# ART + SCIENCE

MEDICAL STUDENT EDUCATION REPORT 2019



PROFESSIONALISM / STUDENT RESEARCH / HEALTH EQUITY



Richard L. Page, M.D.

Dean, The Robert Larner, M.D.

College of Medicine at The

University of Vermont



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Interim Senior Associate
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The Larner College of Medicine has been redefining the leading edge of medical education for over 50 years, with support from record-setting philanthropy. Our commitment to professionalism, our collaborative approach, and our evidence-based innovation in medical education, including our recent transition to an active learning curriculum, set us apart nationally. Our students are increasingly diverse and inclusive of the patient populations they will go on to serve: Twenty-two percent of students in the Class of 2023 are from groups underrepresented in medicine, 31 percent are from rural communities, and 16 percent have disadvantaged socioeconomic indicators. We were pleased to be able to add an additional four students to the class this year, bringing the number of students to 124. Two of these additional seats are allocated to Vermonters, allowing us to help address the projected physician shortage nationwide and here in Vermont.

The 2019 Medical Education Report highlights how our medical education program is raising the bar and breaking new ground in several key areas, including Professionalism, Student Research, Health Equity and Social Justice, and Interprofessional Education.

**Professionalism:** In the fall of 2018, Dean Page created a task force to draft a Professionalism Statement that serves as a reminder of our core values and our commitment to each other. The statement, which emphasizes cultural humility, kindness and respect, is embedded in each letter of acceptance to students and trainees, and in every employment offer to staff and faculty.

**Student Research:** The Larner College of Medicine has a long history of research excellence. In the most recent academic year, the faculty published 1,220 peer-reviewed publications—a remarkable number for the size of the institution. The faculty, including nationally and internationally recognized investigators, is especially adept at successfully navigating an increasingly competitive funding landscape. The Office of Medical Student Education recognizes the importance of medical student research mentorship and opportunities. As a result, the office supports a Director of Medical Student Research, the Summer Research Fellowship Program, and medical education internships for students.

**Health Equity and Social Justice:** When it comes to recognizing the important role of physicians in addressing social justice and health equity, the Larner College of Medicine leads the way. Members of the student-led Social Justice Coalition have worked closely with faculty to ensure students learn about social determinants of health in meaningful ways throughout our curriculum.

**Interprofessional Education:** Larner has strong relationships with other colleges at UVM, including Continuing Medical and Interprofessional Education and the College of Nursing and Health Sciences. With our curriculum infrastructure in place, we have the unique opportunity to share our active learning resources and knowledge with colleagues across UVM.

As the College breaks new ground in medical education, we must keep an eye on outcomes and assessment to ensure that students are continuing to receive the highest quality medical education. We're optimistic about the trajectory the Larner College of Medicine has set, and we invite you to learn more about the programs, students, and faculty who make it all possible.

# ART + SCIENCE

# **Medical Student Education Report 2019**

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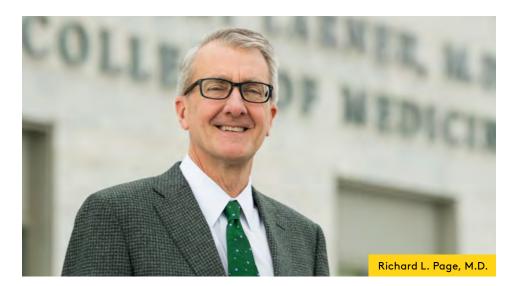




Photography: Andy Duback, Dave Seaver

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# HIGHLIGHTS



# New Dean Richard L. Page Charts a Course for the Future

On October 1, 2018, Richard L. Page, M.D., took office as the 18th dean of The Larner College of Medicine at the University of Vermont. He comes to the role after having served as chair of the Department of Medicine at the University of Wisconsin School of Medicine and Public Health for nine years. With more than 200 publications, articles, and book chapters, Dr. Page has served on numerous national committees. He is a Fellow of the American Heart Association, having chaired their Council on Clinical Cardiology, and is a Fellow of the Heart Rhythm Society, where he served on the board from 2001 to 2012 and was president from 2009 to 2010. Read more from Dean Page about his vision for the College moving forward.

# On the College's commitment to professionalism:

"Everyone should feel that they are in an environment where they can do a job, be respected, and be around others who are committed to treating each other—our colleagues and collaborators, our patients, people who work for us, and the people we work for—in a professional manner. It makes patient care better when individuals are setting a fully realized example for others. This is an area that first became a focus for me when I was chief of cardiology at the University of Washington; I carried this priority with me to Wisconsin as well. Professionalism has to be a core value of educators, scientists, and caregivers.

Because of medicine's great importance in people's lives—in literally sustaining people—that power has to be handled responsibly, and with humility. It's what we have to expect of ourselves, and it has to be the environment we provide for each other. I've been delighted with the resonance that I've found here for this emphasis, and appreciative of the work of our Professionalism Statement Task Force and many other members of our community on this issue."

# On the College's mission to serve the community:

"I've been deeply impressed by our students' commitment to social medicine and social justice in medicine. We have an obligation: I consider health care a right, and inclusive, culturally humble health care is mandatory. We want all patients to feel comfortable and welcome here, and we need to know how to provide the best possible environment for each and every individual who looks to us for care, and who comes here to learn. That has to do with all of us being aware. That work is ongoing, though a good deal has already occurred, including curricular enhancements and modifications to address social issues. I've been encouraged by the commitment of the faculty to community engagement. It's our obligation. We are embedded here, and we need to make a difference in the community in every way we can."

# STEWARDS OF THE ART & SCIENCE OF MEDICINE

On May 1, 2019, students, faculty, and staff gathered for a celebration of the College's new statement on professionalism—drafted by a 12-member task force chaired by **Debra Leonard, M.D., Ph.D.**, professor and chair of Pathology and Laboratory Medicine:

OUR LARNER COLLEGE OF MEDICINE COMMUNITY UPHOLDS THE HIGHEST STANDARDS OF PROFESSIONALISM AS WE FOLLOW OUR PASSION FOR LIFELONG LEARNING AND IMPROVEMENT. WE DEMONSTRATE PROFESSIONALISM THROUGH INTEGRITY. ACCOUNTABILITY, COMPASSION **RESPONSIBILITY.** WE HONOR THE TRUST OUR SOCIETY HAS PLACED IN US AS STEWARDS OF THE ART AND SCIENCE OF MEDICINE. RELYING ON **CULTURAL HUMILITY, KINDNES** AND RESPECT TO GUIDE OUR DAILY INTERACTIONS. WE EXPECT ALL MEMBERS OF OUR COMMUNITY TO EMBRACE THESE PRINCIPLES OF PROFESSIONALISM AS WE STRIVE TO CONDUCT AND SUPPORT PATIENT CARE RESEARCH. AND EDUCATIOI THAT ARE SECOND TO NONE.





# A NEW ERA IN PATIENT CARE

On June 1, 2019, the UVM Medical Center celebrated the opening of the new Robert E. and Holly D. Miller inpatient building. Under construction since 2016, the project marks the first major upgrade to the medical center's inpatient facilities since the mid-1980s. The seven-level, 180,000 square foot building offers vastly improved spaces for education of medical students and is designed to improve the quality of care and the experience of patients and their families by increasing the number of private patient rooms from approximately 30 percent to nearly 90 percent. Named for Vermont philanthropists Bob and Holly Miller, who provided the lead gift for the project, the building commemorates the couple's long-standing commitment to improving the health and wellbeing of community members. Besides the Millers, nearly 1,400 other individuals donated to fund the building.

# **Success in Residency**

The UVM Larner College of Medicine surveyed 106 Class of 2018 graduates who matched into residency as well as their residency program directors. Graduates earned high marks for their clinical acumen and professionalism.

From a Class of 2018 Graduate:

UVM HAS A
UNIQUE FOCUS
ON HUMANISM
IN MEDICINE
NOT FOUND
AT MANY OTHER
INSTITUTIONS.
I NOTICED I WAS
WELL ABOVE MY
PEERS IN THIS
REGARD THANKS
TO MY TRAINING
AT UVM."

93.9%

Percentage of Class of 2018 graduates rated as "prepared" or "more prepared" than their peers by residency program directors for interpersonal/communication skills

93.2%

of residency program directors agreed or strongly agreed with the statement: "Overall, I am satisfied with the preparation of this resident."

# **High Marks for Teaching**

Teachers and mentors who emphasize compassion and respect: One theme from student responses to the 2018 Year Two Questionnaire from the Association of American Medical Colleges. Larner College of Medicine faculty earned praise for their skill as instructors and their engagement with students.

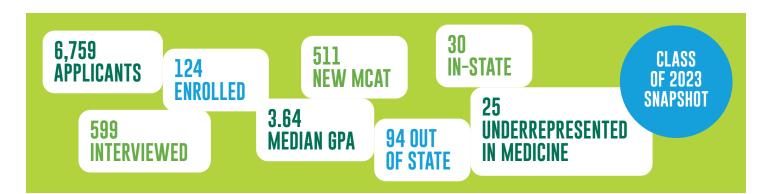


"The goal of our faculty is clearly to develop us into competent, aware, caring, and passionate physicians. This is shown to me by the way that they teach us, what they teach us, and their passion behind their teaching. It is truly their goal for us to do well and to be happy doing so."

"I have come to believe that my school supports students above and beyond other schools; faculty are available for academic support and fun. This is a good place to be a student."

"My medical school community is extremely accepting and engaged in student learning. All of the faculty want students to feel comfortable and succeed."

# HIGHLIGHTS



# College Welcomes First Connecticut Branch Campus Cohort

The UVM Larner College of Medicine Class of 2023 was the first to choose their preference for where they would like to complete the Clerkship and Advanced Integration levels of the Vermont Integrated Curriculum: Either at the UVM campus in Burlington, Vermont, or the College's branch campus in Connecticut. The 35 students headed to Connecticut represent a diversity of backgrounds and experience.

# A DIVERSE CONNECTICUT COHORT

The percentage of students who are underrepresented in medicine, from a rural location, identify as LGBTQ and/or are a 1st generation medical student.

Larner College of Medicine Class of 2023

124
students

- $\bullet$  This is an increase of four students
- An additional two seats are reserved for Vermont residents

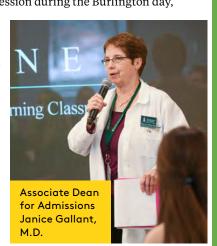
## CLOSER LOOK DAY

The Larner College of Medicine hosted two successful Closer Look Days: A well-attended event on campus in Burlington, and for the first time, an event in Connecticut

for students interested in completing the Clerkship and Advanced Integration levels of the Vermont Integrated Curriculum at the College's branch campus. Each day included ample time to ask current students questions as well as tour facilities. Students in Connecticut participated in video conference calls with leaders at the Burlington campus. A session during the Burlington day,

led by Paula Tracy, Ph.D., and Stephen Everse, Ph.D., gave prospective students the opportunity to experience active learning at the Larner College of Medicine. An invitation to family members to attend Closer Look Days helped many make their final decisions.

MY PARENTS JOINED
ME AND HAD AN AMAZING
TIME; IT SOOTHED THEM TO
SEE HOW UVM TAKES CARE
OF ITS STUDENTS!"



# COMPUTER-BASED ASSESSMENT FOR SAMPLING PERSONAL CHARACTERISTICS

An online test has been adopted by the admissions team to help assess the non-cognitive skills and interpersonal characteristics of applicants prior to inviting them for an interview day. Called CASPer, or Computer-Based Assessment for Sampling Personal Characteristics, the test includes 12 video and written scenarios. with corresponding questions after each section. The goal is to provide the College additional information related to an applicant's ability to empathize, their ethical judgment, their motivation, and their communication skills—all key competencies assessed through the College's multiple mini interview process.

# Diverse Experts Come to Campus

The Larner College of Medicine hosted a range of guest speakers over the past year who brought a diversity of experience and expertise to campus. Talks focused on trans affirmative healthcare, health disparities, and innovative public health approaches to combat the opioid epidemic.

>> On January 23, 2019, Herman A. Taylor, Jr., M.D., (right) professor of medicine and director of the Cardiovascular Research Institute at the Morehouse School of Medicine, presented the annual Health Equity Lecture in honor of Martin Luther King Jr. Day. His presentation was titled "Risk, Race & Resilience: Three Dimensions of Health Disparities." A nationally-recognized cardiologist leader, over the last decade Taylor has focused predominantly on preventive cardiology and leadership of the landmark Jackson Heart Study , the largest epidemiological study of African Americans and cardiovascular disease of its kind ever undertaken.



Vito Imbasciani,
Ph.D., M.D.'85 and George DiSalvo LGBTQ
Health Equity Lecture featured Rachel
Inker, M.D., (inset) a family medicine
physician and the lead provider for the
Community Health Centers of Burlington
Transgender Health Clinic. Her talk on
October 17, 2018, was titled "Trans Health
in Vermont: Providing Trans Affirmative
Healthcare in a Small Rural State."

in Building a Humanistic Response?" was the theme for this year's annual Cultural Awareness Conference on February 20, 2019. Several panel presentations brought community members, leaders from non-profit organizations and healthcare providers together to discuss the scope of the opioid epidemic in Vermont as well as present evidence-based interventions and share resources.

