allow the student to shape his or her own professional development. All students are required to complete an acting internship in internal medicine, a second acting internship in a discipline of the student's choosing, one month of surgical specialty training, emergency medicine, and a teaching practicum/scholarly project. This level is designed to optimize student choice to dovetail with the residency selection process.

Curriculum Competencies include:

- Patient Care
- Medical Knowledge
- Practice-Based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice

VERMONT INTEGRATED CURRICULUM

Level 1: Foundations

AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
ORIENTATION	FOUNDATIONS OF CLINICAL SCIENCES				VACATION	ATTACKS AND DEFENSES	NUTRITION, METABOLISM AND THE GASTROINTESTINAL SYSTEM		VACATION	NEURAL SCIENCE	
PROFESSIONALISM, COMMUNICATION AND REFLECTION							DOCTORING IN VERMONT				

Level 1: Foundations

Level 2: Clerkship

TRADITIONAL OR LONGITUDINAL INTEGRATED CLERKSHIP

AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN			
CONNECTIONS	CARDIOVASCULAR, RESPIRATORY AND RENAL SYSTEMS		HUMAN DEVELOPMENT AND REPRODUCTIVE HEALTH		VACATION	CONVERGENCE	USMLE STEP 1 EXAM PREPARATION AND COMPLETION	BRIDGE	SURGERY		INPATIENT INTERNAL MEDICINE	BRIDGE	VACATION
PUBLIC HEALTH PROJECTS			DOCTORING IN VERMONT					LONGITUDINAL INTEGRATED CLERKSHIP: INTEGRATION OF ALL CLINICAL SPECIALTIES					

Level 2: Clerkship

TRADITIONAL OR LONGITUDINAL INTEGRATED CLERKSHIP

Level 3: Advanced Integration

JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN		
OR	NEUROLOGY/OUTPATIENT INTERNAL MEDICINE	PSYCHIATRY	BRIDGE	FAMILY MEDICINE	BRIDGE	PEDIATRICS	VACATION	OBSTETRICS AND GYNECOLOGY	BRIDGE	SELECTIVE	ACTING INTERNSHIP IN INTERNAL MEDICINE	SURGERY SUB-SPECIALTIES	EMERGENCY MEDICINE
	LONGITUDINAL INTEGRATED CLERKSHIP: INTEGRATION OF ALL CLINICAL SPECIALTIES												

Level 3: Advanced Integration

JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	
USMLE STEP 2 EXAMS PREPARATION AND COMPLETION	SELECTIVE	VACATION	TEACHING PRACTICUM OR SCHOLARLY PROJECT	ACTING INTERNSHIP	INTERVIEWS/VACATION	SELECTIVE	SELECTIVE	SELECTIVE	SELECTIVE	PRESENTATIONS AND TRANSITIONS	GRADUATION

Years 1 & 2: Foundations Level

In the first level of the Vermont Integrated Curriculum, students develop fundamental science knowledge as they begin to build clinical skills. Courses such as the Public Health Projects and Doctoring in Vermont give students the opportunity to engage with the community and cultivate leadership skills.

Adverse Childhood Experiences: The Science, Lifelong Impact, Promoting Resilience

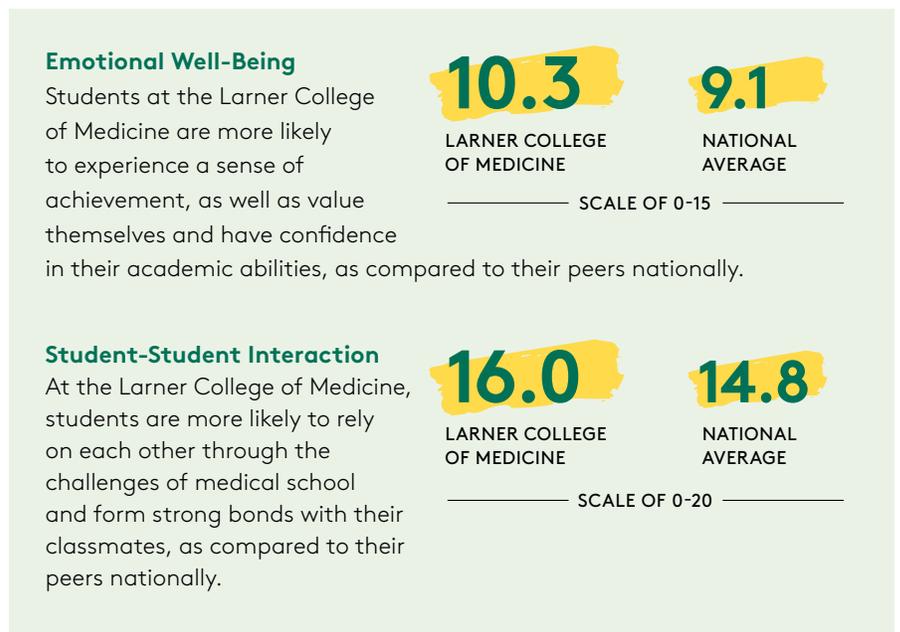
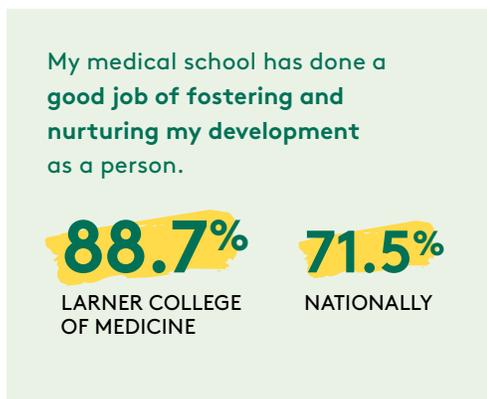
How do adverse childhood experiences (ACEs) influence health and well-being over a lifespan? Students in the Class of 2021 learned about the important connections between trauma as a child and health as an adult during the Department of Family Medicine’s Cultural Awareness Conference, an annual symposium focused on an aspect of diversity and inclusion in healthcare. This year, the conference, titled “Adverse Childhood Experiences: The Science, Lifelong Impact, Promoting Resilience,” featured keynote speakers **Johana “Jody” Brakeley, M.D.**, a developmental/behavioral pediatrician from the Vermont Department of Health Child Development Clinic, and **Kathy Hentcy, M.S.**, director of Mental Health and Health Care Integration for the Vermont Department of Mental Health. Attendees participated in a resilience workshop, and observed a demonstration of trauma-informed interviewing using an ACE screen tool.



Students in the Class of 2021 attended the Cultural Awareness Conference.

Foundations Success by the Numbers

We’re doing something different here at the Larner College of Medicine: In addition to fostering physicians who excel at the art of patient care, we emphasize the importance of student well-being, strong peer relationships, and a lifelong support network, according to several measures from the 2017 Medical School Year Two Questionnaire from the Association of American Medical Colleges.



Leadership Transitions



UVM Professor of Pharmacology **Karen Lounsbury, Ph.D.** (left), was appointed Director of Foundations effective May 1, 2018, succeeding **Paula Tracy, Ph.D.**, who had served in the role for the past six years. A well-respected teacher, scientist and mentor of more than 70 post-doctoral fellows and undergraduate, graduate, and medical students, Lounsbury is a Master Teacher in the College's Teaching Academy and teaches in the Neural Sciences, Foundations of Clinical Science, and Human Development and Reproductive Health courses. More recently she became director of UVM's Masters in Medical Science Graduate Program, a position she will continue to hold.



Students celebrate the many contributions of Paula Tracy, Ph.D., who retired as Foundations director this year.

