PROBING THE MYSTERIES OF TRAUMA

Kalev Freeman, M.D., Ph.D., uses the Emergency Department as a living laboratory

ALSO FEATURED:

- Vermont Medicine Hits a Half-Century
- A Tale of Two Neuroscientists
The Medical Ira Allen Society has a long history, beginning with the Century Club, initiated by medical alumni in the late 1950s. For more than three decades the College of Medicine has recognized hundreds of donors each year. These benefactors have been the mainstay of philanthropy, and their gifts have greatly impacted students, faculty, and research. Just as UVM founder Ira Allen shaped UVM’s earliest legacies, today’s Medical Ira Allen Society members continue to mold the College of Medicine.

The Ira Allen Society at UVM, and the Medical Ira Allen Society at the College of Medicine, recognize annual gifts of $2,500 and lifetime giving of $100,000 or more, with special recognition for donors of $1 million.

MEDICAL IRA ALLEN SOCIETY
History in the making

Probing the Mysteries of Trauma
Born in an instant of unplanned, violent stress, trauma demands immediate action and is inherently difficult to research. Through innovative data-gathering systems, one trauma physiologist at UVM turns the Emergency Department into a living laboratory.
By Josh Brown

A 50-Year Record
Few medical schools, if any, can claim a magazine with a 50 year pedigree. As Vermont Medicine hits the half-century mark, we look back fondly over the five-decade chronicle of the life of the College of Medicine.
By Edward Neuert

A Tale of Two Neuroscientists
A deep personal friendship and shared interest in neuroscience led two longstanding chairs through two decades of collaboration, and the merger of their two departments.
By Jennifer Nachbur
As spring began its turn to summer, we graduated 186 new physicians and two-dozen Ph.D. recipients at this year’s commencement. Those graduates fanned out across the country, with a good number staying a part of our academic medical center community, and many more going to residencies and post-doctoral programs at the most prestigious institutions across the country.

Soon after graduation comes Medical Reunion, a wonderful opportunity to see the results of commencements past, when successful graduates return to share with us and their fellow alumni all the news of their busy lives and their accomplishments. This was my first “repeat” reunion — that is, I’ve now been dean of the College long enough to be seeing classes repeat a second time. With each year, the feeling for how much our alumni value their medical alma mater deepens.

This issue of Vermont Medicine offers a special window into the College of Medicine. Few medical schools can claim to have a magazine whose history stretches back five decades. We are fortunate that, five decades ago, John Mazuzan, M.D.’54, one of our most committed alumni, was tapped to found this publication, then called Halla. In these pages, and in the related material on our web site, you can see the depth of our history and the unchanging nature of our commitment to the missions of this College. And if that ’50 year view isn’t enough, the story of former chairs Rodney Parsons, Ph.D., and Robert Hamill, M.D., and their quarter-century of collaboration and leadership underscores even more what a close-knit, supportive community we are a part of.

We must note two people who are among the many who help us achieve our missions. Meanwhile, the work of researchers at the Vermont Cancer Center has gained important improvement of our school.

Lakoski’s Research Finds Link Between Fitness & Cancer Risk in Men

A high level of cardiovascular fitness in middle age reduces men’s risk of developing and dying from lung and colorectal cancer, two of the most common cancers affecting men, according to findings from a large, prospective 20-year study. Better fitness also reduces the risk of dying from, though not developing, prostate cancer.

Lead study author Susan Lakoski, M.D., assistant professor of medicine, presented these findings at the American Society of Clinical Oncology (ASCO) Annual Meeting in Chicago, Ill., in June. Lakoski’s research was also selected for ASCO’s official Press Program, a distinction accorded to less than one percent of abstracts from the annual meeting.

“While poor fitness is already known to predict future cardiovascular disease, this is the first study to explore fitness as a marker of future cancer risk prognosis,” said Lakoski. “This finding makes it clear that patients should be advised that they need to achieve a certain fitness level, and not just be told that they need to exercise. And unlike exercise behavior, which relies on patient self-reporting, fitness can be objectively and accurately measured in a clinical setting.”

The study included more than 17,000 men who had a single cardiovascular fitness assessment at a mean age of 50 years. Study participants were divided into five groups according to their measured fitness performance. Researchers analyzed Medicare claims data to identify the participants who had developed lung, colorectal, or prostate cancer over a median follow-up period of 20–25 years. They found that the risk of being diagnosed with lung or colorectal cancer was reduced by 68 and 38 percent, respectively, in men who were the most fit, relative to those who were the least fit. Fitness was not found to significantly impact prostate cancer risk.

The University of Vermont College of Medicine arranged for this medical education center to be named for alumnus and Burlington native Robert Larner, M.D.’42, and Helen Larner, in tribute to the couple’s decades-long efforts to make medical education more affordable.

“The impact of the Larners’ generosity on the College of Medicine and the physicians educated there is immeasurable,” noted UVM President Tom Sullivan. “Their understanding and support of cutting edge medical education and the importance of access and affordability for medical students has impacted many, many lives. Moreover, their commitment to UVM and its students has sparked a continuous stream of philanthropy from others, including physicians who have chosen to educate there is immeasurable.”

— UVM President Tom Sullivan
Training Helps Save Lives at Marathon Bombing

The email to Professor of Surgery John Fortune, M.D., arrived late in the evening of April 15. Its writer was fourth-year senior surgery major Katie Shean. “I am sure you have heard about the bomb that occurred at the Boston Marathon today,” Shean wrote. “I wanted to let you know that I was actually in a restaurant about 20 feet from the second explosion site. Instead of running away, I used what you taught me in ATLS and tried to help the victims.”