# College Names First Gender Equity Liaison



Anne Dougherty, M.D., was appointed Gender Equity Liaison in the Office of Diversity and Inclusion at the Larner College of Medicine. In this new role, Dougherty,

who is an assistant professor of obstetrics, gynecology and reproductive sciences, is responsible for improving the experiences of women faculty at the College. Dougherty has oversight for the development and implementation of programs aimed at increasing the number of women faculty hired and promoted, as well as supporting retention and improving job satisfaction among women faculty. Dougherty joins colleagues in the Office of Diversity and Inclusion including Maria Mercedes Avila, **Ph.D.**, health equity inclusive excellence liaison, Eileen CichoskiKelly, Ph.D., academic excellence liaison, Tiffany Delaney, MA.Ed., diversity and inclusion director, Michael Upton, M.D., faculty development liaison, and Margaret Tandoh, M.D., associate dean for diversity and inclusion.

# **SHARING ADMISSIONS DIVERSITY INITIATIVES**

- The UVM Larner College of Medicine admissions team, including Cary Jewkes, M.Ed., admissions director, and vice chairs of the admissions committee Raiel Barlow, M.D., and Laura Greene, M.D., hosted a presentation titled, "You've Been Invited: Selecting Applicants for Interview," at the 2019 Association of American Medical Colleges Northeast Group on Student Affairs annual meeting with colleagues from Drexel University College of Medicine, Albany Medical College and Icahn School of Medicine at Mt. Sinai. The presentation focused on the adoption of dockets as a way to sort applications into pools of similar applicants for review. The goal is to use them to create a screening process that aligns most closely with the College's diversity and inclusion statement.
- Members of the admissions team hosted an abstract presentation, titled "Impact of Gender, Experiences, Reflectivity, and Critical Analysis on Multiple Mini Interview Scores in Admissions," as part of "Highlights in Medical Education" at the AAMC Annual Learn Serve Lead Meeting in Austin, Texas. Authors include Laura Greene, M.D., Leigh Ann Holterman, Ph.D., Raiel Barlow, M.D., Alison Howe, M.S., Elizabeth McElhinney, M.Ed., Cary Jewkes, M.Ed., Kathryn Huggett, Ph.D., and Janice Gallant, M.D.
- Raiel Barlow, M.D., Laura Greene, M.D., Cary Jewkes, M.Ed., Elizabeth McElhinney, M.Ed., Janice Gallant, M.D. and Cate Nicholas, Ed.D., M.S., P.A., presented a workshop titled, "How we successfully 'flipped' our Multiple Mini Interviewer Training," at the 2018 Northeast Group on Educational Affairs Annual Conference in Hempstead, N.Y.

# HIGHLIGHTS

# Leadership in Global Health

The Global Health Program at the Larner College of Medicine hosted its annual "Celebration of Global Health" from April 24 to April 29, 2019. The celebration included panel presentations, a poster session, and an awards ceremony and reception during which members of the College community were recognized for their humanitarian efforts, passion for health equity, and leadership in global health.

### GLOBAL HEALTH LEADERSHIP AND HUMANITARIAN AWARD

- Sheila Chamberlin, C.O., orthoptist and surgical assistant in the Department of Surgery
- Maria Mercedes Avila, Ph.D., associate professor of pediatrics, health equity and inclusive excellence liaison, and director of the Vermont Leadership Education in Neurodevelopmental Disabilities Program

### CITIZEN OF THE WORLD AWARD

 Tendai Chiware, M.D., clinical instructor and obstetrics, gynecology and reproductive sciences fellow

### **GLOBAL HEALTH EDUCATION AWARD**

• Molly Moore, M.D., assistant professor of pediatrics



The celebration also included two panel discussions:

- "Women in Global Health," with panelists Margaret Tandoh,
  M.D., associate dean for diversity and inclusion and assistant
  professor of surgery; Tendai Chiware, M.D., clinical instructor
  and obstetrics, gynecology and reproductive sciences fellow;
  and Anna Zuckerman, M.D., pediatrics resident
- "Academic Collaboration in Global Health," with panelists
   Thomas Willson, M.D., assistant professor of surgery; Sheila
   Chamberlin, C.O., orthoptist and surgical assistant in the
   Department of Surgery; Maria Mercedes Avila, Ph.D.,
   associate professor of pediatrics, health equity and inclusive excellence liaison, and director of the Vermont Leadership
   Education in Neurodevelopmental Disabilities Program



# **GLOBAL HEALTH BY THE NUMBERS**

22

Number of global health leaders and scholars from international partner sites who trained at or visited the Connecticut Branch Campus and the Larner College of Medicine.

364

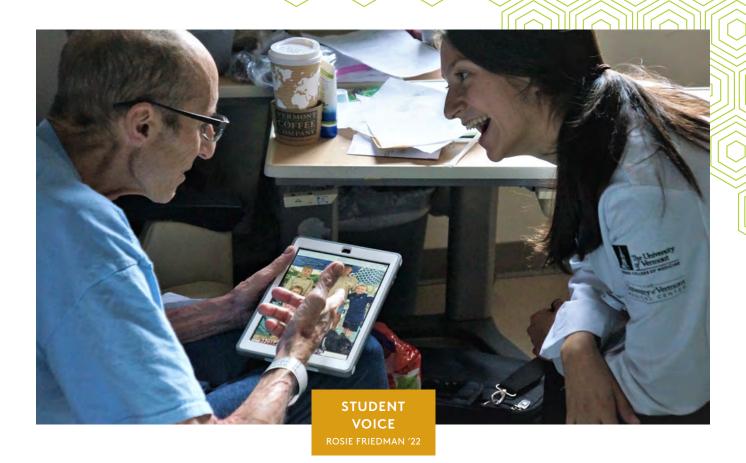
Number of weeks that faculty, fellows, residents, and medical students from the United States spent at international partner sites in the Global Health Program.

149

Number of weeks that global health leaders and scholars from international partner sites were hosted by the Global Health Program.

106

Number of faculty, fellows, residents, and medical students from the Connecticut Branch Campus and the Larner College of Medicine who participated in the Global Health Program at international partner sites.



# **The Power of Being Present**

In the first-year course Professionalism, Communication and Reflection, students have the opportunity to spend time with patients at UVM Medical Center with a singular goal in mind: Getting to know them as people. After her visit with "Mr. B.," Rosie Friedman '22 (above, right) comes to some profound realizations about the importance of listening and building meaningful relationships as she prepares for her career as a physician.

r. B wore an oversized shirt that read "Dad knows a lot but Grandpa knows everything." When I first sat down across from him, he began telling me about his cancer. He bluntly described his situation without any sugar-coating in an "I've got a few weeks left until I kick the bucket" kind of way. In the middle of his story, he paused and asked me what he was supposed to be talking about in our hour together.

I was there as part of the Professionalism, Communication and Reflection course at the UVM Larner College of Medicine, with a goal to get to know a patient in my first few weeks of medical school.

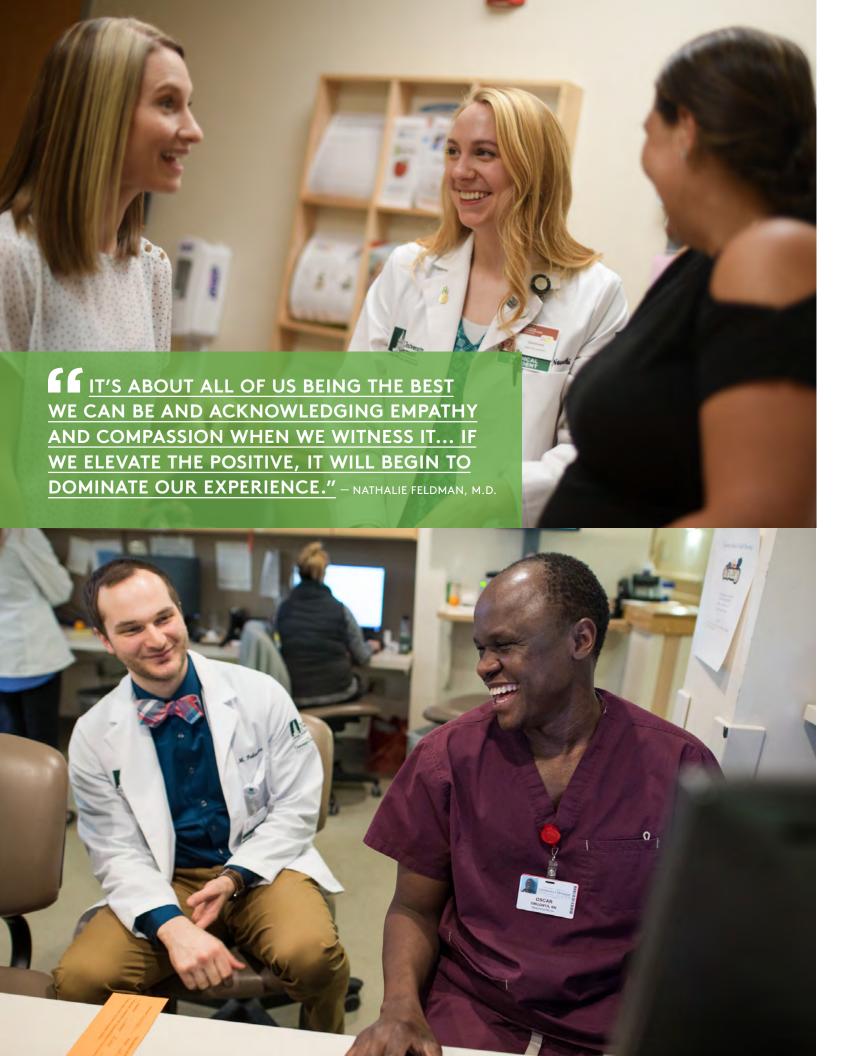
As a first-year student, I couldn't offer any medical advice. I responded that he was free to chat about anything on his mind, as I was there simply to listen. His eyes immediately lit up and with this new sense of freedom, he completely changed

directions. He started telling stories about camping trips with his family, his grandson's first day of Cub Scouts, the day his youngest daughter was born, and memorable drives up to Maine with his wife. He supplemented the stories with photos of his friends, wife, kids, grandkids, and even of the family dogs. Reflecting on his memories with his loved ones, he teared up, and I did too.

Eventually, we circled back to his illness. Just prior to our encounter, Mr. B had been given a prognosis of about three weeks left to live. I asked him how he planned to spend his remaining time in the hospital and his response was, "talking to anyone who's willing to listen." It wasn't until that moment I realized how valuable my presence alone was to Mr. B. Although his illness is what brought him to UVM Medical Center, it wasn't the main topic on his mind that evening. Mr. B chose to use our time to tell me the memoirs of his

loved ones, as they were what gave his life meaning. Simply sharing his stories with me brought him a renewed sense of purpose, and his joy was infectious.

Initially, I had identified Mr. B in my head as cancer patient on Baird 4. However, after one hour of listening he became so much more: He was a giving husband, dedicated father and grandfather, adventurer and entrepreneur, with a dry sense of humor and an appreciation for Burlington sunsets. The conversation I had with Mr. B represents the kinds of discourse from which meaningful relationships are built. Though learning his perspective as a patient helped inform his medical care, learning his perspective as a person was invaluable in getting to know who he really was. I'm grateful to have had Mr. B as my first patient, as our experience instilled in me the power of listening and being present with others. It reminded me that being an exceptional doctor and "caring for" patients means more than prescribing treatment based on my scientific knowledge. It means combining that knowledge with empathetic attunement to what my patients really need.



# Kindness, Respect, Cultural Humility

A Focus on Building Positive Professional Identities

athalie Feldman, M.D., seeks to celebrate kindness and compassion in the medical profession. As director of the learning environment for the UVM Larner College of Medicine, she's developed an innovative program that not only does the important work of addressing learner mistreatment, but helps medical students find role models as they forge their own identities as physicians.

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

A professionalism statement created under the direction of **Dean Richard L. Page, M.D.**, underscores how the College approaches this work. After a 12-member task force created the statement with input from faculty, staff and students, the community came together on May 1, 2019, to celebrate the statement's launch.

"Professionalism must be a core value of educators, scientists, caregivers, and all those who work in medicine and science," says Dean Page. "Because of medicine's great importance in people's lives—often literally sustaining them—that power has to be handled responsibly, and with humility."

Honoring caregivers and teachers has been one way to keep these values front and center, embodied in the new statement and complementary initiatives spearheaded by Feldman and supported by the College's Office of Diversity and Inclusion and Learning Environment and Professionalism Committee (LEAP). For every course evaluation in the

Foundations, Clerkship and Advanced Integration levels of the Vermont Integrated Curriculum, the College recently added two questions. One asks students to highlight a faculty member who exemplifies professionalism. Quotes from student testimonials are gathered and sent to recipients of these accolades. The goal is two-fold: recognize and acknowledge faculty, residents, staff and students who have had a positive impact on others and help students identify role models for the kind of doctor they hope to become.