UVM Assistant Professor of Family Medicine **Rachel Humphrey, M.D.**, succeeds UVM Associate Professor of Family Medicine **Charlotte Reback, M.D.**, as director of the Human Development and Reproductive Health course. A 2008 graduate of the Larner College of Medicine, Humphrey completed her residency in family medicine at UVM Medical Center. Reback has served as director of the seven week-long course since 2010.

The First 16 Months: A Longitudinal Focus

First-year students at the Larner College of Medicine take a deep dive into the foundational health science knowledge necessary to become a physician. They also develop skills and competencies over time through the Vermont Integrated Curriculum's longitudinal components.

- **DOCTORING IN VERMONT:** Eight sessions hosted by a primary care physician in Vermont help first-year students get acquainted with direct patient care, and gives them the opportunity to practice interviewing and examination skills. In the second half of this 29 week-long course, directed by **DENNIS BEATTY, M.D.**, assistant professor of medicine, students perform two complete history and physical examinations with standardized patients.
- **DOCTORING SKILLS:** During Foundations of Clinical Sciences, students complete 12 doctoring skills teaching sessions, including group sessions with standardized patients. It also incorporates point of care ultrasound instruction and work with a cardiopulmonary patient simulator. Directed by UVM Associate Professor of Medicine **ALAN RUBIN, M.D.**, and Standardized Patient Educator **SHIRLEY MCADAM, CHSE**, Doctoring Skills helps students develop history taking and physical exam skills over time, as well as communication skills that are patient-centered.
- **PROFESSIONALISM, COMMUNICATION AND REFLECTION:** Small, process-oriented discussion groups serve as the foundation of this 42 week-long course directed by **LEE ROSEN, PH.D.**, assistant professor of psychiatry. Each week, the groups and their faculty preceptor focus on a topic that widens the lens on a current academic topic in the curriculum or relates to important issues in medical practice. Goals include fostering self-awareness, emotional intelligence, mindfulness, and the capacity to care for self and colleagues.

THE LARNER EXPERIENCE



Doctoring in Vermont



Doctoring Skills



Professionalism, Communication and Reflection

Years 2 & 3: Clerkship Level

The expansion of the Longitudinal Integrated Clerkship at Hudson Headwaters Health Network and the creation of a branch campus at Western Connecticut Health Network give students in the Clerkship level opportunities to gain skills alongside a diversity of physicians and health professionals in a variety of settings.

Population Health Pilot Launches at Hudson Headwaters Health Network

Students at Hudson Headwaters Health Network gain a deep understanding of what it's like to care for patients and families over time through the Longitudinal Integrated Clerkship, which incorporates all of the core specialties over the course of one year. Now, they are also learning the fundamentals of population health through a pilot Health Systems Science Curriculum. Funded through a Teaching Academy grant, the 11-month pilot introduces students to the "triple aim" in healthcare, which focuses on improving the patient experience of care; improving the health of populations; and reducing the per capita cost of health care. Students also contribute new knowledge: As third-year medical students, they're in a perfect position to propose solutions to challenges they observe, says **Colleen Quinn, M.D.**, a family medicine physician and Hudson Headwaters site director. Students may see needs — like higher than average smoking rates, lack of breast cancer screening access, or transportation challenges — that if addressed would improve the health of communities. "Hopefully the connections they make and the genuine relationships they develop will help them to become committed to this type of care," says Quinn. Through the program, students are positioned to become change agents as they go on to residency and practice, says **Stephanie Mann, M.D.**, associate professor of obstetrics and gynecology and principal investigator on the Teaching Academy grant. "[Health systems science] is the future of medical education," she says. "It's not a soft addition or a luxury. It has to be part of what we're teaching and practicing."



Colleen Quinn, M.D.



Stephanie Mann, M.D.

Clerkship Leaders of the Future

With the appointment of several associate clerkship directors, a new generation is poised to continue to provide outstanding leadership of clerkships at the Larner College of Medicine.



Jason Bartsch, M.D., Associate Director, internal medicine clerkship

- Residency: UVM
- Medical school: George Washington University



Erin Morris, M.D., Associate Director, obstetrics and gynecology clerkship

- Fellowship: UVM, maternal and fetal medicine
- Residency: University of Utah Hospitals and Clinics
- Medical school: University of Utah School of Medicine



Molly Rideout, M.D., Associate Director, pediatrics clerkship

- Residency: UVM
- Medical school: McGill University

Connecticut Branch Campus Takes Shape

Western Connecticut Health Network's designation as a branch campus by the state of Connecticut in February of 2017 paves the way for students to complete their core clerkship and advanced integration requirements there, beginning with 35 third-year students in March of 2020. Eventually, 70 students will be hosted at WCHN, 35 at the Clerkship level and 35 in Advanced Integration. The WCHN curriculum shares the same basic structure of the curriculum as the main campus, with an intentional focus on community, public health and global health. Among the newest developments is the appointment of **Ellen Kulaga, M.D.**, as assistant dean for students. The Harold A. Spratt Center for Simulation and Clinical Learning is also equipped with a team of standardized patients and trained professionals to administer clinical skills exams beginning with the Class of 2019. As associate dean for undergraduate medical education at WCHN, **Jonathan Rosen, M.D.**, leads efforts to create a medical education infrastructure in Connecticut, building on the two institutions' long-standing partnership.



Jonathan Rosen, M.D., and Ellen Kulaga, M.D.

Clerkship Success by the Numbers

Students consistently rate faculty at the Larner College of Medicine as outstanding teachers and mentors who prepare them well for practice. The following are selected results from the Association of American Medical Colleges 2017 Graduate Questionnaire.

94.3% 94.3 percent of students in the Class of 2017 said they agreed or strongly agreed that **Obstetrics/ Gynecology faculty were effective teachers**, compared to 76.7 percent of their peers nationally.

89.1% 89.1 percent of students in the Class of 2017 said they agreed or strongly agreed that **Surgery residents were effective teachers**, compared to 73.6 percent of their peers nationally.

91.3% 91.3 percent of students in the Class of 2017 rated the **Family Medicine Clerkship as good/ excellent**, compared to 85.7 percent of their peers nationally.

Making a Difference for Patients

Students who complete the Longitudinal Integrated Clerkship (LIC) at Hudson Headwaters Health Network get to know patients and their families over time as they become integral members of the healthcare team. The UVM Health Network-affiliated site headquartered in Queensbury, N.Y., hosts students for a 12 month-long clerkship. Read more about how student **HOLLY BACHILAS '19** made lasting connections with her patients:

“From the moment I met Holly, her eagerness to learn was evident, but what struck me the most was the natural ability she had at the bedside. She started off as a seemingly quiet and unsure student and then blossomed into a confident and compassionate medical provider over the next nine months. Seeing her enter the room was comforting, as I knew she was going to take the time to listen to what I had to say.”

— Hudson Headwaters Health Network patient

THE LARNER EXPERIENCE



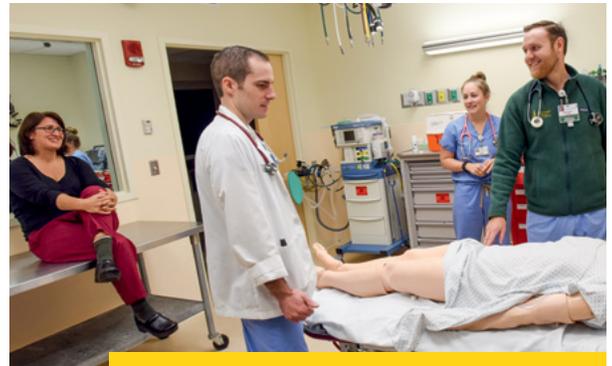
Holly Bachilas '19

Years 3 & 4: Advanced Integration Level

Advanced Integration prepares students for the transition from medical school to residency. Students gain additional clinical skills and knowledge as they begin to experience what it's like to serve as a key member of a care team. Electives give students the opportunity to explore areas of interests in medical centers and clinics across the country.