ATLS stands for Advanced Trauma Life Support, a senior-year course that every surgery major is required to take. Shean had completed her ATLS training three weeks prior to the marathon. “Part of ATLS was a section on mass trauma,” she recalled recently, “and I thought, when am I ever going to see mass casualties?”

On the afternoon of the marathon, Shean and some friends had tried to get an outdoor seat at the Forum restaurant on Boston’s Boylston Street, the exact location where the second of two bombs that detonated that day had been placed. There were no seats available, so the group instead took indoor seats at another restaurant, Max Brenner, one storefront away from Forum and about a block from the race’s finish line.

When the first bomb detonated down the street at 2:49 p.m., the crowd in Max Brenner’s got suddenly quieter, but it wasn’t clear at first what the noise meant. “I decided I would go see what was going on,” said Shean. She was just reaching the door to the sidewalk when the second bomb exploded. Crying, frazzled people immediately began pushing into the restaurant to take cover. Shean fought against the tide and found her way outside. There she found puddles of blood, and several people whose lower limbs had been blown off. Looking down, she saw a severed foot sitting in the street.

She quickly collected belts and scarves from bystanders, and began placing tourniquets on victims and replacing tourniquets that had been improperly placed the first time. The ATLS course had included a scenario where students get to a bombing site and have to assess and treat very quickly five injured victims. Shean continued to do just this on Boylston Street, focusing on the victims who were in the worst shape. At least one of those victims was killed by the bomb. Many others survived with life-changing injuries.

“I just want to say thank you for teaching me how to handle a trauma,” Shean wrote in her email to Dr. Fortune several hours later, after she had left the site and driven away from Boston. “I did all I could and it allowed others to help those who could be saved.”

Shean began her residency in general surgery in July at St. Elizabeth’s Medical Center in Boston. On May 14, at Senior Honors Night, she received the Fletcher Award, presented by Dr. Fortune.
Arthur Perelman, M.D.'52, at center, with family members.
PART 1: POETRY

**Told secrets, without the vigilance of vowels.**

**without the certain comedy of consonants.**

**The skeletal backbones**

**immense negative spaces.**

**So this is what it feels like**

**Language spelled out by**

**From you, for the first time**

**I learned what it meant to be quiet.**

---

**MATTHEW LIN**

UVMCOM 2016

---

**8**

**Contains poetry, prose, and visual art by students all while running a busy solo general practice for 40 years in 1883, was one of the leading American poets of his generation, a student-run initiative is seeking to continue that tradition on a 1990s, and has appeared periodically over the years. Now, a visual arts, began its history in the College of Medicine’s publication for the literary and Journal Publishes 2013 Issue**

---

**PART 2: HISTORY**

**In the end, she rowed 250,013 meters, or 155.35 miles, in 24 hours 31 minutes**

**as an exemplary approach to addressing a global public health challenge, and their project was recognized at this year’s conference in St. Louis, Missouri, in April, their project was recognized as the inaugural A. Reardon, M.D. Award for service to the College, was there with his childhood class of 2016, was there with his childhood friend, Luke Neill, Class of 2016, was three with his childhood friend, Sam Meyer, to present text-messaging software they are developing. Their HIPAA-compliant software program allows patients to communicate with their physicians and receive text messages that help them understand their medications and health implications. At this year’s conference in St. Louis, Missouri, in April, they shared their patient’s experience of an exemplary approach to addressing a global public health challenge, and they met former President Bill Clinton and his daughter Chelsea.**

---

**PART 3: MEDICINE**

**My main duty is to ensure that we educate and train high-quality, excellent physicians. And I want to make sure that we’re providing this information and resources so that the students’ experience over the four-year curriculum is a really positive one. It’s my team’s responsibility to ensure academic success for each student, or to provide the resources that students need to be academically successful. Sometimes, not often, that doesn’t work out — just because you get into medical school doesn’t mean that you’ll be able to meet all of the requirements and successfully graduate, so we also oversee the advancement committee, which determines if someone is demonstrating satisfactory academic progress, and plans for students who might be struggling. So my office is responsible for academics, providing support and resources to those students, and also overseeing the committee that reviews all students.**

---

**Christa Zehle, M.D.’99**

Associate Dean for Student Affairs and Associate Professor of Pediatrics at the UVM College of Medicine

---

**CZ: I don’t think it’s necessary to have been a student here to succeed in this job, but I think it’s been a very important factor for me. I had an excellent experience here as a student. I’ve valued that experience even more than my undergraduate years. I’ve always felt strongly about teaching and education, and to be able to return to my home state, and my home medical institution, to teach and to impart the lessons I’ve learned and the experiences I’ve had to today’s students — well, there’s nothing quite like helping to educate the next generation of physicians. Being able to do that at the institution where you’ve trained, for me, has an extra-special meaning. Many things have definitely changed since my student days, but the collaborative nature of the College of Medicine has stayed the same. Those who work in the College really value and respect education and are excited to be here teaching.**

