

COMMUNITY

Engaging young people in learning, volunteering time to important civic activities, making connections with state decision makers to impact health policy: All are part of the College mission to foster strong, healthy communities in Vermont and around the world.



Clinical Simulation Laboratory staff member Jim Court demonstrates an ultrasound procedure during Girls Science Discovery Day.

Girls Gain a Deeper Understanding of Science

From conducting blood coagulation experiments to trying out tools like a tongue depressor and stethoscope, more than 90 middle-school aged girls had the chance to play the role of scientist and physician during Girls Science Discovery Day in May. Sponsored by the UVM chapter of the American Medical Women's Association, the event brought seventh and eighth grade girls from 29 Vermont schools to campus for a day filled with workshops

and events. Medical students served as hosts, showing students around campus and taking a break mid-day to have lunch with the group. And the day was busy: The "Parts is Parts" workshop — led by **Ellen Black, Ph.D.**, **Lauren Arms, Ph.D.**, and **Diane Jaworski, Ph.D.**, anatomy professors from the department of neurological sciences — featured hands-on activities with real anatomical specimens in the Gross Anatomy Lab. Medical students taught the "Say 'Ahhh'" workshop, which focused on practicing simple physical exam skills and using the skills on a patient. "Lessons from the Dead" with **Rebecca Wilcox, M.D.**, associate professor of pathology and **Pamela Gibson, M.D.**, associate professor

of pathology and director of anatomic pathology, used pathology specimens to teach attendees about pathologic changes that play a role in a patient's life and death. The middle-schoolers saw first-hand how medical students are trained with a tour of the Clinical Simulation Laboratory's virtual hospital, where they had an opportunity to work with the "Hal" Family — full-body mannequins that breathe and talk — in a safe teaching environment. The student groups also had an opportunity to conduct a blood-clotting experiment with **Paula Tracy, Ph.D.**, professor of biochemistry, and **Beth Bouchard, Ph.D.**, assistant professor of biochemistry, and join in a lunchtime discussion and tour of the UVM College

of Medicine and UVM Medical Center campus. The event — now hosted annually for 15 years — has made an impact in that time on girls' career choices. "This event not only provides role models to Vermont girls already interested in careers in science, but also exposes girls from more rural areas, perhaps with limited science experience, to the challenging and diverse field of science," says UVM Professor of Pathology **Sharon Mount, M.D.**, AMWA faculty advisor. "How rewarding to see several young women who attended Girls in Science Day when they were in eighth grade now enrolled in medical school! Other girls have gone on to pursue majors and careers in basic sciences."

Guiding High School Interest in Medical Careers

Medical students deep in the throes of lectures, labs, and exams have had the chance to try on the role of teacher and mentor through a partnership with Essex High School's STEM Academy (where students focus on science, technology, engineering, and mathematics). Led by the Med Mentors Student Interest Group (SIG), the program matches high school seniors who have expressed an interest in a career in medicine with medical student mentors to embark on a semester-long research project. The STEM Academy enrolls students after their first year of

high school, providing opportunities to dig deeper into a science or engineering field of interest as they get ready for college. The Med Mentor partnership serves as the senior capstone project for those in the medical track. This year, the six pairs have been meeting via Skype to talk about the research project — which for each student focuses on a disease of their choice — as well as get to know each other and swap stories about science and medicine. "In some ways, we are in the same shoes as the high school students," says **Ethan Harlow '18**, one of the SIG's student organizers. "This is helping us get comfortable with teaching, and the mentors have thrived in this role." **Lloyd Patashnick '19** says he hopes his perspective — as someone who came to medicine after graduating college as a history major — can help his mentee appreciate the value in the many different types of intelligence people possess. "Med mentors is a starting point to engage young people and reach out to others who might not have thought about medicine," he says. "Recruiting as much diversity as possible can only enhance the profession." For **Kristen Bartlett '19**, Med Mentors is an opportunity to pass on some of the knowledge she's accumulated. "As many of us can appreciate, the journey to medical school can be overwhelming, so I would like to aid in navigating and encouraging my mentee's progression in any way I can," she says. After their research projects are complete, the Essex STEM Academy

students are learning how to communicate science to different audiences through a presentation to a group of their peers, teachers, and other staff. Students also have the opportunity to shadow a physician at the UVM Medical Center, and visit the College of Medicine in the spring as part of a larger county-wide medical exploration day. Med Mentors expanded their reach to different high schools over the winter by hosting panel discussions about the college application process, college life, and the journey to med school.