The second new question asks students to address any instances of potential mistreatment or unprofessional behavior they may have observed. Students explore how they perceived the action and through a confidential reporting process receive support if desired. Through this system, trends and themes can be identified, empowering the College to provide education and professional development related to enhancing the learning environment. "Giving voice to our students provides an opportunity for them to engage in the process of improvement," says Feldman.

Another innovation aimed squarely at building bridges and finding common ground in an environment that can be high stakes and high stress: Cup of Coffee Conversations, a peer support model first developed at Vanderbilt University to address unprofessional behavior in hospital settings. The LEAP committee is adapting this model to the learning environment in medical education. Although Feldman is always available to address issues regarding mistreatment

in a confidential setting, the Cup of Coffee Conversation allows community members to come together, in a non punitive way, to engage in dialogue when a misunderstanding or miscommunication occurs. The peer-mediated model gives the involved parties the "power to be the change agent," Feldman says.

A learning environment curriculum utilizing videos developed and filmed at UVM Medical Center has helped to export the College's approach to professionalism to other institutions. The films—one focused on the experience of medical students and the other on faculty, staff and residents depict instances of potential mistreatment. After viewing the films, audiences engage in facilitated dialogue around represented themes. The curriculum, which is available on Med Ed Portal, has been integrated into the third-year clerkship orientation as well as the residency orientation at UVM Medical Center. Institutions including Yale University, Columbia University and the Mayo Clinic have adopted these materials for GME orientation and faculty development series. Presentations at national conferences including the International Association of Medical Educators Annual Meeting have sparked interest in medical schools around the globe.

"The curriculum is intended to bring everyone back together in dialogue," Feldman says. "Our hope is to help facilitate dialogue and engagement among all members of the health care team in the life long learning task of helping one another be the very best we can be in the care of our patients."

# Learning "About, From & With"

Interprofessional Education in the Health Sciences

'n the fall of 2018, more than 400 students from different health science professions came together over the course of three evening sessions to care for a dying patient—virtually. Medical and nursing students, physical therapy doctoral candidates, social workers-intraining, speech pathology trainees and pharmacy students from the Albany College of Pharmacy watched standardized patients on screen as they played the roles of a patient with amyotrophic lateral sclerosis, family members, and health care providers. The students, seated in small groups, discussed what they witnessed in the video. They talked about emotions the scene evoked, where communication broke down, where the team excelled, and how they'd work together in a similar situation.

The workshop—led by **Mary Val** Palumbo, D.N.P, APRN, director of interprofessional education (IPE) at the UVM College of Nursing and Health Sciences—is just one example of the future of IPE at the University of Vermont. As the needs of patients become increasingly complex, teams that span the health professions are critical to delivering high quality patient care. The trend nationally is towards more integration: In 2009, six national associations of schools of health professions formed the Interprofessional Education Collaborative to prepare future health professionals for team-based care focused on prevention and population health. Revised key competencies published in 2016 have become the gold standard for the field.

One faculty member who is moving the needle forward at UVM: Interprofessional Education Visiting Scholar **Nancy LeMieux, MSN, RN, CHSE**, a clinical instructor in the UVM College of Nursing

and Health Sciences. She will serve in this position, supported by the Larner College of Medicine's Teaching Academy and the UVM College of Nursing and Health Sciences, until July of 2020.

She's tasked with advancing IPE through faculty development and student learning activities, as well as tracking existing IPE curricula and providing support and coaching to faculty who are designing activities. It's important that faculty and students learn "about, from and with" each other as they engage in the work. The overlap with the Larner College of Medicine's emphasis on active learning provides additional opportunity.

"This is fertile ground for first developing foundational communication and teamwork skills and understanding the roles and responsibilities of other health care professionals," she says.

"Later in curricula, students in clinical settings collaborate to bring the unique contributions of each profession to the care of patients. Our ultimate goal is to prepare health professions students for interprofessional collaborative practice when they enter the workforce."

One state of the art tool: The UVM Clinical Simulation Laboratory (CSL), which has been a hub of IPE since its opening in 2011. Two-day CSL workshops that introduce faculty to the power of simulation as a tool for IPE have led to many fruitful collaborations. Cate Nicholas, Ed.D., M.S., P.A., director of education and operations for the CSL and assistant professor of obstetrics, gynecology and reproductive sciences, says the space lends itself to stepping outside of your comfort zone.

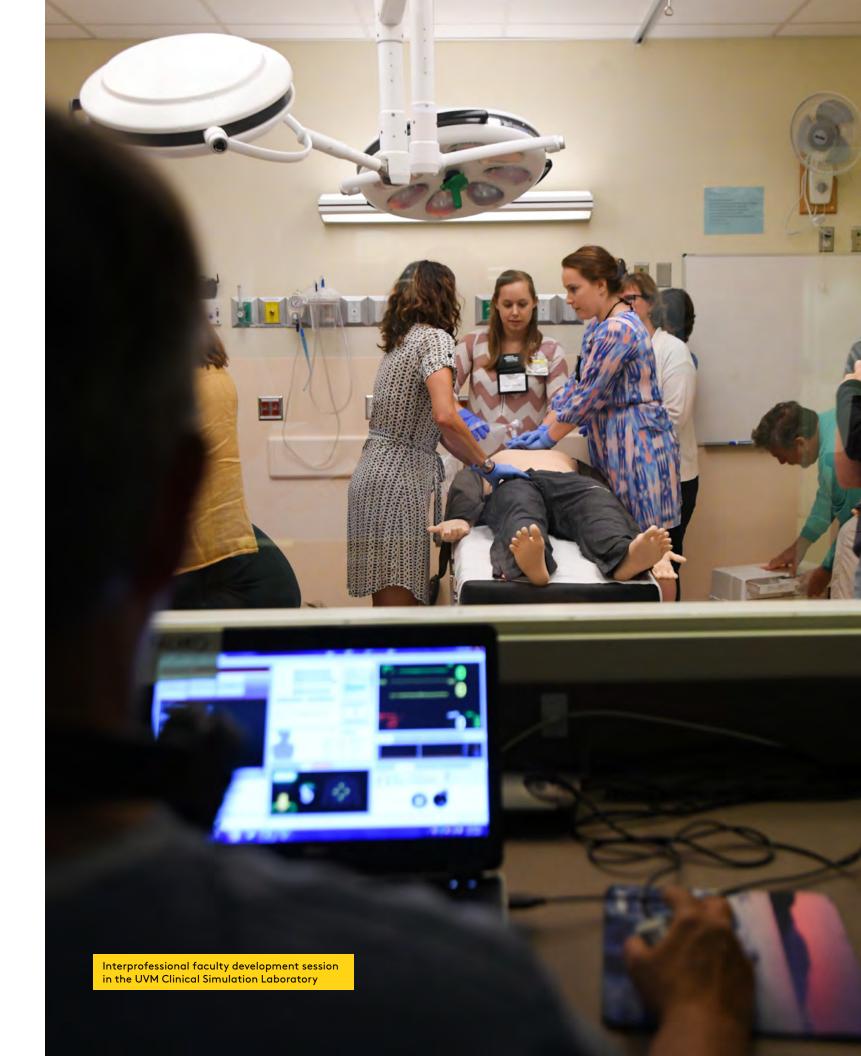
"A simulation experience is neutral ground," she says. "Learners start to

identify where some of their synergies lie."

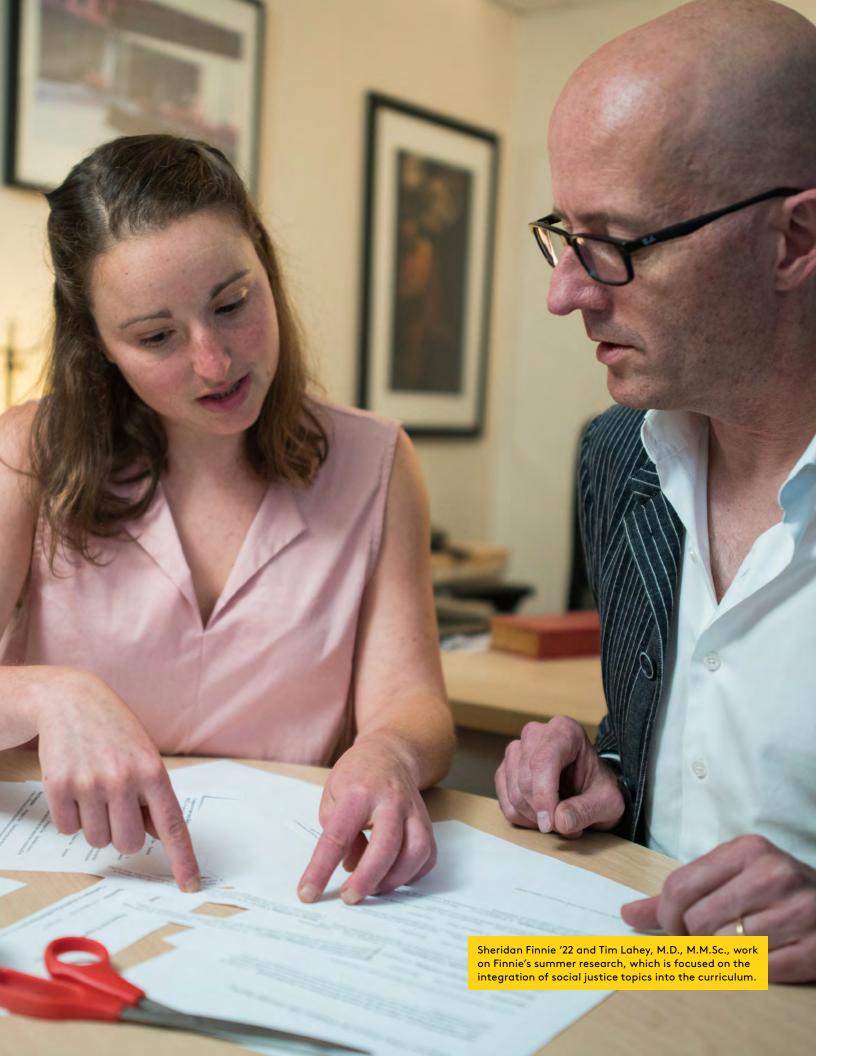
The annual Cultural Awareness Conference has been a mainstay of IPE for 18 years. Originally founded as an event for family medicine residents, attendees now include first-year medical students, advanced practice nursing students, dental students, family medicine residents, and pharmacy students from the Albany College of Pharmacy and Health Sciences, with support from the Office of Primary Care, Office of Diversity and Inclusion, the Department of Nursing, the Department of Family Medicine, and the Albany College of Pharmacy. In 2019, the half-day conference focused on opioid use disorder, while past topics have included human trafficking, adverse childhood experiences, and wealth and poverty in Vermont. The conference is designed to foster dialogue and collaboration, says Martha Seagrave. PA-C, associate professor and director of medical student education programs for the Department of Family Medicine.

In the fall of 2019, the CNHS
Interprofessional Education Steering
Committee will host the third annual
"Introduction to IPE and Collaborative
Care" event for students from programs
including athletic training, physical
therapy, counseling, medicine, pharmacy,
nursing, and others. Small group activities
keep the focus on students learning from
each other, says Seagrave, laying the
groundwork for a team-based approach
throughout their careers.

"Evidence shows that when teams work well together and are more collaborative, then patients do better," Seagrave says. "Team members are happier as well, which leads to better outcomes."■



10 MEDICAL STUDENT EDUCATION 2019



# A Passion for Research

Students Contribute New Knowledge

ould a common blood pressure medication be useful to help prevent melanoma in patients who are genetically susceptible to the skin cancer? When it comes to stroke risk, can we identify biomarkers to help protect patients, particularly those who smoke? How are students and faculty benefitting from the roll-out of social justice topics throughout the first year of the Vermont Integrated Curriculum?

Students at the Larner College of Medicine are making real contributions to research in all of these areas, thanks to robust research fellowship programs, engagement in a fourth year requirement, and a plethora of enthusiastic faculty mentors.

The College's Summer Research Fellowship Program has grown exponentially in recent years, says **Renee Stapleton**, **M.D.**, **Ph.D.**, professor of medicine and director of medical student research. In 2019, the program received 34 applications and was able to fund all of them, up from about 15 fellowships just five years ago. This total includes three students funded through the Cardiovascular Research Institute

"Students spend the summer with their mentor doing research, and they submit a final report in September," Stapleton says. "Many students write an abstract and present posters at meetings, and publish their work in a journal. They get a really solid academic experience out of it."

With support from the UVM Larner College of Medicine Fund, the seven-week Summer Research Fellowship has become a sought-after opportunity for students looking to take a deep dive into an area of interest.