Advanced Integration Features New Emergency Medicine Requirement

A new emergency medicine rotation required as part of Advanced Integration introduces students to the knowledge and skills necessary to diagnose and treat life-threatening illness and injury. The one-month course includes two weeks in the emergency department at UVM Medical Center, and two weeks at either Central Vermont Medical Center or Champlain Valley Physicians Hospital, familiarizing students with different patient populations across urban and rural settings. Not only do students gain an understanding of the most common emergent conditions, they begin to understand what it's like to serve as a key member of a care team as they present differential diagnoses to attending physicians and take responsibility for communicating with families. Directed by Associate Professor of Surgery **Mario Trabulsy, M.D.**, the course emphasizes problem-oriented critical thinking. The fourth-year rotation has been developed in tandem with a new emergency medicine residency program at UVM, which will be accepting applications in the fall of 2018 for the inaugural class of residents beginning in July of 2019.



Mario Trabulsy, M.D., leads a session focused on emergency medicine in the UVM Clinical Simulation Laboratory.

Regional Obstetrics/Gynecology Bootcamp Preps Students for Practice

The fourth annual Northern New England Regional Obstetrics and Gynecology Bootcamp gets fourth-year medical students ready for residency through two weeks of case-based active learning, simulation education, and small group activities. Directed by **Elise Everett, M.D.**, associate professor of obstetrics and gynecology, the bootcamp is the first regional transition to residency course specific to the field. Currently, it is offered to students at the Larner College of Medicine, the Warren Alpert Medical School at Brown University, and Tufts University School of Medicine who are matching into obstetrics/gynecology or family medicine. Goals include improving confidence and skill with technical and surgical procedures, improving knowledge related to specific topics in the field, and preparing students for the transition to their role as doctor through discussion on topics such as work/life balance and mentoring. Research led by **Lindsay Eastman, M.D.'18**, showed students who participated in the bootcamp from 2015 to 2017 reported a significant increase in technical skills confidence, with an improvement in 30 out of 35 objectives. Students also increased their confidence in Milestone Level 1 and Core Entrustable Professional Activity objectives, with a significant improvement in 33 of 34 objectives.



Elise Everett, M.D.

Celebrating Teachers and Mentors

The Larner College of Medicine celebrates scholarly achievement and outstanding teaching and mentoring through the annual Honors Night celebration. Members of the Class of 2018 received individual awards, and students were inducted into the Alpha Omega Alpha Honor Medical Society and Gold Humanism Honor Society. The class also honored faculty and staff who contributed to their medical education. This year, two faculty members received the Clinical Teacher of the Year Award: **Garth Garrison, M.D.**, associate professor of medicine, and **Mario Trabulsy, M.D.**, associate professor of surgery. The Department of Pediatrics received the Clinical Department of the Year Award, also known as the Silver Shovel Award.



Lewis First, M.D. (third from left), chair of the Department of Pediatrics, receives the Clinical Department of the Year Award at Honors Night.

Match Results 2018

Anesthesiology 9	Emergency Medicine/ Anesthesiology 1	Neurology 1	Pathology 3
Dermatology 1	Family Medicine 17	Neurosurgery 2	Pediatrics 14
Diagnostic Radiology 4	General Surgery 11	Obstetrics & Gynecology 4	Peds/Psych/Child Psych 1
Emergency Medicine 7	Internal Medicine 21	Ophthalmology 1	Psychiatry 5
		Orthopaedic Surgery 2	Urology 3

The Navajo People & Rural Medicine

Students in Advanced Integration have the opportunity to pursue electives in areas of interest at locations around the world. In the fall of 2017, **ERIC SCHMIDT, M.D.'18**, completed a rotation at the largest Native American reservation in the United States:

“ For the month of September, I embarked on the experience of a lifetime, living and working on the largest Native American reservation in the United States. Sprawled across the four corners region of Utah, Arizona, New Mexico and Colorado, the Navajo Reservation in Chinle, Arizona, encompasses an area as large as the entire state of West Virginia. Its population, however, is only about 300,000, making it extremely rural. I gained an invaluable understanding of the Navajo people and rural medicine. It has inspired me to seek out future opportunities with the Indian Health Service, and remain involved in community outreach as a physician.”



Eric Schmidt, M.D.'18 (at left), during his fourth-year elective at a Native American reservation.

THE LARNER
EXPERIENCE

CURRICULAR INNOVATIONS

The Larner College of Medicine is at the forefront of integrating new technology like point of care ultrasound into the curriculum, while the UVM Clinical Simulation Laboratory continues to serve as a hub for innovative simulation education. Students and faculty foster a positive learning environment on campus, and lead efforts to promote diversity in medicine nationally.

Peter Weimersheimer, M.D., teaches a student during a POCUS session in the Reardon Classroom.



INNOVATIONS IN SIMULATION EDUCATION

Point of Care Ultrasound

Hudson Headwaters Faculty Fellowship

A fellowship for faculty at Hudson Headwaters Health Network promises to expand use of point of care ultrasound (POCUS) in medical education. With leadership from **Cate Nicholas, Ed.D., M.S., P.A.**, director of education and operations at the UVM Clinical Simulation Laboratory, the fellowship is designed to train Hudson Headwaters faculty in best practices and provide guidance on the technology, which has applications both as a clinical diagnostic tool and as a tool to help students better understand human anatomy and pathologies. **Keith Curtis, M.D.**, and **Peter Weimersheimer, M.D.**, assistant professor and professor of surgery respectively at the Larner College of Medicine, are slated to train faculty at the site for the College's Longitudinal Integrated Clerkship.

POCUS Throughout the Curriculum

With leadership from **Keith Curtis, M.D.**, assistant professor of surgery and integrated ultrasound curriculum director, point of care ultrasound (POCUS) has been integrated into all three levels of the Vermont Integrated Curriculum, and efforts are underway to expand its use as a teaching tool. POCUS is now an integral part of instruction at the Foundations level, in courses including Foundations of Clinical Sciences, Nutrition, Metabolism and the Gastrointestinal System, and Cardiovascular, Renal and Respiratory Systems. At the Clerkship level, students receive POCUS training during orientation for internal medicine, family medicine, surgery, and obstetrics/gynecology. The emergency medicine rotation in the Advanced Integration level includes POCUS-based learning, and students in the senior surgery major receive small group instruction. A fourth-year elective gives students the opportunity for additional training.

Sharing New Knowledge

Cate Nicholas, Ed.D., M.S., P.A., director of education and operations at the UVM Clinical Simulation Laboratory, and **Alison Howe, M.S.**, director of education program outcome analysis for the Teaching Academy, are co-authors of a poster that won a first prize research award at the 2017 Association of Standardized Patient Educators Annual Conference. It was titled "Demographics Results of the 2016 ASPE Grants and Research Committee Standardized Patient Educator (SPE) Practice Analysis."

Cate Nicholas, Ed.D., M.S., P.A., was invited faculty for the 2017 American College of Surgeons/Accredited Education Institutes Consortium in Chicago. She co-presented with **Nehal Khamis, M.D., Ph.D., MHPE**, from the King Saud University Clinical Skills and Simulation Center, Riyadh, Saudi Arabia, a joint curriculum and faculty development presentation on simulation-based education instructional design.