---

**VM: What is the your main role as Associate Dean for Student Affairs?**

**CZ: The second important piece of my job is providing the support and resources for our students’ applications to residency programs, and overall advising. All our students know that they want to be physicians, but settling on the type of physician you want to be can be a very difficult decision. Some people enjoy everything they encounter in the clinical settings, and that can make it really a hard choice. Some develop a strong liking for one particular pathway, but maybe it’s a struggle for them to be competitive in that field. And some people will question whether they made the right decision. So career advising is really big part of what we do. I spend a lot of time meeting with students and doing individual advising, and I definitely enjoy that part of my job. I remember having a challenging decision when deciding that I wanted to be a pediatric hospitalist. I’ve always known I made the right decision, and I want to help our students get to that same place.**

---

**VM: After medical school, our graduates go on to residences here in Vermont and across the nation. What role do you play in that next step?**

**CZ: That’s one of the main things I focus on. We provide the resources that students need to be successful in their next step, whether it’s a residency program, fellowship, or another educational opportunity. We do that by connecting them with the resources they need, such as funding, networking opportunities, and advice on how to prepare for the next stage of their career.**

---

**VM: How has having been a medical student here influenced your role?**

**CZ: I think it’s very important for me. I had an excellent experience here as a student. I’ve valued that experience even more than my undergraduate years. I’ve always felt strongly about teaching and education, and to be able to return to my home state, and my home medical institution, to teach and to impart the lessons I’ve learned and the experiences I’ve had to today’s students — well, that’s something quite like helping to educate the next generation of physicians. Being able to do that at the institution where you’ve trained, for me, has an extra-special meaning. Many things have definitely changed since my student days, but the collaborative nature of the College of Medicine has stayed the same. Those who work in the College really value and respect education and are excited to be here teaching.**
A total of 106 STUDENTS were conferred medical degrees by UVM President Tom Sullivan, J.D., and Dean Rick Morin, M.D., at the College Commencement Ceremony in Ira Allen Chapel on May 19. UVM/Fletcher Allen cardiologist and Associate Professor of Medicine WILLIAM HOPKINS, M.D., gave the main address, in which he recounted the value of mentors and colleagues in his career, including the late Professor of Medicine Burton Sobel, M.D. JEFFREY MCLAREN, M.D.’13 presented the student address. McLaren expressed his appreciation for the unique and caring atmosphere of the College of Medicine, and urged his fellow graduates to remember that feeling with every patient they encounter in the years ahead. Also in attendance were former Vermont Governor and U.S. Ambassador Madeleine Kunin and her husband, John Hennessy, Jr.

The new physicians went off to residency programs at prestigious institutions across the region and nation. About one out of every eight members of the Class of 2013 will remain in Vermont for residency training.

View the 2013 Medical Commencement Ceremony online. The ceremony was streamed live, and you can watch a recording and see more photos of the event. Go to: uvm.edu/medicine/vtmedicine

Tampas Receives Honorary UVM Degree

For half a century, John Tampas, M.D.’54 has shown tireless dedication to the College of Medicine both as a professor of radiology and an active alumnus. At the university’s main commencement ceremony on May 19, this dedication was recognized with an honorary Doctor of Science degree from the institution. In addition to his 1954 medical degree, Dr. Tampas received his bachelor of science from UVM in 1951. He joined the UVM faculty in 1962 and chaired the Department of Radiology from 1970 to 1996. Medical students twice named him UVM Teacher of the Year, and he has served for years on several alumni groups and as president and executive secretary for the Medical Alumni Association (MAA). In 1995, Dr. Tampas received the A. Bradley Soule Award, the MAA’s highest honor for a medical alumnus. An endowed faculty position — the A. Bradley Soule, M.D.’28 and John P. Tampas, M.D.’54 Green & Gold Professor of Radiology — funded by the radiology faculty, recognizes the contributions of both men and their legacy at the College.

Lyden Addresses New Ph.D. Graduates

On Saturday, May 18, graduate students from across the University of Vermont received diplomas and hoods in the Graduate College Commencement Ceremony at the Patrick Gymnasium. Among them were graduates of programs affiliated with the College of Medicine in the areas of biochemistry, cell and molecular biology, microbiology and molecular genetics, pharmacology, molecular physiology and biophysics, clinical and translational science, and neuroscience. In total, 27 Ph.D. students from the College of Medicine were recognized at the ceremony. Another eight received a Master of Science degree. David Lyden, M.D., Ph.D.’86, the Stavros S. Niarchos Chair and an associate professor of pediatrics and cell and developmental biology at Weill Cornell Medical College and a pediatric neuro-oncologist at Memorial Sloan-Kettering Cancer Center, was the guest speaker. Lyden was recognized last fall with the Distinguished Graduate Alumni Award from the UVM Medical Alumni Association.
Through innovative data-gathering systems, a UVM trauma physiologist turns the Emergency Department into a living laboratory.
Dr. Freeman has been able to develop an outstanding research program for emergency medicine and trauma using a novel model of student research assistants.

— Steven Leffler, M.D., UVM Professor of Surgery and Chief Medical Officer, Fletcher Allen Health Care

Elen White,* a twenty-three-year-old skateboarder, grits her teeth and lets out a deep grunting moan. Her knuckles look like hamburger meat. She has black flakes of blood on her lower lip and around her nose, a curving laceration across her forehead, and two glistening gashes in her knee.

A white-and-orange cervical collar holds White’s head still, but her eyes move back and forth as two EMTs in green jumpuits wheel her into a room on the main floor of the Emergency Department of Fletcher Allen Health Care in Burlington.

Kalev Freeman, M.D., Ph.D., leans over the stretcher to look White in the eye. “I’m Doctor Freeman. You’re going to be okay,” he says very gently, as a team of nurses and technicians pull up trays of supplies. “We’ll get you feeling better here.”