Learning and Making a Difference Across the Globe

Alexandra Miller '18 arrived in Kampala, Uganda, as a first-year medical student in the summer of 2015 unsure of her role alongside more experienced physicians and health professionals. But after a six-week global health elective, she found herself a valued member of the team, gaining clinical skills, making connections with patients and their families, and coming away with a new understanding of how empathy and good listening skills can go a long way in patient care. "...In the high risk labor and delivery suite, I found that there were many things I could do. I soon realized that at Mulago Hospital, the simplest things can make the biggest difference," she wrote in a reflection for the UVM College of Medicine's Global Health Diaries blog.

Students like Miller are fanning out to locations around the world through the burgeoning Global Health Program, a partnership between the College of Medicine and clinical affiliate Danbury Hospital/Western Connecticut Health Network. First and fourth-year students, along with faculty from both institutions, are completing elective rotations at affiliate sites in the Dominican Republic, Vietnam, Russia, Uganda, and Zimbabwe. First-year students fulfill their clinical component by carrying out research projects, while senior medical students and residents complete a clinical rotation in



Medical student Daniel Lambert, a member of the Class of 2019, works with a student from Essex High School's STEM Academy as a part of the Med Mentors program.

addition to optional research. Students are given a rich cultural experience through a variety of historical and language seminars, field trips, and the host family program.

Health professionals from partner institutions are also visiting the United States for training and capacity building opportunities at Danbury Hospital. The second group of Global Health Scholars — including the new site director for the Dominican Republic satellite program — completed training in the U.S. in the past year. The program is receiving recognition on an international level: In December 2014, the WCHN/UVM program was accepted as a member of the Consortium of Universities for Global Health, based in Washington, D.C., a worldwide organization of 130 academic institutions and other groups working to address global health challenges. Students and faculty presented five posters at the 2015 annual conference in Boston.

As College of Medicine students continue to complete electives at the different affiliate sites, they promise to help bring home a new understanding of the role physicians and other professionals can play in fostering a truly global health care community.

“Until next time Mulago — and thank you to all the wonderful resilient people that make this such a special place,” wrote Miller of her time in Uganda.



UVM medical students with staff members of the Mulago Hospital in Uganda in the summer of 2015.



Members of the medical student public health project who worked with Vermont CARES to gain funding for a Hepatitis C case management project.

Public Health Project Helps Vermont CARES Gain Funding

The Public Health Projects — a five-month course in the Foundations level of the Vermont Integrated Curriculum — has for over ten years been matching student groups with community agencies to embark on projects that meet a particular need. Through the course students learn the tenets of population health, and gain experience in advocacy work and community action. For one group of students in the Class of 2017, their work helped lead to significant funding for Vermont CARES — the state’s largest and longest-serving AIDS Service

Organization — to start a Vermont Hepatitis C case management pilot project. Vermont CARES was one of only eight programs nationwide that received this \$40,000 in funding from Janssen Therapeutics.

“We absolutely could not have successfully written this proposal without [the students’] steadfast support and thoughtful research,” says Peter Jacobsen, executive director of Vermont CARES. “It was definitely the backbone of our application.”

Titled “Improving Care and Treatment for People Who Inject Drugs (PWID) Living with HIV and/or Hepatitis C,” the grant funds a staff position, peer outreach workers and a web-based information clearinghouse. In Vermont, there are an estimated 1.63 cases of hepatitis C (HCV) per 1,000 people, according to the report on the “Living with Hepatitis C: A Vermont Needs Assessment” public health project, which was conducted in collaboration with Jacobsen and Vermont CARES. Many HCV patients “are aware of their status, but do not seek treatment because of the demands of poverty and ineligibility due to IV drug use,” the students state in their project introduction.