A FOCUS ON
SOCIAL JUSTICE
IN MEDICINE



The student-led Social Justice Coalition, in cooperation with the Office of Diversity and Inclusion and the Teaching Academy, has launched two projects that promise to inform admissions and curricula at the Larner College of Medicine, and contribute to the national conversation around diversity and equity in medicine.

With principal investigator **Diane Jaworski, Ph.D.**, co-investigator **Alison Howe, M.S.**, and co-faculty sponsor **Janice Gallant, M.D.**, members of the coalition are completing a social justice inventory of admissions data, with two questions in mind: Are socioeconomically disadvantaged students underrepresented in medical school? How can medical schools including the Larner College of Medicine better recruit, support and retain underrepresented minorities in medicine? Students **Raghav Goyal '21**, **Samuel Epstein '21**, **Shae Rowlandson '21**, and **Davina Tolbert '21** plan to host a Conversation Dinner on these topics, as well as publish their findings.

A second project seeks to study and build upon the social medicine components of the Vermont Integrated Curriculum, with a goal to integrate learning objectives related to health inequity and the social determinants of health into all Foundations level courses. Faculty advisors **Lee Rosen, Ph.D.**, **Ellen Black, Ph.D.**, **Karen Lounsbury, Ph.D.**, and **Maria Mercedes Avila, Ph.D.**, have worked with students **Elizabeth Lynch '21**, **Raghav Goyal '21**, **Nina Dawson '21**, **Davina Tolbert '21**, **Trina Thornburgh '21**, **Emily Eichner '21**, and **Shae Rowlandson '21**, on a successful proof of concept for the Attacks and Defenses course, and are conducting an assessment of other courses.



Raghav Goyal '21, Nina Dawson '21 and Samuel Epstein '21 in Churchrock, New Mexico.

Student Leadership

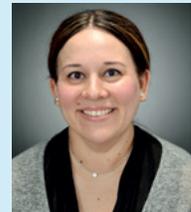
- Social Justice Coalition leaders **Raghav Goyal '21**, **Nina Dawson '21**, and **Samuel Epstein '21** joined hundreds of medical students from around the world at the Social Medicine Consortium in Churchrock, New Mexico in April of 2018. They learned about the global landscape of preventive health interventions, and methodologies for incorporating social justice components into medical curricula.
- If a patient or family requests a physician of a certain race, what's the appropriate and ethical response? Students from the College led a discussion exploring that question during the 47th meeting of the New Hampshire/Vermont Ethics Committees in April of 2018. **Lee Hiromoto '20**, who also has a law degree, gave a presentation on the legal aspects of patient requests for healthcare providers of a specific race. Hiromoto and **Nora Stedman '20**, **Lindsay Howe '19**, and **Soraiya Thura, M.D. '18** facilitated a case discussion.

OFFICE OF DIVERSITY AND INCLUSION EXPANDS

Under the leadership of Associate Dean **Margaret Tandoh, M.D.**, the College's Office of Diversity and Inclusion continues to grow. In February of 2018, the ODI moved to a larger space to accommodate meetings and several additional part-time staff members.

Maria Mercedes Avila, Ph.D.,

an associate professor of pediatrics and director of the Vermont Leadership Education in Neurodevelopmental Disabilities (VT-LEND) Program, has been appointed Health Equity Inclusive Excellence Liaison. She is working with each department on the development of a departmental strategic diversity plan.



As Academic Excellence Liaison, **Eileen CichoskiKelly, Ph.D.**, is focusing her efforts on developing programs and initiatives to support the diverse academic needs of medical students throughout their medical training.

She is an associate professor of family medicine, director of educational instruction, and the course director for the Teaching and Scholarly Requirement.

Avila and CichoskiKelly join current staff members **Tiffany Delaney, MA.Ed.**, diversity and inclusion director, and **Michael Upton, M.D.**, faculty development liaison.

STUDENT LIFE

At the Larner College of Medicine, students are encouraged to engage in service activities that make a lasting impact on the community. Not only do they get to know the patients they serve, they gain a deep understanding of the myriad forces shaping healthcare today. Students who delve into research make important connections between work in the lab and what patients experience in the clinic and hospital.

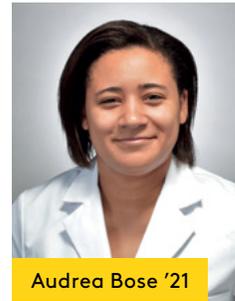
Students Help to Shape Medical Education

Input from current students is key to continually improving medical education. Their leadership on important committees including the Dean's Advisory Committee on Diversity and Inclusion, the AAMC Organization of Student Representatives, Student Council, the Medical Curriculum Committee, the Wellness Committee, the Student Education Group and others help to shape the College's approach to education.

“ We joined the Student Education Group for the opportunity to be part of the exciting shift to active learning. As part of this group, we get to build close relationships with the faculty, staff, and students that make up our community. This year, the Student Education Group is collecting data on how much time students need to prepare for each active learning session so that we can design a schedule that allows students enough time to prepare for class and fully engage in active learning activities.”

— **Audrea Bose '21** and **Sidney Hilker '21**, Student Education Group representatives for the Class of 2021. Hilker is also the student representative on the UVM Board of Trustees.

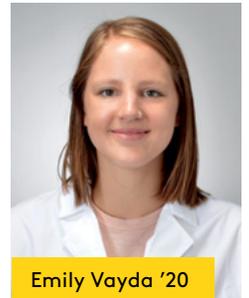
“ The community is an integral part of our education. We organize a large scale service event for the incoming first year class; we build relationships with organizations such as the local food shelf; and we have a student-run group that organizes a clinic for homeless and underserved community members. These events expose our students to diverse patient populations, and it exemplifies that health care comes in many forms, especially outside the walls of a doctor's office.” — **Emily Vayda '20**, Community Service Chair for the Class of 2020



Audrea Bose '21



Sidney Hilker '21



Emily Vayda '20

Students Pursue Research through Summer Fellowship

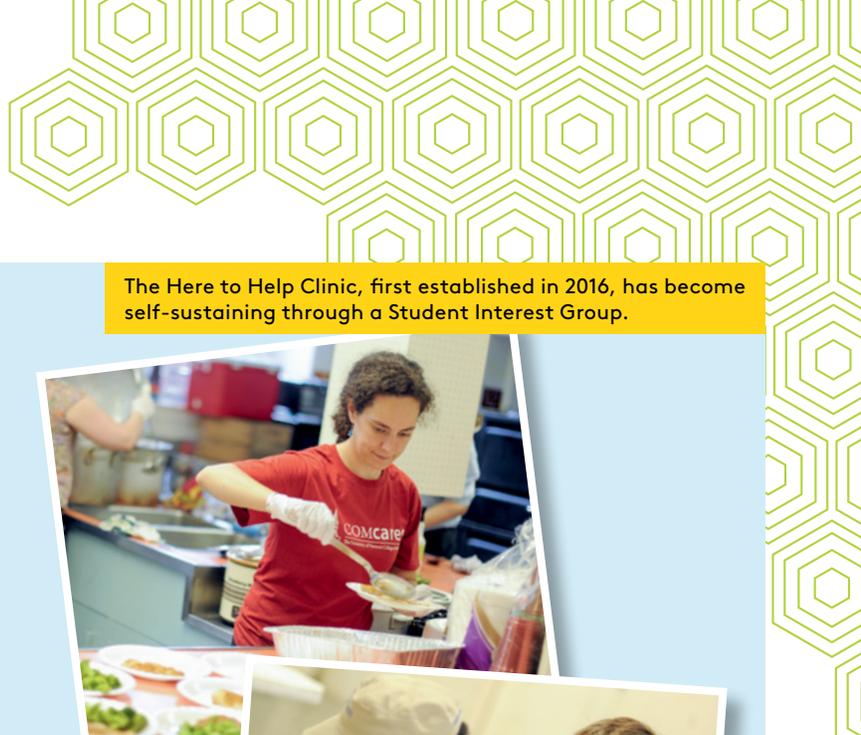
Fourteen students spent their summer diving into important research questions with faculty mentors from the Larner College of Medicine through a summer research fellowship that provides funding and support. Directed by UVM Associate Professor of Medicine **Renee Stapleton, M.D., Ph.D.**, the competitive program offers grants to students for a seven-week research project. The goal is to introduce students to the research process while building partnerships with faculty and advancing science. Funding for fellowships has nearly doubled in the past year, from \$35,000 to \$60,000, thanks to alumni who have given to the UVM Larner College of Medicine Fund, the primary unrestricted fund supported by alumni of the College. Three students received Summer Research Fellowship Merit Awards at the annual Foundations celebration in January. Twenty-one students applied for the \$500 award, a pool that included students who completed research outside of the college:

- **M. Lauren Donnelly '20** (Mentor: Aimee Shen, M.D.) Structure-function Analyses of the Clostridium difficile Germinant Receptor CspC



L to R: **Scott Mitchell '20**, **Kirsten Martin '20**, **M. Lauren Donnelly '20**, and **Renee Stapleton, M.D., Ph.D.**, at the 2018 Foundations Awards ceremony.

- **Scott Mitchell '20** (Mentor: David Bauer, M.D.) Snap-Valve Cerebral Shunt System Operates at Intracranial Pressures, Visualized by Ultrasound
- **Kirsten Martin '20** (Mentor: Joseph Gleeson, M.D.) Discovery of novel recessive genes in a consanguineous cohort using genotype-phenotype correlations



The Here to Help Clinic, first established in 2016, has become self-sustaining through a Student Interest Group.

“HERE TO HELP”: FROM SCHWEITZER FELLOW PROJECT TO STUDENT INTEREST GROUP

As a 2016 Schweitzer Fellow, **Jasmine Robinson '19** embarked on a year-long service project to create a clinic for people in the Burlington, Vt.-area who were homeless and underserved. It's a population near and dear to her heart: For much of her childhood and young adult life, Robinson was homeless.

After gathering support and input from a range of social service agencies and community organizations, she launched the inaugural Here to Help clinic at the First United Methodist Church in July of 2016. It was a huge success, offering health screenings, haircuts, toiletries, hot showers and a warm meal to many Vermont residents who desperately needed these services and necessities.

Robinson's work captured the attention of fellow medical students. **Erin Hunt '20** and **Rachael Munoz '20** continued where she left off in 2017, again through a Schweitzer Fellowship awarded through the New Hampshire/Vermont chapter of the organization. Since 1996, more than 300 health-focused graduate students have been awarded grants to address health disparities and the social determinants of health.

Now, a Student Interest Group has been formed to keep Here to Help clinics going strong, with a mission to establish meaningful and lasting connections with members of the homeless and low-income population. Under leadership from a group of students in the Class of 2021, the SIG hosts monthly clinics, bike repair, exercise, nutrition and wellness sessions, and more.



“ AS A FUTURE PHYSICIAN, I ASPIRE TO BE A VALUED LEADER IN MY COMMUNITY AND ADDRESS THE CONCERNS OF THE UNDERSERVED IN A LARGER CAPACITY. AS A FIRST YEAR MEDICAL STUDENT, I HAVE THE OPPORTUNITY TO DO EXACTLY THAT”

— JASMINE ROBINSON '20

Recent Schweitzer Fellow Projects

- **Conner Soderquist '20** conducted a project at the Centerpoint School to increase access to healthy food and improve culinary skills among adolescents faced with economic hardship and impacted by social, emotional, learning and/or mental health challenges. Nutrition education paired with site visits to local farms and cooking classes helped students build a positive relationship with food.
- Working with the Pride Center of Vermont, **Benjamin Smith '20** and **Al York '19** created Trans*Form, a

project focused on reducing the number of transgender Vermonters who transition in isolation. The project, continued by Schweitzer Fellow **Eli Goldberg '20**, supports the health and wellbeing of transgender Vermonters through peer mentoring, community skill shares, and online resources.

- **Susannah Kricker '18** and **Astia Roper-Batker '18** developed a standardized health literacy training program to prepare UVM students to deliver effective and specific lessons on healthcare topics to Latino migrant dairy farmworkers.

SCHOLARSHIP of TEACHING

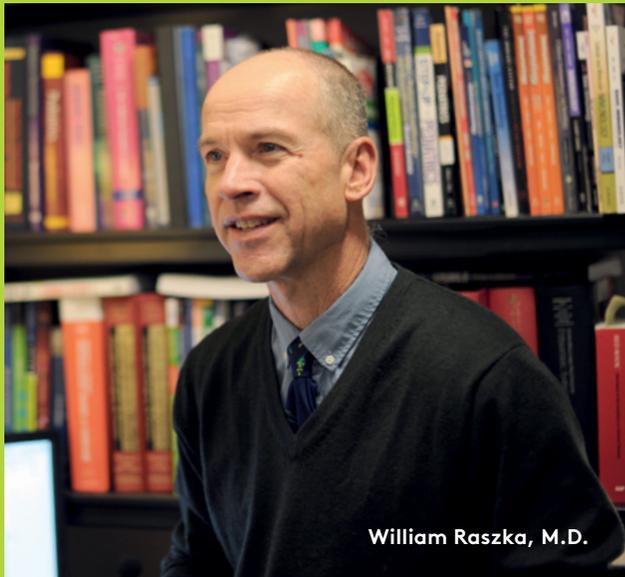
Huggett Appointed Chair of National Teaching Academy Organization

Larner Endowed Professor of Medical Education **Kathryn Huggett, Ph.D.**, has been appointed chair of the Academies Collaborative, a national organization that fosters teaching academies as a way to “develop and recognize educators’ excellence in the health professions.” Her one-year term began in November of 2017. As chair, she will play a key role in advancing the goals of the Academies Collaborative, which include establishing an advising system among academy members;



Kathryn Huggett, Ph.D.

facilitating collaboration on academy conferences or institutional initiatives; and fostering multi-institutional educational research. Huggett, who has served as director of the College’s Teaching Academy since 2015, is a sought-after consultant on medical education and faculty development. She is the co-editor of the first and second editions of *An Introduction to Medical Teaching*, a well-known faculty development manual, and is a reviewer for numerous medical education journals.



William Raszka, M.D.

Pediatrics Professor Honored by National Organization

William Raszka, M.D., professor of pediatrics, received the 2018 Achievement Award from The Council on Medical Student Education in Pediatrics (COMSEP), a national organization that champions the cause of pediatric medical student education. His leadership and substantial contributions to the organization were celebrated at the COMSEP Annual Meeting in April of 2018. The recipient of numerous teaching awards at the Larner College of Medicine, Raszka is director of pediatric medical student education, as well as course director for the pediatrics clerkship and the first-year course Attacks and Defenses. Since 2010, he has served as associate editor of the journal *Pediatrics*.

GRADING RUBRIC GARNERS SURGICAL EDUCATION ASSOCIATION HONOR

Tess Aulet, M.D. (right), general surgery resident and protégé member of the Teaching Academy, collaborated with **Jesse Moore, M.D.**, active learning director and associate professor of surgery, and **Cate Nicholas, Ed.D., M.S., P.A.**, director of education and operations at the UVM Clinical Simulation Laboratory, to develop a grading rubric to be used for assessing the AAMC’s “Entrustable Professional Activity 5, documenting a clinical encounter.” Aulet’s research was chosen as one of six plenary podium presentations at the annual meeting of the Association for Surgical Education.