Freeman turns to one of the nurses, Sheena Fisher, R.N., who is adjusting an IV line. “Let’s do a hundred of fentanyl,” he tells her and then turns back to his patient. “We’re getting you some medicine to help with your pain.”

The EMTs report that White collided with a streetlight and fell, face-first, over a small concrete wall in downtown Winooski. No helmet. “Where are you hurting, my friend?” Freeman asks.

“My head hurts so bad,” White tells him, groaning again, and her eyes drift up to a monitor overhead, beeping out a record of her breaths and beating heart. “I’m looking to see what needs stitches,” he says, peering closely at his patient’s forehead. But Freeman is more concerned about what he can’t see: what might be happening inside White’s skull.

“Are you able to sit still for a few pictures?” he asks. “We’re going to take some pictures of your head and then we’ll get you stitched up.” White grunts and gets whisked down the hall for a CAT scan.

Just outside White’s exam room, recent UVM graduate Chelsea Manning, who’s now working as a research assistant in the Department of Surgery, has been waiting quietly. She’s holding a vial for collecting blood. Freeman steps out to talk with her. “We are going to draw blood from her for the study.” Freeman tells Manning. “We’ll enroll her. I think she’s going to get admitted. Head bleeding! Could be. I’m guessing she broke some of the bones in her face. She’s pretty crushed.”

Then he sits down at a bank of computers to order some tests for his new trauma patient. A surgeon strides by in blue scrubs. More EMTs wheel around the corner with a bed, pushing an elderly patient the color of ash. Like a chorus of electronic frogs, there’s a constant beeping and ringing in the air from telephones and monitors.

It’s not exactly the quiet, peaceful environment a scientist might hope for to do research, or a professor might hope for to instruct college students.

But Freeman, who is an assistant professor of surgery and pharmacology, director of Emergency Medicine Research, and the lead investigator of the Trauma Physiology Laboratory at the UVM College of Medicine, does both. He conducts research and teaches undergraduates and medical students — right in the emergency room.

In return, his research on trauma — particularly traumatic brain injury and blood clotting — depends on the 24-hour-a-day, 7-days-a-week efforts of undergraduate students (and a few recent graduates, like Manning) enrolled in courses he founded: Surgery 200 and 201.

Since 2008, he’s had hundreds of students enrolled. Like Manning, they help with his research on trauma. And they help him get started.

So far, the students have gathered data for 22 studies, both for Freeman and for other researchers across the College of Medicine.

Leffler is impressed by what Freeman has built. “He has been able to develop an outstanding research program for Emergency Medicine and Trauma using a novel model of student research assistants.

* Taken in a studio with white background and digital changes for privacy.
This innovative program has been great for our patients, academic medical center, and the students.”

With this team, Freeman’s research aims to understand the relationship between traumatic injury and blood vessels. Several of his studies focus on the endothelium — the inner lining of blood vessels that regulates smooth muscle, helps form blood clots, and provides a barrier to fluid that could leak in the brain. But in trauma the biochemical signals in the endothelium can go haywire. Freeman believes, which leads to a cascade of other medical problems.

Many physicians think of trauma as a mechanical problem requiring a surgical fix. Broken bones can be set, amputated or stitched up, but sometimes you stitch up all the holes but they’re still bleeding out and there’s not much you can do about it,” he says. “When is a person going to have coagulation problems? Some clot too easily; some don’t clot well at all. Trauma surgeons would love to have this information.” Freeman says, “before they begin to operate.”

While Chelsea Manning waits, Freeman and a medical student sit in the blue gloom of an image viewing room, looking at glowing scans of Helen White’s head and spine. “The big risk for her is bleeding. She’s gotten facial trauma, so I’m looking to see if she’s got any blood inside the skull,” he says, as he scours the ghostly grey images for telltale bright-white patches behind the eye sockets or between bone and brain. “You can see she broke her nose here,” he says pointing to an unhappy-looking angle in the picture. “But I don’t see any threatening bleeding in the skull,” he says. “That’s good.”

A few minutes later, Manning steps in the room. “I’m ready to do the blood,” she says. “I’m on call all night; do you want me to stay with her and do the two-and-four-hour draws? Do you think we’re ultimately going to use her blood?”

“You must be sure if she’s going to have an admission injury,” Freeman says, “but let’s go ahead and run the blood sample and get this piece of data and log it. I’ll know before midnight.”

In the little lab, Manning spins the blood in a centrifuge and then runs samples into two machines that will measure its clotting characteristics. “Here we can see how quickly it clots,” she says. On a computer screen a thin line spreads out into a wide blue band. “That’s where the clot is starting,” Manning says, as the data streams out, forming a bell-shaped pair of curves, beautiful and orderly.

Trauma, on the other hand, is, almost by definition, disorderly and unpredictable. A blinding rush of headlights. A leg blown off by an IED under your Humvee. A sudden rending of our gossamer plans by an intrusive, painful snap. “This is why we haven’t figured out the answers to many trauma questions, because it is so challenging to study; you can’t plan for it,” Freeman says, “These are people in the worst of circumstances, in the middle of the night, and we have to work fast. It’s very hard to get this data. It’s simply a feasibility challenge. An emergency room is a very difficult environment to do robust scientific research.”

An additional challenge: Freeman needs Helen White’s permission to participate in this clotting study. Informed consent is a foundation of all ethical medical research. But how do you get consent from a patient who just smashed her face on the concrete? Or worse. “When someone is bleeding out from everywhere and they’re on a ventilator, how can you get them to sign a consent form to take a blood sample?”