One example: **Sheridan Finnie '22**. who entered the Larner College of Medicine with a public health degree from Yale and a passion for research. She quickly became engaged in the College's Social Justice Coalition—a student group formed to explore new ways to integrate social justice themes into the curriculum—and volunteered to assess how the changes were perceived by students and faculty. She teamed up with Tim Lahey, M.D., M.M.Sc., professor of medicine and UVM Medical Center's director of clinical ethics, to conduct faculty and student surveys and analyze data both quantitatively and qualitatively. She and Lahey plan to publish the research, as the College has much to teach other institutions.

"We're doing this research in the ethic of a needs assessment," she says. "Now that the pilot year is behind us, how can we move this forward in a sustainable and institutionally-supported way?"

Summer grants also open doors to clinical research. **Juan Conde '21** used his summer research fellowship from the Cardiovascular Research Institute of Vermont to focus on stroke, the fifthleading cause of death in the United States according to the CDC. With mentor **Mary Cushman, M.D., M.Sc.**, professor of medicine, he analyzed data from 30,000 participants in a national study to identify biomarkers to help clinically predict who amongst smokers is at a higher risk of stroke. The work earned him a CVRI Summer Research Fellowship Merit Award.

Beyond summer opportunities, a longitudinal research emphasis—founded

through a 2016 Frymoyer Scholar Grant awarded to Stapleton and former UVM faculty member Amy O'Meara, D.N.P.— allows medical and doctor of nursing practice students to learn more about the research process, from applying for grants and Institutional Review Board approval to data analysis and the publication process.

And many students return to research in their final year of medical school through the Teaching/Scholarly Project course. Directed by Eileen CichoskiKelly, Ph.D., academic excellence liaison for the Office of Diversity and Inclusion and associate professor of family medicine, the course requires students to either serve as a teaching assistant or complete a scholarly project with guidance from a faculty mentor. Historically, about 25 percent of the class chooses research. Some return to a topic from their summer research fellowship or Public Health Project, a required second-year course where they work with community partners in small groups. Not only does this help prepare students for competitive residencies, it widens their understanding of what is possible in their careers.

"I want students to do what they're passionate about," says CichoskiKelly. This flexibility has translated into a diversity of projects, from designing learning modules now integrated into the curriculum, to quality improvement projects, to clinical research focused on everything from care for transgender youth to potential new preventive measures for melanoma.

For Stapleton, the burgeoning scholarly engagement of students heralds an encouraging trend, one that sets UVM up as a continued national leader in research.

# Addressing Social Justice, Promoting Health Equity

Integrating the Social Determinants of Health into the Curriculum

rom the tiniest ticks of genetic expression to the sweep of organ systems, medical students gain a deep understanding of human body function. They spend hundreds of hours learning how to use tools and technologies, from stethoscopes to point of care ultrasound, to deliver the best patient care they can. However, when it comes to thorny societal issues like the intersection of race and class in medicine, unequal access to health care, and the outsized toll chronic disease can take on marginalized populations, medical students have historically had little opportunity to engage.

Faculty and students at the UVM Larner College of Medicine are working collaboratively to change how the social determinants of health are integrated into a medical education curriculum. They're naming the systemic challenges that affect health and well-being as squarely within the physician's purview to address. By extension, they're inviting the medical establishment to step up, with Larner students poised to lead the way, says **Shaden Eldakar-Hein, M.D.**, associate professor of medicine and course director for Professionalism, Communication and Reflection (PCR).

"To hear the first-year students talking about the social determinants of health is promising," she says. "They're thinking about it now, starting at the beginning, instead of working backwards."

Students themselves asked for the opportunity to confront these issues. Some members of the Class of 2021 founded a book club amongst friends that evolved over time into a group called the Social Justice Coalition, reigniting discussions about the role of the physician in addressing health equity. Students began conversations with faculty including Foundations Director **Karen Lounsbury**,

**Ph.D.**; Foundations of Clinical Sciences Course Director **Stephen Everse**, **Ph.D.**; UVM Medical Center Director of Clinical Ethics and UVM Professor of Medicine **Tim Lahey, M.D., M.M.Sc.**; and **Eldakar-Hein**. Together, they sought out opportunities to develop course content.

The key to the curricular changes has

been integration: A pilot for the 2018-19 academic year linked topics in the 18-week Foundations of Clinical Sciences course with discussion topics in PCR and casebased work for the 13 sessions in the ethics curriculum. A Theme of the Week ties all three components together. For example, coursework on molecular genetics is paired with a Theme of the Week focused on the genetic basis of race. In PCR, students complete an implicit bias test and discuss readings related to racism in medicine. In ethics discussions, led by Lahey and Eldakar-Hein, students debate a real case that gets at some aspect of race and the role of a physician.

"The goal is for students to be thinking about these topics as they go along," says Lounsbury, building awareness of the connections between social issues and health as they develop their identities as physicians. "It's important for students to bring this consciousness to their work," says Lahey. "So many topics intersect, from historical injustice to healthcare disparities, ethics and beyond. This is about professionalism. This is about quality improvement and public health. These are also neglected topics that are intimately important to the day-to-day work that almost all physicians do."

Faculty development will continue to be important. Lahey's keynote presentation at the Teaching Academy's annual Mud Season Retreat—titled "How Should We Prepare Students to Fight Clinically Impactful Injustice?"—set the stage for one

track devoted to teaching for social justice, with topics like understanding implicit bias and social medicine teaching techniques.

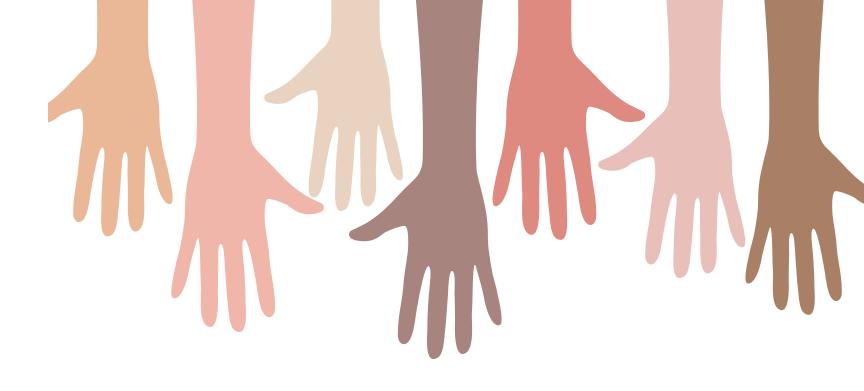
For Eldakar-Hein, she sees the College community connecting in meaningful ways. PCR has long been a hub for that type of engagement, as students meet in small groups with a faculty mentor every week for 42 weeks.

"We are all in our own silos of divisions and departments," she says. "How can we standardize our teaching and teach each other?"

Students, faculty, and the broader College community continue to move efforts forward. A group including Nikkole Turgeon '22, Richard Brach '22, Nina Dawson '21, Raghav Goyal '21 and Sam **Epstein '21,** with Lounsbury as faculty advisor, recently presented on "Aligning Medical Education for Healthcare Providers with Social Medicine Pedagogy: A Concept in Practice" at the Social Medicine Consortium Conference in Chiapas, Mexico on June 1, 2019. Sheridan Finnie '22 leads research to assess faculty and student perceptions of the Theme of the Week and related social medicine content, with Lahey as mentor for the project funded by a Summer Research Fellowship. Faculty advisors for the Social Justice Coalition. including Lahey, Eldakar-Hein, Michael Upton, M.D., and Maria Mercedes Avila, Ph.D., continue to be instrumental in guiding discussions about how social issues affect health and well-being.

There's a direct line between engaging future physicians in this work, promoting professionalism, and preventing burnout.

"Our students show up ready to change the world. If we empower our students to really make a difference, to keep their values alive during medical training, they're more likely to actually change the world after they graduate," Lahey says.



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MEDICAL STUDENT EDUCATION 2019

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:

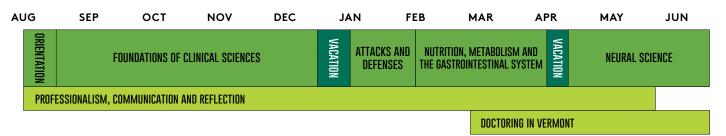
# **Advanced Integration Level**

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

## **Level 1: Foundations**



JAN

CONVERGENCE

VACATION

### **Level 1: Foundations**

SEP

PUBLIC HEALTH PROJECTS

OCT

CARDIOVASCULAR, RESPIRATORY

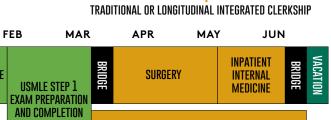
NOV

DEC

HUMAN DEVELOPMENT AND

AUG

CONNECTIONS



LONGITUDINAL INTEGRATED CLERKSHIP:

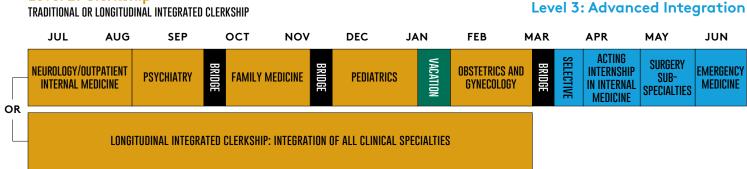
INTEGRATION OF ALL CLINICAL SPECIALTIES

Level 2: Clerkship

## Level 2: Clerkship

DOCTORING IN VERMONT





# **Level 3: Advanced Integration**

JUL	AUG	SEP	ост	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	GRADUATION TRANSITIONS AND PRESENTATIONS

# Years 1 & 2:

ACTIVE

LEARNING

INDEPENDENT

**LEARNING** 

# **Foundations** Level

Vermont Integrated Curriculum focuses on the development of

EVALUATION

SYNTHESIS

**ANALYSIS** 

**APPLICATION** 

COMPREHENSION

KNOWLEDGE

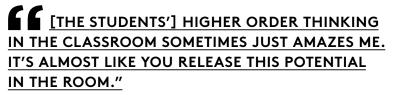
# Active Learning Fosters Teamwork, Collaboration

From the very first days of medical school during the one-week Orientation course, through to the final days before heading off to clerkship, students in the Foundations level of the Vermont Integrated Curriculum experience active learning at every step of the way. With support from the College's active learning team and Teaching Academy, course directors and faculty now employ five core active learning modalities with standard operating procedures in all 12 courses.

Instructional designers work closely with individual faculty to design sessions best suited to the material they're addressing. Learning modules completed ahead of in-class activities get students ready for the application of knowledge and set the stage for success, says Foundations Director Karen Lounsbury, Ph.D., professor of pharmacology.

"Students are prepared when they come into class to integrate what they've learned," she says. "Instead of listening to a lecture and then studying, they learn the material first and then they apply it. It's like the difference between reading about driving and driving a car. With active learning, you're driving a car with the instructor in the seat next to you."





- REBECCA WILCOX, M.D., NUTRITION, GASTROINTESTINAL AND METABOLIC SYSTEMS COURSE DIRECTOR

## **Meet the New Course Directors**

**Neural Sciences Course Director Deepak** Gupta, M.D., assistant professor of neurological

Medical School: Delhi Maulana Azad Medical

Neurology Residency: Case Western Reserve University

Movement Disorders Fellowship: Columbia University Vagelos College of Physicians and Surgeons



Cardiovascular, Renal and Respiratory Systems Course Director Andrew Hale, M.D.

assistant professor of medicine Medical School: Tufts University School of Medicine

Internal Medicine Residency: Beth Israel Deaconess Medical Center

Infectious Disease Fellowship: Beth Israel Deaconess Medical



## The Larner Experience

# **Building Awareness** and Empathy

College

What does it feel like to experience vision loss? What are some of the barriers to access when using a wheelchair? Students in the Class of 2021 had the opportunity to consider these questions and many more as part of Disability Awareness Day, an event that has been part of the Human Development and Reproductive Health course curriculum for more than 15 years. Through a series of simulations and panel discussions, students "gain a greater awareness of the health issues faced by people with disabilities and learn of some ways in which they can improve their practice in the future," says UVM Professor Emeritus of Pediatrics Stephen Contompasis, M.D.





Excellence in Public Health awardees, L to R: Jill Jemison, Jan Carney, M.D., M.P.H., Raj Chawla, M.P.H., Dean Richard L. Page, M.D., Eli Goldberg '20; Emily Vayda '20; Amanda Kardys '20; Elias Schoen '20; William Earle '20, Thomas Delaney, Ph.D., Commander Joseph T. Frost, M.P.H., R.D.N., C.D. Missing: Mary Griffin '20, Nikolas Moring '20

# **Public Health Project Success**

The Public Health Project course introduces students to the field of public health and gives them the opportunity to work in small groups with community partners. Associate Dean for Public Health and Health Policy Jan Carney, M.D., M.P.H., is course director. Several groups recently received national recognition for their work:

### 2019 EXCELLENCE IN PUBLIC HEALTH AWARD

The U.S. Public Health Service Physician Professional Advisory Committee awarded a 2019 Excellence in Public Health Award to seven Class of 2020 students for their public health project titled "Needs Assessment of Suicide Prevention in Vermont Middle and High Schools." (see photo above)

### 2018 AMERICAN PUBLIC HEALTH ASSOCIATION AWARDS

At the 2018 American Public Health Association Annual Meeting in San Diego, Calif., eleven Class of 2020 Public Health Projects were accepted for presentation and three projects received awards.