Frymoyer Scholars L to R: Andrew Hale, M.D.; William Pendlebury, M.D.; Mary Palumbo, D.N.P., APRN; William Raszka, M.D.; Beth Noyes, Pharm.D.; Rebecca Wilcox, M.D.; Molly Rideout, M.D.; Jana Lichtenfeld, M.D., M.P.H.; Travis Beebe-Woodard, R.N., BSN; Steven Lidofsky, M.D., Ph.D.

2018 FRYMOYER SCHOLARS ADVANCE MEDICAL EDUCATION

The John W. and Nan P. Frymoyer Fund for Medical Education supports distinguished physicians and nurses in their pursuit of innovation in medical education and teaching that emphasizes the art of patient care.

Travis Beebe-Woodard, R.N., BSN:
"Trauma Nurse Fellowship"

Andrew Hale, M.D., Steven Lidofsky, M.D., Ph.D.: "Optimizing Care for Vermonters Infected with Hepatitis C Virus through a State-wide Educational Curriculum"

Jana Lichtenfeld, M.D., M.P.H., Diane Imrie, M.B.A., R.D., Cathy McIssac, M.S., R.D., Rebecca Wilcox, M.D., Cara Feldman-Hunt, M.A.: "Culinary Medicine Teaching Kitchen Medical Student Elective"

Mary Palumbo, D.N.P., APRN, William Pendlebury, M.D.; Lori P. McKenna, M.S.W., LICSW; Betty Rambur, Ph.D., R.N., FAAN: "Disseminating a Plan for Improved Care of Persons with Alzheimer's Disease and their Family Caregivers for the State of Vermont"

Molly Rideout, M.D., Tracey Wagner, R.N., Beth Noyes, Pharm.D., William Raszka, M.D.: "Development of a Longitudinal Pediatric Residency Preparation Course"



John and Nan Frymoyer



Paula Tracy, Ph.D., the inaugural recipient of the Frederick C. Morin, M.D. Educational Leadership Award, with Dean Morin.

Celebrating Educational Scholarship & Teaching



In recognition of her many contributions as a "distinguished teacher, scientist and leader," **Paula Tracy, Ph.D.**, was honored as the inaugural recipient of the Frederick C. Morin, M.D. Educational Leadership Award at the Teaching Academy's annual Snow Season Retreat. Tracy, who was named Foundations Director in 2012, joined the faculty in 1984 and is a professor and former interim chair of biochemistry. The College celebrated her work as one of the original designers of the Vermont Integrated Curriculum, and honored her legacy as a role model and outstanding teacher and mentor for medical students. Tracy stepped down from her role as Foundations Director in 2018.

The College celebrated exemplary educational scholarship and teaching at the Snow Season Retreat with the following additional awards:

— Innovation in Curriculum Development or Pedagogy Award —

Ellen Black, Ph.D., Assistant Professor of Neurological Sciences

Stephen Everse, Ph.D., Associate Professor of Biochemistry

— Learner Assessment Award —

Tess Aulet, M.D., surgery resident

— Outstanding Contribution Award —

Colleen Quinn, M.D., Clinical Assistant Professor of Family Medicine and Hudson Headwaters Health Network LIC Site Director

— Educational Scholarship Award —

Judy Lewis, M.D., Associate Professor of Psychiatry

Nathalie Feldman, M.D., Director of the Learning Environment, Medical Student Education

The following faculty received UVM Health Network Medical Group Education Awards:

— Annual Grant Award Program: Educational Research —

"Enhancing Interprofessional Collaborative Practice Through Concept Mapping"
Co-investigators **Bridget Marroquin, M.D.**, Anesthesiology; **Stephanie Mann, M.D.**, Obstetrics, Gynecology and Reproductive Sciences; **Candice Ciolac, M.D.**, Family Medicine, Champlain Valley Physicians Hospital (CVPH); **Sandra Sperry, MSN, RNC-OB, C-EFM**, Nurse Manager, Birthing Center, UVM Medical Center

— Continuing Medical and Interprofessional Education Educator of the Year Award —

Charles MacLean, M.D., Associate Dean for Primary Care and Professor of Medicine

— Graduate Medical Educator of the Year Award —

Loic Fabricant, M.D., Assistant Professor of Surgery

TEACHING ACADEMY

The Teaching Academy sustains and supports an interdisciplinary community of educators who value the scholarship of teaching and learning while facilitating educator development. The goal is to promote an academic environment that increases the value and impact of educators locally, regionally, and nationally.



ANNUAL HIGHLIGHTS

Essentials of Teaching and Assessment Retreat September, 2017

Designed for faculty, residents, fellows, graduate students, and postdocs who are new to teaching, this one-day course introduces participants to the pedagogy, strategies, and resources for effective teaching and assessment.

Snow Season Education Retreat January, 2018

This year's Snow Season Education Retreat featured a keynote lecture on "New Pathways through Medical School: EPAs, Time-Variable Competencies and Progression" by **Susan Skochelak, M.D., M.P.H.**, Group Vice President, Medical Education, American Medical Association. The annual retreat also includes a poster session and small group activities on such topics as metacognition in medical education, simulation debriefing techniques,



Rebecca Wilcox, M.D., presents at the Essentials of Teaching and Assessment Retreat

and teaching clinical reasoning.

Medical Educator Fellowship Program

The nine faculty members selected for participation in this year's fellowship program work with each other and with mentors to develop new skills in teaching and assessment through interactive, seminar-style sessions and readings. The eight month-long program results in individual scholarly projects for presentation and publication.

TEACHING ACADEMY GRANTS & AWARDS

2018 Teaching Academy Travel Award

Bridget Marroquin, M.D.

Alan Rubin, M.D.

2018 Curriculum Development and Educational Scholarship Grant

Stephanie Mann, M.D. and **Colleen Quinn, M.D.**, for "A Health Systems Science Curriculum" for the Larner College of Medicine Longitudinal Integrated Clerkship

MEDICAL EDUCATION GRAND ROUNDS

February 9, 2018

"Everyday Bias and the Medical Educator," **Pamela Puthoor, M.D.**, UVM Assistant Professor of Pediatrics

December 8, 2017

"Best Practices and Innovations in Program Evaluation," **Judy A. Shea, Ph.D.**, Associate Dean for Medical Education Research at the Perelman School of Medicine at the University of Pennsylvania

October 27, 2017

"Identifying Best Instructional Practices: Promoting Self-Reflection for Enhancing Efficient and Effective Learning," **Norma Saks, Ed.D.**, Professor in the Department of Psychiatry at Rutgers Robert Wood Johnson Medical School

September 8, 2017

"Reimagining & Reinvigorating Medical Student Education," **Charles G. Prober, M.D.**, Senior Associate Dean for Medical Education at Stanford School of Medicine



Charles Prober, M.D.



Faculty take a tour during the Educational Technologies Open House in the Larner Learning Commons.

Celebrating the New Larner Learning Commons

Members of the UVM community celebrated the Larner Learning Commons and the state-of-the-art resources it makes available during an Educational Technologies Open House in August of 2017. As a hub for innovation in medical and health science education, the learning commons co-locates learning activities and resources, including the Teaching Academy, Instructional Technology, the Dana Medical Library, the Larner Classroom, and study space. The newest technology is available for faculty to develop course materials to facilitate active learning, including digital collaboration spaces, teleconference equipment, and a recording studio. The construction of the Larner Learning Commons was supported by late College of Medicine alumnus Robert Larner, M.D.'42 and his wife Helen.