You can’t. And yet understanding what’s happening with critically injured patients — just after they’re injured, in the first few days to get consent from the family.”

“Acute brain injury on systemic endothelial function,” Freeman writes. In other words, when a car crash victim with a head injury dies of a heart attack a week later, it may be because “the cardiac tissue was damaged by brain trauma. All the blood vessels Helen White’s face was potentially survivable,” Freeman says, “more than 90 percent of soldiers who die simply bled to death. For some reason, many severely wounded people can’t form blood clots — and Freeman would like to know why.

“You’d think we could just give these patients blood transfusions. No one should ever die from bleeding, because we can give them blood!” Freeman says. “But they just can’t make a blood clot.” There are several theories about why this happens: massive transfusions of red blood cells and plasma change the biochemistry of the blood’s natural clotting mechanisms. Saline infusions dilute blood proteins. Dropping body temperature and build-up of acid may contribute. Genes matter. Freeman would like to show how dysfunction of the endothelium is also a culprit.

“We’ve already figured out most of the possible surgical procedures for trauma, but sometimes you stitch up all the holes and they’re still bleeding out and there’s not much you can do about it,” he says. “What is there after mechanical surgery?” Freeman asks. His answer: “Better biochemistry.”

“If we can understand what is going on with blood vessels after trauma, then we can target therapies to help protect them and thereby benefit blood clotting capabilities and prevent brain swelling.”

— Kalev Freeman, M.D., Ph.D., Assistant Professor of Surgery and Pharmacology, Director of Emergency Medicine Research

Acute brain injury on systemic endothelial function,” Freeman writes. In other words, when a car crash victim with a head injury dies of a heart attack a week later, it may be because “the cardiac tissue was damaged by brain trauma. All the blood vessels Helen White’s face was potentially survivable,” Freeman says, “more than 90 percent of soldiers who die simply bled to death. For some reason, many severely wounded people can’t form blood clots — and Freeman would like to know why.

“You’d think we could just give these patients blood transfusions. No one should ever die from bleeding, because we can give them blood!” Freeman says. “But they just can’t make a blood clot.” There are several theories about why this happens: massive transfusions of red blood cells and plasma change the biochemistry of the blood’s natural clotting mechanisms. Saline infusions dilute blood proteins. Dropping body temperature and build-up of acid may contribute. Genes matter. Freeman would like to show how dysfunction of the endothelium is also a culprit.

“We’ve already figured out most of the possible surgical procedures for trauma, but sometimes you stitch up all the holes and they’re still bleeding out and there’s not much you can do about it,” he says. “What is there after mechanical surgery?” Freeman asks. His answer: “Better biochemistry.”

“If we can understand what is going on with blood vessels after trauma, then we can target therapies to help protect them and thereby benefit blood clotting capabilities and prevent brain swelling.”

— Kalev Freeman, M.D., Ph.D., Assistant Professor of Surgery and Pharmacology, Director of Emergency Medicine Research Research assistant Abby Wager prepares blood samples as Dr. Freeman observes. Because blood from trauma victims must be processed soon after their injury, Freeman built an analysis facility in a former closet at the Emergency Department.

“Acute brain injury on systemic endothelial function,” Freeman writes. In other words, when a car crash victim with a head injury dies of a heart attack a week later, it may be because “the cardiac tissue was damaged by brain trauma. All the blood vessels Helen White’s face was potentially survivable,” Freeman says, “more than 90 percent of soldiers who die simply bled to death. For some reason, many severely wounded people can’t form blood clots — and Freeman would like to know why.

“You’d think we could just give these patients blood transfusions. No one should ever die from bleeding, because we can give them blood!” Freeman says. “But they just can’t make a blood clot.” There are several theories about why this happens: massive transfusions of red blood cells and plasma change the biochemistry of the blood’s natural clotting mechanisms. Saline infusions dilute blood proteins. Dropping body temperature and build-up of acid may contribute. Genes matter. Freeman would like to show how dysfunction of the endothelium is also a culprit.

“We’ve already figured out most of the possible surgical procedures for trauma, but sometimes you stitch up all the holes and they’re still bleeding out and there’s not much you can do about it,” he says. “What is there after mechanical surgery?” Freeman asks. His answer: “Better biochemistry.”

“If we can understand what is going on with blood vessels after trauma, then we can target therapies to help protect them and thereby benefit blood clotting capabilities and prevent brain swelling.”

— Kalev Freeman, M.D., Ph.D., Assistant Professor of Surgery and Pharmacology, Director of Emergency Medicine Research
Concussions can produce a range of symptoms such as headaches, depression, slowed reaction times, memory loss and sleep problems. But beyond these cognitive, behavioral and emotional clues — often self-reported — there is no method of detecting a head injury in mild cases. In 2011 and 2012, Thomas and other students taking Freeman’s summer 2010-2011 courses helped recruit patients with concussions to be part of the Head Injury Testing and Outcomes Program (HiTop). Using an advanced MRI machine near the Emergency Department, the researchers tested 28 of these volunteers soon after their injury and then seven days later using a state-of-the-art technique called diffusion tensor imaging. The team has been looking at the brain’s white matter — axons — to see if shearing or swelling could be detected, giving a new view on mild brain injuries. This imaging is very sensitive, and the team hopes to detect damage of fibers where other techniques can’t. The study also tested the patients’ brains at work, using functional MRI imaging, looking at blood oxygenation levels in several areas of the brain’s gray matter while the patient worked on, for example, a memory task.