# STUDENT ABSTRACT AWARD category Honorable Mentions

- Kirsten Martin '20 for "Radon, From the Ground into Our Schools: Parent/Guardian Awareness of Radon Levels in Vermont"
- Eli Goldberg '20 for "Needs Assessment of Suicide Prevention in Vermont Middle and High Schools"

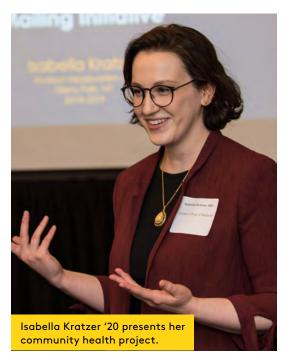
# STUDENT POSTER AWARD category Second Place

• Lee Hiromoto '20 for "Health Professionals and Public Awareness of Carbon Monoxide Poisoning in Vermont"

# Years 2 & 3:

# Clerkship Level

Students in the Clerkship year focus on building clinical skills, including a solid foundation in primary and preventive care, through working with interdisciplinary teams in ambulatory and hospital environments.



# Improving Health Systems in Rural New York

The four students completing the Longitudinal Integrated Clerkship (LIC) at Hudson Headwaters Health Network gain first-hand experience improving health care systems through the community projects they complete during their 12 months with the federally-funded health network in rural New York State. LIC students develop clinical skills—as well as a deep understanding of how to work in an interdisciplinary team—by following a panel of patients over time under the supervision of a primary care physician preceptor.

### **QUALITY IMPROVEMENT:**

Cervical Cancer Screening Rates within Hudson Headwaters Health Network In response to below-average cervical cancer screening rates, Dylon Gookin '20 designed a letter that was sent to 1,075 female patients educating them about cervical cancer and inviting them to be screened.

## **COLORECTAL CANCER SCREENING QUALITY IMPROVEMENT:**

# A FITKit Mailing Initiative

**Isabella Kratzer '20** organized mailings of an at-home colorectal cancer screening test to hundreds of eligible patients who were not up to date on this preventive care.

### TO JUUL OR NOT TO JUUL:

## A Crash Course on the Health Effects of Vaping

**Chad Serels '20** traveled to health centers across the network giving talks about the health effects of JUUL and other vaping products to providers, nurses, and staff. He reached out to community members, particularly youth, to gauge the need for information on this topic.

# HOW TO IMPROVE A MEDICATION-ASSISTED TREATMENT (MAT) PROGRAM FOR OPIOID DEPENDENCE:

### First, Look at the Evidence

**Collin York '20** examined potential improvements to MAT access and treatment in a group of 111 patients supported by eight providers. Ideas include using telehealth and group treatments, and creating a home induction guide for buprenorphine.

# Central Vermont Medical Center Launches Pilot Program

The pilot year for a Longitudinal Integrated Clerkship (LIC) at Central Vermont Medical Center (CVMC) launched in March of 2019, with four students set to complete their clerkship requirements at the Berlin, Vt., site by becoming embedded as part of an interdisciplinary healthcare team. A member of the UVM Health Network, CVMC is a hub for regional health care delivery. The 122 licensed bed hospital serves a population of 66,000, with a medical staff of nearly 135. Christine Payne, M.D., clinical assistant professor of family medicine, is site director. Sarah Child has been named CVMC LIC coordinator.



# The Larner Experience

# **Words of Encouragement**

In March of 2019, the newly minted third-year students were given "Clerkship Survival Kits" assembled for them by the Class of 2020. In each bag, students found useful tools, such as penlights and the Maxwell Quick Medical Reference book, along with encouraging words of advice from their counterparts.

NOW IS THE TIME TO EXPLORE YOUR CLINICAL INTERESTS WITH AN OPEN MIND AND HEART, AND REACQUAINT YOURSELF WITH ALL THOSE REASONS WHY YOU INITIALLY DECIDED TO GO TO MEDICAL SCHOOL."

CLERKSHIP YEAR WILL
BE ONE OF THE MOST
HUMBLING, CHALLENGING,
AND INSPIRING YEARS OF
YOUR LIFE!"

FOCUS ON FORMING
RELATIONSHIPS WITH
YOUR PATIENTS AND YOUR
CLINICAL TEAM...GETTING
TO KNOW THE PEOPLE YOU
MEET WILL MAKE THE TIME
FLY AND THE EXPERIENCE
100X BETTER."



# Danbury Branch Campus to Host 35 Class of 2023 Students

In March of 2021, 35 students in the Class of 2023 will be headed to the UVM Larner College of Medicine's Connecticut campus to complete their seven core clinical clerkships and fourth year Advanced Integration course work. Although the relationship between UVM and Western Connecticut Health Network—now Nuvance Health—has been long-standing, the designation of the site as a branch campus in 2017 paved the way for a total of 70 students to be hosted in Connecticut for their third and fourth years. All students spend the first 18 months in Vermont for the first level of the curriculum. A medical education infrastructure to support students in Connecticut is led by Jonathan Rosen, M.D., associate dean for undergraduate medical education,



L to R: Jonathan Rosen, M.D., Moira Barber, Ellen Kulaga, M.D., Joanna Conklin

and **Ellen Kulaga, M.D.**, assistant dean for students, with medical student education coordinators **Moira Barber** and **Joanna Conklin**.

# **New Clerkship Leadership**

The College welcomes several new clerkship directors and associate directors to the ranks of medical education leadership.

## Surgery Clerkship Director Meredith Collins, M.D.

Medical School: The Ohio State University College of Medicine General Surgery and Plastic and Reconstructive Surgery Residencies: The Mount Sinai Hospital

<u>Microvascular Surgery Fellowship:</u> MD Anderson Cancer Center



## Associate Surgery Clerkship Director Fuyuki Hirashima, M.D.

Medical School: Geisel School of Medicine
General Surgery Residency: UVM Medical Center
Cardiothoracic Surgery Fellowship: Montefiore Medical Center at the
Albert Einstein College of Medicine



# Family Medicine Clerkship Director Amanda Kolb, M.D.

<u>Medical School:</u> University of Massachusetts <u>Family Medicine Residency and Fellowship:</u> University of Virginia Health System

 ${}^{\star}{}$ She takes over for Candace Fraser, M.D., who retired from the position after 10 years



## Associate Neurology Clerkship Director Noah Kolb, M.D.

<u>Medical School:</u> University of Massachusetts

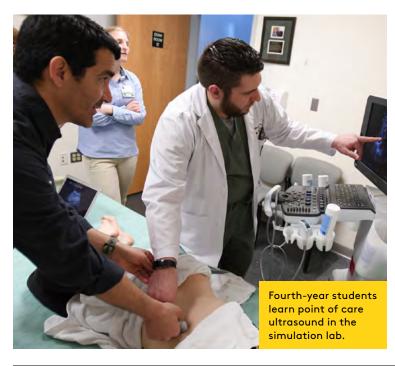
<u>Neurology Residency:</u> University of Virginia School of Medicine

<u>Clinical Neurophysiology Fellowship:</u> University of Utah School of Medicine

Years 3 & 4:

# **Advanced** Integration Level

Advanced Integration focuses on preparing students for practice as a physician through acting internships, scholarly and teaching experience, and opportunities to explore career



# **Emergency Medicine Clerkship Focuses on** Problem-Solving Skills, Prep for Residency

A new case-based learning series for the emergency medicine clerkship builds on the patient care experience students gain during rotations at three area hospitals, while a new emergency medicine residency program at UVM Medical Center offers an additional dimension to their training. The emphasis throughout is on applied learning and problem solving.

Sarah Schlein, M.D., assistant professor of surgery and emergency medicine clerkship director, says attending physicians who teach throughout the course use the case-based series she developed as the foundation for sessions on a range of emergency medicine topics. Pre-learning material ensures students come ready to discuss and diagnose.

"I've taken these cases that are real, as well as thought-provoking and interesting," she says. "Students answer questions and generate what the next step would be. They are figuring out what the management approach is, and hopefully through that struggle they are learning and assimilating the information better."

> The UVM Medical Center Emergency Medicine Residency Program, which welcomed its first six residents in July of 2019, offers additional learning opportunities for students as they work side-by-side with resident trainees. Directed by Associate Professor of Surgery **Richard Bounds, M.D.**, the residency program combines academic and rural emergency medicine experience, prepping trainees for a range of practice environments. Clerkship students—who in addition to two weeks at UVM Medical Center complete rotations at either Central Vermont Medical Center or Champlain Valley Physicians Hospital—benefit from working with "near peers" as they hone their problem solving skills. The goal is to

know; it's how you think," says Schlein. "We're helping students work through a challenging problem while asking them to think outside the box. We want them to knowledge and apply it."

# prepare students to lead teams and integrate knowledge. "This is true across the field of medicine: It's not what you draw connections, practice retrieving little bits of medical

# Match Results 2019

Anesthesiology 4 Child Neurology 1 Dermatology 2 Diagnostic Radiology 5 Emergency Medicine 12 Family Medicine 13 Internal Medicine 15 Medicine/Emergency Medicine 1

Neurology 3 Neurosurgery 1 Obstetrics & Gynecology 6 Ophthalmology 1 Orthopaedic Surgery 4 Otolaryngology 1 Pathology **5** Pediatrics 11

Peds/Psychiatry/Child Psychiatry 1 Physical Medicine & Rehabilitation 1 Plastic Surgery 1 Psychiatry **6** Radiation Oncology 1 Thoracic Surgery 1 Urology 2

# **Getting Ready for Licensure: Prep for Practice**

A two-week elective called "Prep for Practice" gets students ready for their professional obligations as physicians. In addition to sessions on clinical ethics and professionalism, students learn about crafting a CV and personal statement. They also meet with an advisor about specialty choice and the matching process. Two days of the course—directed by Interim Senior Associate Dean for Medical Education Christa Zehle, M.D.—



Medicine Patricia King, M.D., Ph.D., Ph.D. leads a half-day

session that introduces students to the state medical board and licensing requirements. Students have the opportunity to adjudicate mock cases

are devoted to a

"Mini MBA" that

gives students

an introduction

to the business

side of medicine.

**UVM** Professor of

that may come before a board with experts who visit the class, including state medical board members, attorneys general, and the executive director of the Vermont Medical Board. As former chair of the Federation of State Medical Boards, King wants to help students understand the underlying professional tenets of their work caring for patients. "This is your license. This is your obligation," she says. "These are the factors the public trusts you with and these are your responsibilities to the public. It really is a foundational part of professionalism."

# The Larner Experience

# Reflections on Butabika **Psychiatric Hospital**



Through a fourth year global health elective, **Brian** Rosen, M.D.'19, had the opportunity to help care for patients at Butabika National Referral Mental Hospital in Kampala,

Uganda. 'His essay garnered top honors in the College's 2019 global health reflection contest.

"My discomfort participating in psychiatric care at Butabika is immense and yet I wonder if my own standards are too unreasonable given the constraints on the ground. Am I justified in my fear and discomfort or am I simply "othering" another system? I have been questioning my emotions and feelings since beginning my time on Butabika's grounds but have yet to find an answer. Yet maybe that questioning and understanding is unnecessary. By explaining away my feelings and concerns, am I simply looking for a way to intellectualize my anxiety? I am left with the hope that one day I will make meaning from my inpatient experiences in Uganda. Until that time, I will simply sit with the discomfort that I now feel."



# **Honors Night**

On May 13, 2019, faculty, staff and students celebrated the achievements of the Class of 2019 and honored the faculty who mentored and supported them. The following faculty received awards:

- Dignity in Medicine Award: William Raszka, M.D., professor of pediatrics and Attacks and Defenses course director
- Clinical Resident of the Year Award: **Danielle Leahy, M.D.**, clinical instructor in obstetrics, gynecology and reproductive sciences
- The Harry E. Howe, M.D., and Theo O. Howe Outstanding Teacher of Surgery Award: Loic Fabricant, M.D., assistant professor of surgery
- Clinical Teacher of the Year Award: **Florian Foerg, M.D.**, assistant professor of medicine; David Rand, D.O., assistant professor of medicine; and Sarah Schlein, **M.D.**, assistant professor of surgery
- Clinical Department of the Year Award (The Silver Shovel Award): **Department of Pediatrics**

# **CURRICULAR INNOVATIONS**

From research on educational theory and methods to the adoption of new technology that improves how students are taught, the Larner College is at the forefront of medical education innovation.

# **New Developments in Point of Care Ultrasound**

Under the leadership of Keith Curtis, M.D., assistant professor of surgery and integrated ultrasound curriculum director, several new components have been added to the College's longitudinal ultrasound curriculum:

- · Case-based sessions using a new sonosimulator have been incorporated into the family medicine, emergency medicine, surgery and OB/GYN clerkships. The technology uses high tech stickers on a mannekin or standardized patient that when scanned with an ultrasound transducer produce images of pathology. The sessions help to reinforce positive findings with ultrasound and fine tune clinical decision-making for third and fourth year students.
- · A new deep vein thrombosis module has been added to the Attacks and Defenses course. The module includes an online learning component and a hands-on



point of care ultrasound training session for students to learn how to evaluate a patient for this condition.