Teaching Academy Inductees 2017-18

Distinguished Educator

- Mark Hamlin, M.D.
Professor, Anesthesiology

Master Teacher

- Varun Agrawal, M.D.
Associate Professor, Medicine
- Stephen Berns, M.D.
Assistant Professor, Family Medicine
- Anant Bhawe, M.D.
Associate Professor, Radiology
- Kristen DeStigter, M.D., FACR
Professor, Radiology
- Andrew Hale, M.D.
Assistant Professor, Medicine
- Amanda Kennedy, Pharm.D., BCPS
Associate Professor, Medicine
- Janusz Kikut, M.D.
Professor, Radiology
- Mark Pasanen, M.D.
Associate Professor, Medicine
- Carlos Pino, M.D.
Professor, Anesthesiology

Member

- Abigail Adler, M.D.
Assistant Professor, Pediatrics
- Michael Bazylewicz, M.D.
Assistant Professor, Radiology
- Bronwyn Bryant, M.D., Assistant Professor,
Pathology and Laboratory Medicine

- Eileen CichoskiKelly, Ph.D.
Associate Professor, Family Medicine
- Borzoo Farhang, M.D.
Assistant Professor, Anesthesiology
- Havaleh Gagne, M.D.
Assistant Professor and Medical Director, RADT Program, Radiology
- Garth Garrison, M.D.
Associate Professor, Medicine
- Rosy Hill, M.D.
Assistant Professor, Medicine
- Joel Schnure, M.D.
Professor, Medicine
- Geoffrey Sriver, M.D.
Assistant Professor, Radiology
- Paul Slavik, M.D.
Assistant Professor, Medicine
- Sarah Twichell, M.D.
Assistant Professor, Pediatrics
- Leslie Young, M.D.
Assistant Professor, Pediatrics

Protégé

- Emily Hadley Strout, M.D.
Clinical Instructor-Resident, Medicine
- Phillip Munson, *Cellular, Molecular and Biomedical Sciences Ph.D. Graduate Student*
- Vishal Shah, M.D.
Clinical Instructor-Resident, Medicine
- Lea Sheward, M.D.
Clinical Instructor-Resident, Pediatrics
- Kramer Wahlberg, M.D.
Clinical Instructor-Resident, Medicine
- Patrick Zimmerman, D.O.
Fellow-Resident, Surgery

College Hosts AAMC Workshop

On December 8, 2017, Judy A. Shea, Ph.D., associate dean for medical education research at the Perelman School of Medicine at the University of Pennsylvania, visited the Larner College of Medicine to present a Medical Education Research Certificate Program (MERC) workshop titled "Formulating Research Questions and Designing Studies."

The AAMC's MERC program is targeted at faculty who are seasoned educators but are new to conducting educational research, with a goal to develop "research skills that will enable collaborative participation in medical education research projects." Thirteen faculty members from the College participated.

SELECTED PUBLICATIONS & PRESENTATIONS

Publications

Craig LB, Buery-Joyner SD, Bliss S, Everett EN, Forstein DA, Graziano SC, Hampton BS, McKenzie ML, Morgan H, Page-Ramsey SM, Pradhan A. To the Point: Gender differences in the Obstetrics and Gynecology clerkship. *American Journal of Obstetrics & Gynecology*. 2018 May 29. <https://doi.org/10.1016/j.ajog.2018.05.020>

Dickinson BL, Deming N, Coplit L, Huggett KN, Quesnelle K, Sheakley M, Rosenfeld G, Wragg S. IAMSE Member Perspectives on the Recognition, Reward, and Promotion of Medical Science Educators: an IAMSE Sponsored Survey. *Medical Science Educator*. 2018;1-9. <https://link.springer.com/article/10.1007/s40670-018-0548-z>

Hale A, Freed J, Ricotta D, Farris G, Smith C. Twelve tips for effective body language for medical educators. *Medical Teacher*. Published online May 14, 2017. DOI: <http://dx.doi.org/10.1080/0142159X.2017.1324140>

Hale A, Ricotta D, Freed J, Smith CC, Huang G. Adapting Maslow's Hierarchy of Needs as a Framework for Resident Wellness. *Teaching and Learning in Medicine*. 2018 Apr 30. <https://doi.org/10.1080/10401334.2018.1456928>

Jeffries WB, Huggett KN, Szarek J. Lectures. In Dent J and Harden RM, eds., *A Practical Guide for Medical Teachers*, 5th Edition, Edinburgh, Churchill Livingstone 2017.

Jeffries WB. From Information Provider to Learning Facilitator in Harden R.M., ed., *The Eight Roles of the Excellent Medical Teacher*, 2018, in press.

Craig LB, Buery-Joyner SD, Bliss S, Everett E et al, Undergraduate Medical Education Committee, Association of Professors of Gynecology and Obstetrics. To the point: gender differences in the obstetrics and gynecology clerkship. *American Journal of Obstetrics and Gynecology*, Manuscript Number; E18-1047.

Parris J, Hale A. Death and Dignity: Exploring Physicians' Responsibilities after a Patient's Death. *American Journal of Medicine*. Published online May 11, 2017. DOI: <http://dx.doi.org/10.1016/j.amjmed.2017.04.017>

Raszka WV Jr., Jeffries WB. Integrating Basic Sciences in a Clerkship Curriculum. In Morgenstern B, ed. *Guidebook for Clerkship Directors*, 5th Edition. Alliance for Clinical Education, 2018, in press.

Ricotta D, Huang G, Hale A, Freed J, Smith CC. Mindset theory in medical education. *Clinical Teacher*. Feb 12, 2018. DOI: [10.1111/tct.12765](https://doi.org/10.1111/tct.12765)

Rideout MR, Raszka WV. Hypovolemic shock in a child: A pediatric simulation case. *MedEdPORTAL*. 2018;14:10694. https://doi.org/10.15766/mep_2374-8265.10694

Sobel HG, Pasanen ME. (2018) Clinic Director Roles and Expectations. In: Lu L, Barrette EP, Noronha C, Sobel H, Tobin D. (eds) *Leading an Academic Medical Practice*. Springer, Cham. https://doi.org/10.1007/978-3-319-68267-9_1

Wilcox RL, Adem PV, Afshinnkoo E, Atkinson JB, Burke LW, Cheung H, Dasgupta S, DeLaGarza J, Joseph L, LeGallo R, Lew M. The Undergraduate Training in Genomics (UTRIG) Initiative: early & active training for physicians in the genomic medicine era. *Personalized Medicine*. 2018 May 30. <https://doi.org/10.2217/pme-2017-0077>

Zehle, C. Establishing Fair and Ethical Medical Student Promotions Committees. IAMSE 2018

Presentations

Beatty D. Teaching Clinical Reasoning in the Classroom and in the Clinic; lunchtime table discussion, AAMC national meeting, Boston, Mass., November 2017

Everett EN. The Education Sorting Hat: How Competencies, Objectives, EPAs and Milestones Apply to Clerkship Structure. 2017 Association of Professors

of Obstetrics and Gynecology/Council of Resident Education in Obstetrics and Gynecology Annual Meeting, Clerkship Directors' School 301

Everett EN. Cleansing the Curriculum: The EPA Energy Drink—All the Necessary Nutrients to Fortify Medical Student Assessment! Association of Professors of Obstetrics and Gynecology Faculty Development Seminar, January 2018

Everett EN. Journal Watch 2018: The Pursuit of Educational Scholarship. Association of Professors of Obstetrics and Gynecology/Council of Resident Education in Obstetrics and Gynecology Annual Meeting, February 2018