On both types of imaging, the researchers found significant differences between control patients and those with concussions. Another important finding: in the hours right after a concussion, many patients have the same symptoms — but the research team saw low activation of brain areas associated with memory tasks in the patients who didn’t recover quickly from their injury. Thomas reports, “whereas there is high activation in those who will go on to recover and the control group.”

In other words, in addition to finding physical evidence of concussions, the researchers hope that this study may point toward techniques that would be predictive of who is likely to go on to have long-term symptoms — or develop the post-concussion syndrome increasingly seen in NFL players and recent combat veterans. Those patients who still had symptoms after a week were invited into the second stage of the study, a six-week program of mindfulness training supervised by Naylor, who directs UVM’s Mind/Body Medicine Clinic. The patients met once a week to learn meditation and focusing techniques that the researchers believe can help injured brains recover.

A major focus of the sessions: cognitive exercises with music. Young men are major sufferers of concussions, but they are much less likely than women to participate in traditional group therapy. “It’s tough getting NFL guys to sit in a group therapy,” Freeman says, “but iPod therapy could work. These are cognitive exercises, focusing, for example, on certain sounds like a horn or drum beat. It’s like a mind gym.”

Whether sleeping or spitting, the healthy body has an amazing ability to keep constant blood flow to the brain. Testing brain and gut arteries from animal models, Freeman and his students are exploring how the molecular signaling mechanisms in endothelium, particularly calcium pathways, can misfire after a traumatic brain injury — leading to excessive dilation in the brain and blood vessels. With his mentor, University Distinguished Professor Mark Nelson, Ph.D., chair of the Department of Pharmacology, Freeman has been collecting data showing that endothelial cells are hyperactivated following trauma, as a wave of calcium ions move in. This blast of calcium could be a cellular foundation for both swelling of brain tissue and loss of clotting capacity.

Using high-speed video images from powerful spinning-disc confocal microscopes in Nelson’s nearby lab, Freeman and his team can observe and measure calcium, nitric oxide, and other signals that move into and through endothelial cells. Their hope is to help point the way toward treatments that could block key calcium ion channels, turn off overabundant calcium signals, and maintain clotting pathways: in short, calm the endothelium. In the long run, Freeman would like to contribute to long-sought therapies for uncontrolled bleeding and traumatic brain injuries.

But this night, in the hospital, it turns out, is not going to be admitted as an in-patient to the hospital. Her injuries hurt, but they’re not as serious as they first looked and her head now seems fine. Some stitches, wound scrubbing, pain medications, and she’ll be heading home. “We got the first blood sample, which we can use in the comparison group,” Freeman tells Manning. But because the patient is being discharged, she can’t be in the main trauma study. And in that, Helen White, lacerated, sutured, and sore, could count herself fortunate. “In the lab we all work,” Freeman says, “Then I go work a shift in the E.D. and see someone on Friday night, someone in a car accident, with the same injury that we’re modeling and studying. That brings it home. It reminds me why we’re doing the research.”
AS VERMONT MEDICINE HITS THE HALF-CENTURY MARK, WE LOOK BACK FONDLY OVER THE FIVE-DECADE CHRONICLE OF THE LIFE OF THE COLLEGE OF MEDICINE
covered General Eisenhower’s visit to Norwich University in 1946 for the paper, and had seen his write-up go national on the Associated Press wire.

“I don’t know how I took on creating a magazine and still maintained a full-time practice,” he says. He soon began to receive some help from the University’s public relations office, but stayed on the magazine’s masthead as editor until the late 1970s.

Five decades after the first issue rolled off the presses, the magazine has gone through several editorial and production changes. Originally an 8-inch square, it moved up to a full-size publication in the early 1980s. Color came to its pages in 2001, as did a name change, since the readership had broadened to include recipients who had never sat in the Hall A lecture hall, which itself became a thing of the past a few years ago. (The alumni news and notes section, in tribute, retains the old lecture hall name.)

In the following pages, and through articles available on the Vermont Medicine website, readers can get a glimpse of the changing life of the College of Medicine from the 1960s to today. Even more important are the clear indications of what hasn’t changed — the work to educate students and produce research that serves patients and the community.

— Ed Neuert
Editor, 1998–present

Students
More than anything else, alumni of the College always wish to be kept informed of what it is like to be a medical student today. Across all the “todays” of the last 50 years, the magazine has shown students throughout their daily life — navigating the worlds of the lecture hall and clinics, learning about the physician’s life, and having a lot of fun along the way.

During a recent interview, John Mazuzan, M.D.’54, the founding editor of the College of Medicine’s magazine, looks over an early issue of Hall A in his Burlington living room.

Facilities
Over 50 years, the College’s campus has not only changed — it’s actually moved. Early issues of Hall A detail the plans for the Given complex and, in 1958, the move to the top of the hill — including the last class in the old Hall A that had served the school for more than 60 years. Later years saw coverage of the construction to Rowell Hall, and the rise of the Health Sciences Research Facility and the Medical Education Center.

Curriculum
Change is a constant in medical education, and nothing has been more of an indicator of the constant refinement and improvement of the art and science of medicine than the continuing evolution of the College’s curriculum over the past 50 years. In 1967 the “new” curriculum introduced a radical change: early clinical experience. That spirit continued to inform the curriculum development process over the coming decades, eventually fostering the Vermont Integrated Curriculum’s development in the late 1990s and early 2000s. Through all those years, the nation’s need for more physicians drove the size of the student body to more than double.