· Students in the Longitudinal Integrated Clerkship at Hudson Headwaters Health Network and Central Vermont

Medical Center now receive point of care ultrasound training before they depart to sites in central New York and central Vermont. They also have opportunities for periodic trainings throughout the third year.



With mentorship from Peter Weimersheimer, M.D., professor of surgery and director of point of care ultrasound (POCUS), and Keith Curtis, M.D., assistant professor of surgery and integrated ultrasound curriculum director, a group of students in the Class of 2021 have become teachers for first-year students learning how to use point of care ultrasound. Additional training sessions as well as access to faculty manuals and videos have helped them prepare to teach and mentor, boosting their own skills in the process. Naira Goukasian '21 hopes she and her classmates helped make POCUS more approachable for their first-year counterparts: "It can be kind of intimidating as a first-year to jump into POCUS...it takes some practice and I think having another student guide you through it eases the tension a little."

### The Medical Student Mental Health Panel:

# A Powerful Approach to Overcoming Barriers to Mental Health Care

The Team: Leigh Ann Holterman, Ph.D.; Lee Rosen, Ph.D.; Moshe Bitterman, M.D.'18; Olivia Larkin '21 and Elizabeth Lynch '21

**The Innovation:** A formal, student-run mental health panel at the Larner College of Medicine allows senior students to share with first-year students stories about how they and their peers sought out and were helped by professional mental

**Key Takeaways:** In a survey prior to the panel in 2018, 25 percent of respondents said they believed peers would view them unfavorably for receiving mental health treatment. After the panel, that number dropped to eight percent. Before the panel, over 20 percent said they thought supervisors would

view them unfavorably for receiving mental health treatment. Only four percent still believed this after the panel. The panel served to reduce stigma and increase knowledge of available resources for mental health care.

Poster presentation at 2019 Northeast Group on Education Affairs Annual Meeting

# RESEARCH **SNAPSHOTS**

Research teams at the Larner College of Medicine push medical education in new directions, serving as examples for peer institutions. These two studies represent the quality of that work.



Illustrating the Iterative Process of Design, Engagement, and Reflection in Medical Education

A Six-Step Active Learning Design Process:

The Team: Cara Simone, M.A.; Cate Nicholas, Ed.D., M.S., P.A.; Jesse S. Moore, M.D.; and Kathryn N. Huggett, Ph.D.

The Innovation: A six-step active learning design process has helped to standardize curriculum delivery by giving faculty concrete steps to follow. The process focuses on continuous quality improvement and creates durable and clinically correlated outcomes.

**Key Takeaways:** The active learning design process as implemented by the College's instructional designers has accelerated culture change and adoption of standardized active learning curriculum delivery. Student evaluations

have been positive for sessions implemented through the new process.

Oral presentation at the 2019 Northeast Group on Education Affairs

# **Human Trafficking Module Incorporated into Global Health Training**



Ed.D., M.S., P.A.



Rachel DiSanto,

An educational module focused on recognizing victims of human trafficking, exploitation and slavery has been incorporated into the global health bridge week curriculum for Larner College of Medicine students. The module, developed by the UNITE against Human Trafficking Collaborative at UVM, includes standardized patient cases based on survivors' lived experiences, video of standardized patient cases, and facilitator guidelines and discussion questions. The module grew out of a Larner College of Medicine fourth year scholarly project that revealed a knowledge gap in human trafficking recognition and referral among area doctors. A public health project from a College of Nursing and Health Sciences students revealed similarly limited knowledge among nurses. Representatives from the Larner College of Medicine on the multidisciplinary UNITE Collaborative include Cate Nicholas, Ed.D., M.S., P.A., director of education and operations for the UVM Clinical Simulation Laboratory, and Rachel DiSanto, M.D., clinical assistant professor of family medicine.

# A LEADER IN INFORMATION TECHNOLOGY: NATIONAL **PRESENTATIONS**

Four Larner College of Medicine Technology Services managers— Health Sciences CIO Jill Jemison; Technical Support Manager Gordon White; Ed Tech Team Lead Laurie Gelles, Ph.D.; and Database Manager **Steve Goldman**—presented projects at the 2019 Association of American Medical Colleges Group on Information Resources National Meeting in San Diego, Calif. Topics included "Using Financial Data to Drive Faculty Behavior During Curriculum Change;" "See Me, Feel Me, Touch Me, Heal Me: How Educational Technology Has Evolved to Increase Engagement;" "They Like Us, They Really Like Us, Until They Don't: A Student Panel;" "Finding the Balance: Med School IT in the Age of Centralization;" and "Med Ed Data Warehouses— Where Are We and How Did We Get Here?"

# STUDENT LIFE

Students at the Larner College of Medicine are encouraged to embark on projects that enhance their education and support their community. Through this work, they become leaders and change agents as they develop their identities as physicians. A robust Student Affairs team supports them every step of the way.



# Zehle to Serve as **Northeast Group on Student Affairs Rep**

Associate Dean for Students and Interim Senior Associate Dean for Medical Education Christa Zehle, M.D., has been appointed as the Northeast Group on Student Affairs representative to the AAMC Committee on Student Affairs (COSA) Working Group on Medical Student Well-being. As the Northeast GSA representative, Zehle will identify topics of national concern related to the well-being of medical students, and work to develop interventions and resources that address these issues.

# **NEW ASSISTANT DEANS APPOINTED**

Associate Professor of Medicine Shaden Eldakar-Hein, M.D., and Assistant Professor of Medicine Prema Menon, M.D., Ph.D., have been appointed Interim Assistant Deans for Students in the Office of Medical Student Education, pro-



Hein, M.D.



M.D., Ph.D.

viding oversight of programs that support student professional identity development, academic achievement, health and well-being, as well as career advising.

# MOYNIHAN TO SERVE AS DIRECTOR OF ACADEMIC ACHIEVEMENT

Tim Moynihan, Ph.D., has been appointed the new Director of Academic Achievement and Medical Education Learning Specialist at the Larner College of Medicine. In this role, he develops and delivers comprehensive academic support and enrichment services to all medical students for academic success and lifelong learning. Moynihan graduated from the California Institute of Integral Studies in San Francisco with a master's degree in counseling psychology in 2009 and a Ph.D. in psychology and consciousness studies in 2018.



# **Students Represent College Through Ambassador Program**

Over 100 students serve as representatives of the Larner College of Medicine at important events throughout the year through the Student Ambassador Program. After an application and interview process, students chosen to be ambassadors complete leadership training and decide which events they'd like to attend. Options include admissions activities, orientation for the incoming class, White Coat Ceremony, Family Day, alumni events, and Commencement. Through the conversations they have at these major events, ambassadors establish a positive impression of the College and represent the institution's mission of serving patients, the medical profession, and the community. Faculty advisors for the program are Christa Zehle, M.D., interim senior associate dean for medical student education and Jan Gallant, M.D., associate dean for admissions.



# Push for Pronouns in Medical Education

sking for someone's pronouns sets the stage for positive interactions with patients and colleagues. A group of Larner College of Medicine students including clinically-oriented training video soon Luke Higgins '22, Kelly Chan '22, Mohammed Wali '22, Emerson Wheeler '22, Noorin Damji '22, Rachel Harrison '22, and Alden Sacco '20 developed a short video and survey to help their peers navigate these conversations, setting them up to be allies for members of the transgender and nonbinary community. "Our primary objective was to increase participant comfort with asking for others' pronouns, sharing their own pronouns, correcting colleagues, and navigating social situations using pronouns of transgender and non-binary people," says Sacco. "We studied the video's impact on participants' comfort and knowledge around pronoun use, with

very positive results and feedback, and plan to publish both the video and our study results in the near future. We are hoping to film a more on pronoun use and terminology to be utilized by physicians and other health care professionals." After distributing the video and survey to all current Larner College of Medicine students, the group shared what they learned at Q-Med, a conference sponsored by The Dean's Advisory Council for LGBTQI+ Affairs at the Yale School of Medicine. The group of students presented their research project, "Teaching Appropriate Pronoun Use in Medical Education: A Quantitative Analysis of Video Training Effectiveness."



Counterclockwise from top: Kelly Chan '22, Luke Higgins '22, Emerson Wheeler '22, Rachel Harrison '22, Noorin Damji '22, Alden Sacco '20, Mohammed Wali '22

AT UVM, THE PROXIMITY OF **FACULTY AND STUDENTS ALLOWS** FOR AN ENVIRONMENT WHERE STUDENT INITIATIVE IS WELCOME AND **ENCOURAGED...IT IS AMAZING TO BE** PART OF A SCHOOL THAT CONSTANTLY HAS STUDENT DRIVEN EFFORTS TO IMPLEMENT CHANGE. NOT ONLY DOES THIS GIVE US A CHANCE TO MAKE THE MOST OF OUR LEARNING EXPERIENCE, IT ALSO PUSHES US TO TAKE ON NEW **RESPONSIBILITIES AND BE THE CHANGE** WE WANT TO SEE."

- AVA BAKHTYARI, CLASS OF 2020

# SATURDAY SCHOOL SUPPORTS PREP FOR STEP 1 EXAM

The Step 1 Saturday School, led by a core group of eight to ten senior peer tutors, offers weekly meetings in the fall for all second year medical students preparing for the USMLE Step 1 exam. The sessions give students the ongoing opportunity to work in small groups on curated boards-style questions, content review, and optimal study strategy. Some primary goals include:

- providing a framework for students to become comfortable with boards-style questions,
- creating a community of support and accountability, and
- reinforcing effective learning methods for success.

This fall marks the third iteration of the Step 1 Saturday School, developed by recent graduates under the guidance of Lee Rosen, Ph.D., director of student well-being and assistant professor of psychiatry. Step 1 Saturday School is both a service of the peer tutoring program as well as part of the College's Step 1 Support Series.

# SCHOLARSHIP of TEACHING

# **NEGEA Grant Explores Student Evaluation of Teaching**

Assistant Dean for Medical Education **Katie Huggett, Ph.D.** and Associate Professor of Surgery and Active Learning Director **Jesse Moore, M.D.**, are co-investigators for a Northeast Group on Educational Affairs (NEGEA) Collaborative Research Grant titled "Student Perspectives About Learning: An Important Influence on Evaluations of Teaching?" The 13-member research team hails from institutions including Penn State University College of Medicine, Yale University School of Medicine, Albert Einstein College of Medicine, The University of British Columbia, and Kwantlen Polytechnic University. Principal investigator is **Paul Haidet, M.D., M.P.H.**, professor of medicine, humanities and public health sciences at Penn State.





# Health Humanities the Focus for NEGEA Special Interest Group

Leigh Ann Holterman, Ph.D., director of curricular evaluation and assessment, is co-leader for a new Northeast Group on Educational Affairs Special Interest Group titled "Health Humanities as Teaching and Learning Strategy." The goal is to foster a Community of Practice (CoP) model for utilizing health humanities as a teaching and learning pedagogical tool, with a focus on how to achieve learning moments with either curricular or co-curricular efforts and how to understand and approach learning using artifacts, prompts and shared dialogue. The SIG promotes a space for sharing of resources, teaching and learning stories/moments, pedagogical best practices, and scholarship and dissemination.

# **2020 NEGEA CONFERENCE COMES TO UVM**

The UVM Larner College of Medicine has been chosen to host the 2020 AAMC Northeast Group on Educational Affairs (NEGEA) annual conference. Hundreds of medical educators from across the northeast are expected to attend to present educational scholarship and attend a range of workshops and plenary sessions.

Dates: April 30-May 2, 2020

Conference and Host Chair:
Katie Huggett, Ph.D., assistant dean
for medical education

Host Co-chair:

Bridget Marroquin, M.D., associate professor of anesthesiology

Chief Administrator:

Amanda Broder, Teaching Academy administrative coordinator

# Honoring Teachers, Celebrating Excellence

The Teaching Academy celebrated faculty excellence and education scholarship at the annual Snow Season Retreat on January 31, 2019.