The students created a 20 question survey to assess demographics and the applicability of existing services at VT CARES, which was completed by HCV patients at seven sites throughout Vermont. Based on their findings, the students — who included Class of ’17 members Alexandra Brown, Justin Genziano, Julia Powers, Samy Ramadan, Amy Schumer, Matthew Shear and Katherine Wang — recommended that Vermont CARES expand their services to include clients with HCV. UVM Professor of Pediatrics Jerry

Larrabee, M.D., was the faculty advisor.

“This new grant, made possible by the students’ research, allows us to expand care and support options for those with hepatitis C, and this is a huge next step for Vermont,” says Jacobsen. “The College’s commitment to local connections and impact really pays health dividends, and this is a great example of a strong connection.”

Med Students Give Back: Serving the Community

Life as a medical student can be busy — with studying, labs, lectures, team-based learning sessions, and more studying — but College of Medicine students still manage to find time to give back to the community. This year alone, they have participated in dozens of events and activities, from trail work with the Green Mountain Club to food drives to benefit local community agencies to cooking meals for residents at the Ronald McDonald House in Burlington. COM Cares — an organization that grew out of a student-led Schweitzer Fellows project in 2007 — now sponsors many community initiatives for students, faculty and staff, in cooperation with the Office of Diversity and Inclusion. And the College’s many and varied Student Interest Groups host a legion of events that offer opportunities to give back. A few examples: The student-led Microscope Exchange works to place microscopes and other supplies in resource poor areas around the world, and hosts local fundraisers to help offset transportation costs. Students in Smile DOCS visit area elementary schools to teach children using real pathology specimens, models, and interactive learning activities. The Running Student Interest Group raises money every year for a deserving cause through organizing a team to participate in the Vermont City Marathon. The event draws dozens of faculty, staff and students, and rallies the College around a common goal: In 2015 the team raised money for Steps to Wellness, the oncology rehabilitation program sponsored by the University of Vermont Cancer Center. And then there are the smaller activities throughout the year



Amy Schumer '16 and Karl Kristiansen '16 (in background) pack up surplus microscopes to donate to medical personnel in poorer parts of the world through the Microscope Exchange Program spearheaded by medical students.

that stand to have a big impact, like the Pediatric Student Interest Group gathering one afternoon to make fleece blankets for the University of Vermont Children’s Hospital. It all adds up to a stronger community and physicians who understand first-hand the value of giving back.

Graphic Storytelling for Better Reflection

You may not often hear ‘medical school’ and ‘comics’ in the same sentence, but a two-day workshop held at the College of Medicine in late 2014 brought those two worlds together, inviting participants to explore identity



Cartoonist and Marsh Professor-at-Large Alison Bechdel works with Matthew Shear '18 and Leah Cipri '18 during the graphic storytelling workshop.

in the context of healthcare. Hosted by UVM James Marsh Professor-at-Large and acclaimed graphic novelist **Alison Bechdel**, the workshop introduced faculty, staff and students to the burgeoning field of graphic medicine. The approach uses storytelling — in the form of pictures — to help healthcare providers better understand patients and themselves. The value of storytelling has increasingly been recognized in medical education as a way for physicians to develop empathy, explore difficult situations and emotions, and prevent burn-out. The workshop, co-sponsored by the College’s offices of diversity and inclusion and medical student education, took this as a jumping-off point to focus on LGBTQ identity as related to the healthcare field. Participants walked away with a 12-panel comic that explored an experience or interaction, offering the opportunity to reflect on its meaning and impact. Bechdel proved to be an insightful and encouraging guide for medical students and faculty who may not have ‘drawing’ at the top of their skill set. Bechdel’s work, including *Fun Home* (which has been adapted into an award-winning Broadway play), and *Are You My Mother?* earned her a MacArthur Genius grant. She chatted with students about their storylines, offered tips to develop a strong narrative, and provided examples from her own work that helped to underscore the impact storytelling can have.