Women
It seems almost impossible to realize now, but in the 1960s it was headline-worthy to state that “A Medical Student…is Not Always a ‘He’.” Women had first been admitted to the College in the early 1920s, but their numbers in the student body had never been large. Beginning in the mid-1970s that changed fairly rapidly. Five female students featured in the 1970s was Casja Nordstrom (later Casja Schumacher, M.D.’74), who went on to years of service on the Medical Alumni Association Executive Committee, including service as the first female president of the committee. Her two daughters also earned their M.D.s at the College. Today, as has been the case for many years, roughly half the student body are women.

1965
1969
2000
2005

1967
1971
1977
2004

Read All About It!
See the full stories featured here, plus many added articles from the last 50 years.

Go to: uvm.edu/medicine/50medicine
First and foremost comes the human dimension of medicine: the doctor/patient relationship. But augmenting that is the tremendous tide of technological innovation that has brought forth astounding new resources for better treatment and increased access to and sharing of information. Physicians are lifelong learners, and that has been apparent in these pages. Computers made an early appearance, the World Wide Web was born right before our eyes, and in the new millennium, the College of Medicine Educational Tools (COMET) became a 24/7 platform for medical student learning and sharing. Clinical simulation became a strong presence in the past decade.

Research
One of the great stories in U.S. medicine over the last five decades has been the growth of the National Institutes of Health and other funding agencies, and the resulting growth of research work at medical schools throughout the nation. An article in a 1966 issue of Hall A told of the College’s winning one of the first five federal grants for regional heart disease, cancer, and stroke programs — an early effort at translating the latest medical knowledge into clinical practice. As the College’s research funding has grown, stories about those efforts have frequently appeared in the magazine.

Clinical Practice
The delivery of medical care has changed in many ways over the last 50 years. Medicare and Medicaid were introduced a year after the magazine was founded, and the huge changes over the years in practice structures, the introduction of new clinical fields such as emergency medicine, and the continuing need for more primary care doctors have been documented in Hall A and Vermont Medicine.

Faculty
There is no recognized formula for a successful medical school, but if it had to be reduced to a mathematical equation, that would certainly involve adding an intelligent and curious student body to a dedicated, knowledgeable, and caring faculty. Many members of the College faculty have been celebrated in these pages through the decades — people who helped form the physicians of today, and whose reputations and influence continue.

Technology
The delivery of medical care has changed in many ways over the last 50 years. Medicare and Medicaid were introduced a year after the magazine was founded, and the huge changes over the years in practice structures, the introduction of new clinical fields such as emergency medicine, and the continuing need for more primary care doctors have been documented in Hall A and Vermont Medicine.
A deep personal friendship and shared interest in neuroscience led two longstanding chairs through two decades of collaboration and the merger of their departments.

Along the bays and beaches of the Long Island shoreline, a vibrant mix of land and sea creatures captivated the attention of a little boy so deeply that he knew by the age of seven he would one day be a biologist. A couple of hours to the north, in a town east of Hartford, Conn., the son of a widowed Irish maid grew to be an accomplished athlete who loved coaching children in basketball and other sports. Some forty years later, their paths would cross in Burlington, Vt., when they began laying the foundation for what would, in 2012, become the Department of Neurological Sciences at the University of Vermont.

Animals still figured prominently in the mind — and career — of Rodney Parsons, Ph.D., when he arrived at UVM in 1967. Fresh from a National Institutes of Health (NIH) postdoctoral fellowship at Columbia College of Physicians and Surgeons, coming to Vermont was a kind of homecoming for the Middlebury College alumnus and his wife. He’d followed through on his early interest, and received a biology degree, and then moved clear across the country to Stanford for graduate school before returning to his native New York.

We built our two departments together with common interests. We thought of it as a mechanism to increase recruitments, to build bridges.

— Rodney Parsons, Ph.D.

Things changed, administratively, in 1979, when Parsons became the chair of the then-Department of Anatomy. While medical, physical therapy, and neuroscience students already had an anatomy course, he designed, with Alpert’s permission, an eight-credit, two-semester integrated anatomy and physiology course to teach non-medical, non-physical therapy students, including those enrolled in the two-year nursing program, and medical technology and graduate technology programs. Physiology and Anatomy and Neurobiology faculty each taught half the course. Parsons and Steven Freedman, Ph.D., had previously co-designed the integrated medical student neuroscience course used at the College until the launch of the Vermont Integrated Curriculum in the early 2000s.

“There was only limited research in the anatomy department back in the seventies,” says Parsons, and there were only about five faculty and one-and-a-half administrative staff in the department when he became chair. It was then that he began to build the theme of neuroscience, changing the department name to Anatomy and Neurobiology. Originally he promised then-Dean William Lugishahld, M.D.,

A DEEP PERSONAL FRIENDSHIP AND SHARED INTEREST IN NEUROSCIENCE LED TWO LONGSTANDING CHAIRS THROUGH TWO DECADES OF COLLABORATION AND THE MERGER OF THEIR DEPARTMENTS.
that he’d serve in the chair’s position for five years. His first recruit was the late Bruce Fonda, M.S., a lecturer in anatomy and neurobiology who was trained by longtime anatomist Dallas Boulaye, who was set to retire after 50 years’ service. Also among Parsons’ early hires was Jerome Fiekens, Ph.D., his former postdoctoral fellow. Over the next two years, as he added more faculty, Parsons hired nearly twenty more faculty members, many of whom remain in the department today. Among them was Cynthia Forehand, Ph.D., professor of neurological sciences and current interim dean of the Graduate College, who took on responsibility for increasing the scope of the medical student neuroscience course after Freedman’s departure from UVM.