Everett EN. Medical Student Makeover: Using Simulation to Fortify Medical Student Performance in the Residency Interview. Association of Professors of Obstetrics and Gynecology Faculty Development Seminar, January 2018

Gray K. Optimus PRIMER: Transforming Formative Feedback into Effective Summative Written Assessments. Pediatric Academic Society Conference, San Francisco, Calif., 2017

Gray K. Too Busy, Too Bored, Too Burnt-Out: Practical Theory-Based Tools to Win Back the Unmotivated Learner. Pediatric Hospital Medicine Conference, Nashville, Tenn., 2017

Hale A, Ricotta D, Freed J, Smith CC, Huang G. Adapting Maslow's Hierarchy of Needs as a Framework for Resident Wellness. Accepted at Teaching and Learning in Medicine, February 28, 2018

Hale A. What Are They Here to Learn? Meeting the Needs of Residents and Medical Students on an Infectious Disease Service. Poster presentation at Infectious Disease Week in San Diego, Calif., October 2017

Heck AJ, Huggett KN, Fornari A. Addressing Active Learning Implementation Challenges. Focus Session at the Annual Meeting of the International Association of Medical Science Educators, Henderson, Nev., June 12, 2018

Huggett KN, Blanco M. Determining a fit between your education work and publication venues. Workshop at the summer meeting of the Society of Directors of Research in Medical Education. Louisville, Ky., May 21, 2018

Jeffries WB, Huggett KN, Jemison J. An Innovative Space Transformation to Support 100% Active Learning Commitment. Invited presentation at symposium entitled "An Inside Tour of Innovative Education Spaces" at the American Association of Medical Colleges Learn-Serve-Lead Meeting, Boston Mass., November 6, 2017

Jeffries WB, Huggett KN. Institutional Transformation to Evidence-Based Pedagogy: A Case Study Applying the Four-Frame Approach. Presentation at the Association for Medical Education in Europe Annual Meeting, August 28, 2017

Jeffries WB, Huggett KN. Introducing Active Learning by Flipping the Classroom. Faculty Development Workshop, Meharry Medical College, April 4 - 5, 2018

Jeffries WB. Embracing Evidence-Based Pedagogy. Dorothy Snider Medical Education Grand Rounds, University of Arkansas College of Medicine, March 20, 2018

Jeffries WB. The imperative for active learning: death of the lecture? Invited presentation at symposium entitled "Advances in Evidence-Based Health Sciences Education" at the Association for Medical Education in Europe Annual Meeting, August 29, 2017

Jeffries WB. Transforming Teaching to Active Learning. University of North Dakota, May 23, 2018

Jeffries WB. Faculty Development Workshop, College of Osteopathic Medicine, Touro University - California, Vallejo, Calif., May 12, 2018

Lewis J, Feldman N, Adams D, Harari D, Patel C. The Other Side of Medical Student Mistreatment: Lessons in Radical Empathy. American Psychiatric Association Annual Meeting, New York, N.Y., May 8, 2018

Lewis J, Young J, Anzia J. Delivering on the Promise of CLER: Novel Approaches to Teaching Patient Safety. American Association of Directors of Psychiatric

Residency Training Annual Meeting, New Orleans La., March 2, 2018

Mann SE, Huggett K. Teaching Residents to Navigate the Complex Systems of Health Care Delivery: An innovate curriculum that not only improves clinical care but ensures proficiency in quality improvement, patient safety and population health." Association of American Medical Colleges Northeast Group on Educational Affairs conference, Hempstead, N.Y.

Mann SE, Burns T. Do Ob Gyn residents and the CCC reach the same competency conclusions? Association of Professors of Obstetrics and Gynecology/Council of Resident Education in Obstetrics and Gynecology Annual Meeting, February 2018

Mann SE, Levine MA. An innovative curriculum to educate residents about the principles of the triple aim. Association of American Medical Colleges Integrating Quality National Meeting, June 2017

Mann SE, McNamara T, Levine MA. Do entering Ob Gyn interns understand how to navigate today's complex health care systems? Association of Professors of Obstetrics and Gynecology/Council of Resident Education in Obstetrics and Gynecology Annual Meeting, February 2018

Marroquin B. Secrets of Successful Teaching: Being in the Know. Society for Education in Anesthesia Annual Meeting.

Martir J, Everett E. How clerkship students learn procedural skills. Association of Professors of Obstetrics and Gynecology/Council of Resident Education in Obstetrics and Gynecology Annual Meeting, March 2018

Rideout M, Burns R, Devon E, Hartke A. Will They be Ready? Designing Effective and Engaging Pediatric Residency Preparatory Courses (Boot Camps) for Fourth Year Students. Workshop at Council for Medical Education in Pediatrics Annual Meeting, Denver, Col., April 2018

Rideout M, Good B, Raszka W. Crossing Boundaries: Flipping the Classroom in the Clerkship Year. Workshop at Council for Medical Education in Pediatrics Annual Meeting, Denver, Col., April 2018

Sakamuri S, Moore JS, Everett E. Using Interview Simulation to Improve Medical Student Performance in Residency Interviews. Oral presentation. International Association of Medical Science Educators Annual Meeting, Burlington, Vt., June 10-13, 2017

Seagrave, M. Using Self-Directed Learning and Self-Assessment to Engage Millennial Learners and Improve Learning Outcomes. Society of Teachers of Family Medicine Conference on Medical Student Education, Austin, Texas, January 2018

Seagrave, M. Teaching in the Clinical Setting: Skills for Today's Family Physician. Society of Teachers of Family Medicine Conference on Medical Student Education, Austin, Texas, January 2018

Smith CB, Berns SH, Bicknell N, Gelfand LP, Kelley A, Lindenberger EL, Morrison LJ, and Back AL. Efficacy of a Novel Communication Skills Intervention for Practicing Oncologists. The American Academy of Hospice and Palliative Medicine National Meeting, Boston, Mass., March 2018

Strout E, Landrey A, MacLean C and Sobel H. Internal medicine resident experiences with a 5-week panel management curriculum: A qualitative and Descriptive analysis. Alliance for Academic Internal Medicine National Meeting, Grapevine, Texas, October 20, 2017; North American Primary Care Research Group International Meeting, Quebec City, Canada, November 17, 2017

Strout E, Wahlberg E, Greenberg C, Whitbread K, Goedde M, Maruti S, Sobel H. Primary Care Internal Medicine Residents at the Wheel: Integration of a Hub and Spoke Model for Office Based Opioid Therapy into a Primary Care Internal Medicine Residency Program. Society for General Internal Medicine Regional Meeting, March 9, 2018

Thompson R, Good B, Rideout M, Raszka W. Likert or Like It: An Introduction to Effective Survey Design. Council for Medical Education in Pediatrics Annual Meeting, Denver, Col., April 2018



Medical Education Leadership

William B. Jeffries, Ph.D.

Senior Associate Dean for Medical Education; Associate Professor of Pharmacology

Tania F. Bertsch, M.D.

Associate Dean for Clinical Education; Associate Professor of Medicine

Janice Gallant, M.D.

Associate Dean for Admissions; Associate Professor of Radiology

Christa Zehle, M.D.

Associate Dean for Students; Associate Professor of Pediatrics

Kathryn Huggett, Ph.D.

Assistant Dean for Medical Education; Larner Endowed Professor of Medical Education; Teaching Academy Director

Paula Tracy, Ph.D.

Director of Foundations and Preclinical Assessment (2012 - April 2018); Professor of Biochemistry

Karen Lounsbury, Ph.D.

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