Frederick C. Morin III, M.D. Educational Leadership Award Tania Bertsch, M.D., Associate Professor of Medicine and Associate Dean for Clinical Education

Innovation in Curriculum Development or Pedagogy Keith Curtis, M.D., Assistant Professor of Surgery

### Learner Assessment Award

**Cate Nicholas, Ed.D., M.S., P.A.**, Assistant Professor of Obstetrics, Gynecology, and Reproductive Sciences and Director of Education and Operations for the UVM Clinical Simulation Laboratory

### **Outstanding Contribution Award**

Maria Mercedes Avila, Ph.D., Associate Professor of Pediatrics



# **2019 FRYMOYER SCHOLARS**

The John W. and Nan P. Frymoyer Fund for Medical Education supports physicians and nurses who embody the best qualities of the clinician teacher. The 2019 scholars are engaging in projects that emphasize the art of patient care:

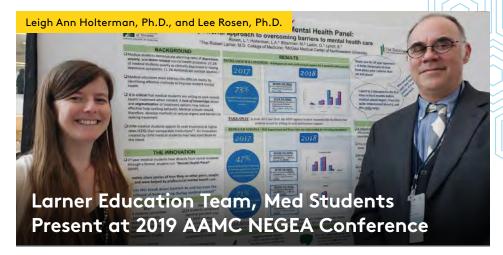
Rebecca Bell, M.D., M.P.H., Thomas Delaney, Ph.D., and Richard "Mort" Wasserman, M.D.: "Firearm Injury Prevention Screening and Counseling"

Bronwyn Bryant, M.D.: "Validating Entrustable Professional Activity-Based Assessment to Determine On-Call Competency in Pathology Residents"

Fuyuki Hirashima, M.D., Nicholas Bedrin, M.D., Serena Murphy, M.D., and Stephen Ranney, M.D., and Rebecca Wilson, R.N.: "Establishing UVM Medical Center as a Training Institute & Center of Excellence for Cardiac Surgery Unit Advance Life Support"

Rebecca Nagle, M.S.N., A.P.R.N., Christina Harlow, D.N.P., FNP-BC, A.P.R.N., Leah Pryor, Emily Clairmont, R.D., and Jana Lichtenfeld, M.D.: "Integrative Nutrition Teaching Kitchen and Inter-professional Community Service Learning Curriculum"

Iris Toedt-Pingel, M.D., Kaitlin Ostrander, M.D., and Stephen Berns, M.D.: "TalkVermontPEDS: Creating an Interprofessional Pediatric Advanced Communication Course"



Several members of the Larner College of Medicine Teaching Academy, Active Learning office and Office of Medical Student Education, as well as medical students from the Social Justice Coalition, presented at the 2019 Association of American Medical Colleges Northeast Group on Educational Affairs (NEGEA) conference at the Perelman School of Medicine at the University of Pennsylvania in April of 2019.

### Workshop

Katie Huggett, Ph.D., and colleagues: "Writing and Submitting a Successful NEGEA Grant Proposal"

### **Oral Abstract Presentations**

**Eileen CichoskiKelly, Ph.D., Donna O'Malley, M.L.S.,** and colleagues: "A Qualitative Study to Inform an Effective Model for Mentoring in Medical Education Scholarship." (Nominated for an NEGEA Excellence in Medical Education Award.)

Cara Simone, M.A., Cate Nicholas, M.S., P.A., Ed.D., Jesse Moore, M.D., and Katie Huggett, Ph.D.: "A Six-Step Active Learning Design Process: Illustrating the Iterative Process of Design, Engagement, & Reflection in Medical Education"

### **Posters**

Lee Rosen, Ph.D., Leigh Ann Holterman, Ph.D., Moshe Bitterman, M.D.'18, Elizabeth Lynch '21, and Olivia Larkin '21: "The Medical Student Mental Health Panel: A Powerful Approach to Overcoming Barriers to Medical Students Seeking Mental Health Care"

Jesse Moore, M.D.; Rebecca Wilcox, M.D., Karen Lounsbury, Ph.D., Leigh Ann Holterman, Ph.D.; Cara Simone, M.A., and Katie Huggett, Ph.D.: "Creating Standardized Active Learning Instructional Methods to Replace Lecture in a Medical School Curriculum"

Raghav Goyal '21; Samuel Epstein '21; Christina Dawson '21; Trina Thornburgh '21; Elizabeth Lynch '21; Reed Hausser '21; and Shae Rowlandson '21: "Development of a Student-Led Social Determinants of Health Curriculum at Larner College of Medicine that Does Not Require Creation of New Lectures"



HONORS AND AWARDS

Professor and Chair of Pediatrics **Lewis First, M.D.**, was elected as an honorary member for life and chair emeritus at the National Board of Medical Examiners (NBME) Annual Meeting in March 2019. In the announcement about this honor, the NBME stated that "Dr. First's contributions will reverberate through the NBME and USMLE (United States Medical Licensing Examination) for many years to come."

**Rachel DiSanto, M.D.**, clinical assistant professor of family medicine, received the Alpha Omega Alpha Volunteer Clinical Faculty Award from students in the Class of 2019. The award recognizes a community physician who contributes to the education and training of clinical

students. DiSanto is a family medicine physician at North Country Primary Care in Newport, Vt.

Lauren K. MacAfee, M.D., assistant professor of obstetrics, gynecology and reproductive sciences, was honored as the 2019 recipient of the Leonard Tow Humanism in Medicine Faculty Award. These awards recognize graduating students and faculty members who demonstrate clinical excellence and outstanding compassion in the delivery of care and who show respect for patients, their families, and healthcare colleagues.

# 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**

# Mud Season Education Retreat March 29, 2019

Keynote Address:

"How Should We Prepare Students to Fight Clinically Impactful Injustice?" by UVM Professor of Medicine and UVM Medical Center Director of Clinical Ethics **Tim Lahey, M.D.** 

# Essentials of Teaching and Assessment Retreat September 14, 2018

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



AAMC Medical Education Research Certificate (MERC) Workshops Friday, April 12, 2019

"Formulating Research Questions and Designing Studies"

"Measuring Educational Outcomes with Reliability and Validity"

Led by Larry Gruppen, Ph.D., Professor of Medical Education, Department of Learning and Health Sciences, University of Michigan Medical School

# MEDICAL EDUCATION GRAND ROUNDS

### September 28, 2018

"Developing and Implementing the Critical Clinical Competencies Through Case Studies at SIU," **Debra Klamen, M.D., MHPE**, Senior Associate Dean for Education and Curriculum, Southern Illinois University School of Medicine

### October 26, 2018

"Museums and Medicine: The Power of Observation," **Andrea Rosen, M.A.**, Curator, Fleming Museum, University of Vermont

## November 30, 2018

"Effective Body Language Techniques for the Medical Educator," **Andrew Hale, M.D.**, UVM Assistant Professor of Medicine, and **Daniel Ricotta, M.D.**, Co-Director of BIDMC Academy, Beth Israel Deaconess Medical Center

### December 14, 2018

"Success Stories, Opportunities for Faculty, and Lessons Learned: Active Learning at The Larner College of Medicine," **Jesse Moore, M.D.**, UVM Associate Professor of Surgery, Director of Active Learning

### January 25, 2019

"Anatomy Academy: Extending the Learning Environment from Classroom to Community," **Jonathan Wisco, Ph.D.**, Associate Professor of Anatomy and Neurobiology, Boston University School of Medicine

### February 22, 2019

"Turn Your Teaching into Scholarship," **Kathryn Huggett, Ph.D.**, UVM Assistant Dean for Medical Education and
Teaching Academy Director and **Cate Nicholas, M.S., P.A., Ed.D.**, UVM Assistant Professor of Obstetrics, Gynecology
and Reproductive Sciences and Director of Education and
Operations for the Clinical Simulation Laboratory

### May 3, 2019

Robert Larner, M.D. College of Medicine at The University of Vermont: LCME Kick-Off Celebration

**Veronica Catanese, M.D., MBA**, Senior Director, Accreditation Services, Co-Secretary, Liaison Committee on Medical Education (LCME), Association of American Medical Colleges

# **TEACHING ACADEMY GRANTS & AWARDS**

2019 Travel Award

Varun Agrawal, M.D., associate professor of medicine

Deepak Gupta, M.D., assistant professor of neurological sciences

Bridget Marroquin, M.D., associate professor of anesthesiology

Curriculum Development and Educational Scholarship Grant

Deepak Gupta, M.D., assistant professor of neurological
sciences, "Priming Medical Students in the Technological,
Regulatory and Financial Aspects of Clinical (TEREFIC)
Practice"

# **Medical Education Fellowship**

Faculty develop new skills in teaching and assessment through this eight month-long program as well as produce individual scholarly projects for publication and presentation. 2018-19 participants include:

Elizabeth Ames, M.D.

Professor, Orthopaedics and Rehabilitation
David Li-Kang Chen, M.D.

Assistant Professor, Medicine
Katie Dolbec, M.D.

Assistant Professor, Surgery
Matt Geeslin, M.D.

Assistant Professor, Radiology
Rosy Hill, M.D.

Assistant Professor, Medicine

Macaulay Onuigbo, M.D.
Associate Professor, Medicine
Sarah Schlein, M.D.
Assistant Professor, Surgery
Anne Stowman, M.D.
Assistant Professor, Pathology and
Laboratory Medicine
Adam Ulano, M.D.
Assistant Professor, Radiology



# Distinguished Educator

Medical education fellows Sarah Schlein,

M.D., and Adam Ulano, M.D.

• Mark Plante, M.D. *Professor*, *Surgery* 

### Master Teacher

- Robert D'Agostino, M.D. Associate Professor, Radiology
- Andrea Green, M.D. *Professor, Pediatrics*
- Friederike Keating, M.D. *Professor, Medicine*
- Michael LaMantia, M.D. Associate Professor, Medicine
- Janet Murray, Ph.D.
   Assistant Professor, Microbiology and Molecular Genetics
- Deirdre O'Reilly, M.D. Assistant Professor, Pediatrics

### Member

- Anne Dougherty, M.D. Assistant Professor, Obstetrics, Gynecology and Reproductive Sciences
- Danielle Ehret, M.D. Associate Professor, Pediatrics
- Jonathan Flyer, M.D. Assistant Professor, Pediatrics
- Deepak Gupta, M.D. Assistant Professor, Neurological Sciences

- Abhishek Kumar, M.D. Assistant Professor, Medicine
- Lauren MacAfee, M.D. Assistant Professor, Obstetrics, Gynecology and Reproductive Sciences
- Roberta O'Brien, M.D. Associate Professor, Medicine
- Marios Prikis, M.D. Assistant Professor, Medicine
- David Rand, D.O., M.P.H. Assistant Professor, Medicine
- Andrew Rosenfeld, M.D. Assistant Professor, Psychiatry
- Matthew Saia, M.D. Assistant Professor, Pediatrics
- Eline van den Broek-Altenburg, Ph.D. Assistant Professor, Psychiatry
- Stanley Weinberger, III, M.D. Assistant Professor, Pediatrics

## Protégé

- Hillary Anderson, M.D. *Clinical Instructor-Resident, Pediatrics*
- Nicholas Bedrin, M.D.
  Clinical Instructor-Resident, Surgery
  James East, M.D., Ph.D.
- Clinical Instructor-Resident, Radiology

# Beatty and Marroquin Represent College on AAMC Council

Dennis Beatty, M.D., assistant professor of medicine, and Bridget Marroquin, M.D., associate professor of anesthesiology, have been



College of Medicine representatives to the Association of American Medical Colleges Council on Faculty and Academic Sciences (CFAS).
CFAS, which includes more than 350 faculty representatives

appointed Larner



- Johanna Kelley, M.D.

  Clinical Instructor-Resident, Obstetrics,
  Gynecology and Reproductive Sciences
- Stephen Ranney, M.D. Clinical Instructor-Resident, Surgery
- Rebecca Rieck, M.D.

  Clinical Instructor- Fellow, Obstetrics,
  Gynecology and Reproductive Sciences
- Avneet Singh, M.D. Clinical Instructor-Resident, Medicine

# SELECTED PUBLICATIONS & PRESENTATIONS

### **Publications**

Ashley C, Donaldson K, Evans K, Nielsen B, Everett E. Surgical Cross-Training with Surgery Naive Learners: Implications for Resident Training, *Journal of Surgical Education*, In review

Aulet TH, Moore JS, Callas PW, Nicholas C, Hulme M. (En) trust me: Validating an assessment rubric for documenting clinical encounters during a surgery clerkship clinical skills exam. *The American Journal of Surgery*, 2018 Dec 25

Craig LB, Buery-Joyner SD, Bliss S, Everett EN, Forstein DA, Graziano SC, Hampton BS, McKenzie ML, Morgan H, Page-Ramsey SM, Pradhan A, Hopkins L. To the point: gender differences in the obstetrics and gynecology clerkship. *American Journal of Obstetrics and Gynecology*. 2018;219(5):430-435. PMID: 29852154

Dougherty A, Kasten M, McDonald M, Angela N, Kawooya M, Matovu A, Destigter K. Exploring the prevalence of high-risk obstetric conditions diagnosed by point-of-care ultrasound evaluation in a rural Ugandan population: a cohort study. *Global Reproductive Health*. 2018 Sep 1;3(3):e20

Dougherty A, Kayongo A, Deans S, Mundaka J, Nassali F, Sewanyana J, Migadde E, Kiyemba R, Katali E, Holcombe SJ, Heil SH. Knowledge and use of family planning among men in rural Uganda. *BMC Public Health*. 2018 Dec;18(1):1294

Everett E, Forstein D, Bliss S, Buery-Joyner S, Craig LB, Graziano S, Hampton BS, Hopkins L, McKenzie ML, Morgan H, Pradhan A, Page-Ramsey S. To the Point: the expanding role of simulation in Obstetrics and Gynecology medical student education. *American Journal of Obstetrics and Gynecology*. 2019;220(2):129-141. PMID: 30696555

Freed J, Hale A, Ricotta D, Huang G. From Monotony to Motivation: Effective Presentation of Epidemiological Data. *Academic Medicine*. January 25, 2019

Graziano S, Forstein D, Bliss S, Buery-Joyner S, Craig LB, Graziano S, Hampton BS, Hopkins L, McKenzie ML, Morgan H, Pradhan A, Page-Ramsey S, Everett E. Developing as an Academic Medical Educator in Obstetrics and Gynecology. Obstetrics and Gynecology. Manuscript #: ONG-19-728, In review

Hadley Strout, EK, Landrey AR, MacLean CD and HG Sobel. Internal Medicine Resident Experiences with a 5-Month Panel Management Curriculum. *Journal of Graduate Medical Education*. October 2018, Vol. 10, Issue 5, 550-565

Hale A, Freed J, Alston K, Ricotta D. What Are We Really Talking About? Clarifying Types of Consultation and Their Impact on Physician Communication. *Academic Medicine*. Published online before print February 12, 2019

Hale A, Ricotta D, Freed J. Evaluating the Erythrocyte Sedimentation Rate. *Journal of the American Medical Association*. Published online March 19, 2019 doi:10.1001/ jama 2019 1178

Hadley Strout EK, Landrey AR, MacLean CD, Sobel HG. Internal medicine resident experiences with a five-month ambulatory panel management curriculum, *Journal of Graduate Medical Education*. 10:5, 2018. (Accepted May 31st, 2018) <a href="https://doi.org/10.4300/JGME-D-18-00172.1">https://doi.org/10.4300/JGME-D-18-00172.1</a> (PMID: 30386483)

Hartke A, Devon E, Burns R, Rideout M. Building a Boot Camp: Pediatric Residency Preparatory Course Design Workshop. MedEdPORTAL. Under review

Hopkins L, Morgan H, Buery-Joyner S, Craig LB, Everett E, Forstein D, Graziano S, Hampton BS, McKenzie ML, Page-Ramsey S, Pradhan A, Bliss S. To the Point: A Prescription for Well-being in Medical Education, accepted for publication, *American Journal of Obstetrics and Gynecology*, May 2019

Huggett K, Christensen N, Jensen G, Maio A. Learning to research clinical reasoning. In J. Higgs, G. Jensen, S. Loftus, & N. Christensen (Eds.), *Clinical reasoning in the health professions* (4th ed., pp. 475-482). Edinburgh: Elsevier: 2019.

Keegan C. (2019, 2020, 2021). Miscarriage (early pregnancy loss). Domino FJ, ed-in-chief. *The 5-Minute Clinical Consult* 2019, 2020, 2021. Philadelphia: Lippincott Williams & Wilkins

O'Toole J, Huggett K, Leclair L, Stapleton R. Twenty-Four-Hour Attending Coverage and Its Effect on Trainee Educational Opportunities. *Medical Science Educator*. 2018 Sep 1:28(3):473-6.

Pradhan A, Buery-Joyner SD, Page-Ramsey S, Bliss S, Craig LB, Everett EN, Forstein DA, Graziano, S, Hopkins L, McKenzie ML, Morgan H, Hampton BS. "To the Point: Undergraduate Medical Education Learner Mistreatment Issues in the Learning Environment in the United States," accepted for publication, *American Journal of Obstetrics and Gynecology*, 2019 Apr 25. [Epub ahead of print] PMID: 31029660

Ricotta D, Huang G, Hale A, Freed J, Smith CC. Mindset theory in medical education. *Clinical Teacher*. Feb 2018. DOI: 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

Rogers TS, Wilcox R., Harm SK. (2019). Design and Implementation of a Pathology-Specific Handoff Tool for Residents. *Academic Pathology*. https://doi.org/10.1177/2374289519839186

Sobel H, Pasanen M. Leading An Academic Practice (2018) Editors: L Lu, EP Barrett, C Noroha, H Sobel and D Tobin. Springer Publications. Chapter 1: Clinic Director's Roles and Expectations, Halle Sobel and Mark Pasanen. Chapter 2: Supervising and Supporting Faculty, Alaka Ray, Priya Radhakrishnan and Halle Sobel. Chapter 11: Population Health Management for Residents, Robert Fortuna and Halle Sobel

Sobel S, Goedde M, Maruti S, Hadley Strout E, Wahlberg E, Kennedy AG. Primary Care Residents Delivering Care: Integration of Office-Based Opioid Treatment into an Internal Medicine Residency Curriculum. *Academic Psychiatry* (accepted for publication)

Sobel HG. Primary Care Residents Delivering Care: Integration of Office-Based Opioid Treatment (OBOT) into an Internal Medicine Residency Curriculum. *Journal of Academic Psychiatry*. May 13, 2019, epub ahead of print. https://doi.org/10.1007/s40596-019-01069-z

van Eeghen C, Hitt J, King JG, Okech JE, Rouleau B, Melekis K, Kessler R, Pinckney R. An Interprofessional Education Pilot Program on Screening, Brief Intervention, and Referral to Treatment (SBIRT) Improves Student Knowledge, Skills, and Attitudes. International Journal of Higher Education, 2019; 8:119-132. https://doi.org/10.5430/ijhe.v8n10119

### **Presentations**

Bedrin N, Brown K, Ranney S, Nicholas C, Forgione P. "Location, location, location (and Curriculum!): Measuring the Impact of Interventions to Increase Resident Utilization of a Virtual Reality Laparoscopic Trainer." Association for Surgical Education Surgical Education Week, Chicago, Ill., April, 2019

Berns S. "Putting Innovative Simulation Methods into Action for Communication Skills Training." 2019 Accreditation Council for Graduate Medical Education National Meeting, Orlando, Fla.

Bryant B. "Entrustable Professional Activities." Grand Rounds, University of Minnesota, Minneapolis, Minn., January 2019

 $Burgess\,L,\,McEntee\,RK,\,Rock\,L.\,\text{``Communicating with patients:}\,Back\,to\,the\,Basics.\text{''Society of Hospital Medicine}\,Annual\,Meeting,\,National\,Harbor,\,Md.,\,March\,2019$ 

CichoskiKelly E. "A Qualitative Study to Inform an Effective Model for Mentoring in Medical Education Scholarship." Northeast Group on Educational Affairs Annual Meeting, University of Pennsylvania, April 4-6, 2019

Davidson M, Marroquin B, Breneman S. "How To Harness 'Expert-ise' in the Development of Evaluation Tools." Society for Education in Anesthesia Annual Spring Meeting, Denver Colo., April 26-28, 2019

Dougherty A, Deans S, Mundaka J, Nassali F, Kalyesubula R, Heil SH. "Adaptation of a family planning intervention using behavioral modification techniques to a rural Ugandan population." Tenth Annual Consortium of Universities for Global Health Conference, Chicago, Ill., March 2019

Eldakar-Hein S, Wahlberg KJ, Yadavalli G, Peet A. "What Are You Thinking and Why Should You Care? Metacognition and Medical Education." Oral presentation and workshop at the 2018 Association of Program Directors in Internal Medicine Fall Meeting, Orlando, Fla., October 26, 2018

Everett E, Mann S, Morosky C. "Health Systems Science for the Clerkship. Unmasking the work you are already doing." Association of Professors of Gynecology and Obstetrics/Council of Resident Education in Obstetrics and Gynecology Annual Meeting, New Orleans, La., February 2019

Everett E, Graziano S, Page-Ramsey S. "Sharing the Tiki Torch! Inspiring Ourselves and the Next Generation of Academic Medical Educators." Association of Professors of Gynecology and Obstetrics, Martin Stone Faculty Development Seminar, Maui, Hawaii, January 2019

First L. 2019 Grand Rounds/named lectureships on medical education and/or workshops on faculty development in teaching: Yale, UNC (Charlotte campus--Levine Children's Hospital), Dartmouth, University of Tennessee Le Bonheur Children's Hospital

Good B, Thompson R, Rideout M, Raszka W. "PDSA meets Feedback Friday: Using QI methodology to integrate improved feedback into your program." Council for Medical Education in Pediatrics Annual Meeting, St. Petersburg. Fla., March 2019

Huggett KN, Lindsley T. "Introducing Trainees to Medical Education Activities and Opportunities for Educational Scholarship." Building the Next Generation of Academic Physicians, Albany Medical College, Albany, N.Y., September 29, 2018

Huggett K. "Program Evaluation and Evaluation Research." AAMC Medical Education Research Certificate (MERC) program session presented at the MedStar Health Teaching Scholars Program, Queenstown, Md., September 20. 2018

Huggett K, Coplit L, Wragg S. "Teaching Academies: Benefits to faculty and institutions." Grand Rounds presentation at Western Michigan University Homer Stryker M.D., School of Medicine, Kalamazoo, Mich., September 7, 2018

Jorgenson J, Tajik A, Miller A, Mallange E, Pius D, Dougherty A. "Development and implementation of a culturally appropriate education program to increase cervical cancer screening among Maasai women in rural Tanzania." Tenth Annual Consortium of Universities for Global Health Conference, Chicago, Ill., March 2019

Kennedy AG. "The Little Engine that Could: A 20-Year Perspective from the Vermont Academic Detailing Program." Keynote Speaker at the National Resource Center for Academic Detailing 6th International Conference on Academic Detailing, Boston, Mass., November 2018

Moore M, Dougherty A, McNamara M, Sadigh M. "Use of simulation for preparation of pre-clinical medical students for global health electives." Ninth Annual Consortium of Universities for Global Health Conference, New York. March 2018

Nicholas C. "Turn Your Everyday Work into Scholarship." Association of Standardized Patient Educators Annual Conference, June 2018

Nicholas C, Kenny B, DeAngelis J. "Basking in the Sunshine of Successful Mentoring Relationships." Association of Professors of Gynecology and Obstetrics, Martin Stone Faculty Development Seminar, Maui, Hawaii. January. 2019

Ranney S, Bedrin, N, Roberts N, Nicholas C, Forgione P. "A Method for Determining How Resident's Can Maximize Learning in the OR." Association for Surgical Education Surgical Education Week, Chicago, Ill., April 2019

Ranney S, Bedrin N, Russell S, Trevisani G, Nicholas C, Forgione P. "Translating Surgical Errors into Simulated Learning Opportunities." American College of Surgeons Accredited Education Institutes Surgical Simulation Summit, Chicago, Ill, March 2019

Simone C, Nicholas C, Moore J, Huggett K. "A six-step Active Learning design process: Illustrating the iterative process of design, engagement, and reflection in medical education." AAMC Northeast Group on Educational Affairs Spring Meeting, Philadelphia, Penn., April 6, 2019

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 of General Internal Medicine National Meeting, Denver, Colo., May 2019





# Medical Education Leadership

### Christa Zehle, M.D.

Interim Senior Associate Dean for Medical Education; Associate Dean for Students; Associate Professor of Pediatrics

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## Vincent Miller, M.D.

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### Cate Nicholas, Ed.D., M.S., P.A.

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# **Course Directors**

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**Dennis Beatty, M.D.**Doctoring in Vermont

**Jan Carney, M.D., M.P.H.**Public Health Projects

**Deborah Cook, M.D.**Connections

# Shaden Eldakar-Hein, M.D.

Professionalism, Communication and Reflection

# Stephen Everse, Ph.D.

Foundations of Clinical Sciences

### **Deepak Gupta, M.D.** Neural Science

Andrew Hale, M.D.

Cardiovascular, Respiratory and Renal Systems

# Rachel Humphrey, M.D.

Human Development and Reproductive Health

# Patricia King, M.D., Ph.D.

Convergence

William Raszka, M.D. Attacks and Defenses

## Rebecca Wilcox, M.D.

Nutrition, Metabolism and Gastrointestinal Systems

Christa Zehle, M.D.
Orientation

# **Clerkship Directors**

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Jeremiah Dickerson, M.D.

Psychiatry

**Elise Everett, M.D.**Obstetrics and Gynecology

**Timothy Fries, M.D.**Neurology

Amanda Kolb, M.D.

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**Roberta O'Brien, M.D.**Medicine — Outpatient

**Louis Polish, M.D.**Medicine — Inpatient

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### **Site Directors**

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**Garth Garrison, M.D.**Acting Internship in Medicine

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WE'VE BEEN INNOVATORS OF A MEDICAL EDUCATION PROGRAM THAT INCORPORATES BEST LEARNING PRACTICE AND TAKES INTO ACCOUNT EVER-EVOLVING HEALTH CARE SYSTEMS AND EDUCATIONAL ENVIRONMENTS. PHYSICIANS TODAY NEED TO BE SELF-DIRECTED, LIFELONG LEARNERS; ACTIVE LEARNING DEVELOPS THE SKILLS OUR STUDENTS NEED TO THRIVE."

- CHRISTA ZEHLE, M.D., INTERIM SENIOR ASSOCIATE DEAN FOR MEDICAL EDUCATION