Parsons chaired the search committee that brought former Chair of Neurology Robert Hamill, M.D., to the College in 1993. Parsons’ wife had recently passed away, and the two became close friends, with Parsons often serving as Hamill’s “chef” during his Burlington visits. They had much in common, including the loss of their fathers in early childhood, but Hamill’s path to UVM was longer, and originated from an unexpected starting point.

“I wasn’t even going to go to college,” says Hamill, whose family had emigrated from Ireland before his birth. His father later became ill and passed away while Hamill was still a boy. He and his mother, who worked as a maid near their home in Manchester, Conn., were the only family that described as poor. But despite his financial disadvantages, Hamill had two things going for him: he was a skilled athlete, and he was bright. Despite his mother’s urgings to leave school and take a trade (he studied automotive repair), his high school guidance counselor had other plans for him.

“He gave me Middlebury, Williams, Brown, and Worcester Polytechnic, he said,” says Hamill, who told the counselor, “I really can’t go to any of these. I wouldn’t fit in.” The counselor didn’t let up, and through conversation teased out that Hamill would consider becoming a physical education teacher. So he was steered toward Springfield College — the birthplace of basketball, volleyball, exercise physiology and the YMCA. Thanks to scholarships from his hometown and the college, he was able to attend. “It really was a life-changing experience,” he says. At Springfield, he mastered anatomy and physiology, biomechanics, and — critical to his future path — the brain’s role in movement and medicine. The suggestion clicked, and he switched to pre-med. His senior year, he was accepted to Wake Forest College’s Bowman Gray School of Medicine and, despite more financial stress, the dean of students at the school arranged for a full scholarship. Hamill was on his way.

At Wake Forest, Hamill fell in love with both his wife — whom he married his second year — and with neurosciences and neurology. He spent three years in the Navy after medical school, then completed a two-year residency in internal medicine at Strong Memorial Hospital in Rochester, NY. A three-year neurology residency and a four-year NIH research fellowship in developmental neurobiology led him to New York City, where he studied with world-class clinical and basic science mentors at Cornell, and honed his research expertise in Parkinson’s disease.

The Hamill family moved to Rochester, N.Y., in 1980, where he served as a professor of neurology at the University of Rochester. A clinician, teacher and researcher, he ran the Alzheimer’s Center and headed the neurogenetics division, as well as neurology at Monroe Community Hospital. He had built a research group of about 20 people and enjoyed functioning as their “coach,” halling back to his original career aspirations at Springfield College. Early in the 1990s, he reached a turning point in his career, he’d been asked to run the University’s Center on Aging, and colleagues were submitting his name for chair positions at other institutions. Then he received a letter from UVM. With his deep love of his native New England, the offer from UVM, which included service leadership at the then Medical Center Hospital of Vermont, was the only one he seriously considered.

“When I came here, I think there were six of us,” says Hamill, whose new department included no one older than E. Stanley Emerly, M.D., who had been acting chair. Rup Tandan, M.D., recent interim co-chair of neurological sciences Timothy Friis, M.D., Joseph McSherry, M.D., Ph.D., and the late Antonio Gomez, M.D. In addition, the late Herbert Martin, M.D., who had retired, was still seeing patients part-time. “There was limited clinical research and there weren’t any NIH grants when I came,” Hamill says. Hamill’s arrival coincided with the early stages of the founding of what would become Fletcher Allen Health Care, and additional recruitment plans were hatched. “[Some were challenging years],” admits Hamill, who would do four months of hospital service each year, and ran the clinics — M.S. and Stroke — and started a Parkinson clinic to keep the department viable.

The concept for a translational science department grew out of Hamill’s and Parsons’ close camaraderie. “We built two two-year appointments around translative science interests,” says Parsons, who recalls the evolution of the idea beginning with, Hamill and John Evans, Ph.D. — then started a dean of the College of Medicine. “We thought of it as a mechanism to increase recruitments, to build bridges,” Parsons shares. The two knew that heightened competition and the need to do more translation and functional work supported their concept, and they wanted to develop an opportunity for basic science and clinical faculty to talk to each other. As a result, they brought faculty member Margaret Vizaud, Ph.D., and later Felix Ekenstein, Ph.D., on board in Hamill’s department, and Rac Nishi, Ph.D., in Parsons’. “Basic science was small here,” says Parsons, who recognized the value of his and Hamill’s collaboration from both a research, and patient, perspective. “The realm of integrated education. "Neuroscience evolved out of other basic science disciplines," he adds. As the field grew, he recruited to meet competing needs, seeking out researchers who could also teach. Among them were Drs. Gary Mawe, Cynthia Forehand, Diane Javorski, and Victor May. Ellen Black, Ph.D., had been Parsons’ graduate student and was hired to teach anatomy. After Freedman left, Parsons increased the scope of Forehand’s responsibilities to include the College’s neuroscience course. Hamill’s and Parsons’ translational science-building theme migrated into the curriculum as well. When Hamill arrived, the neurology rotation was an elective, not mandatory. That status shifted when a movement led to the growing number of medical students pushed for the addition of a neurology clerkship. The development of the Neural Science course in the Vermont Integrated Curriculum also augmented the role of neuroscience faculty, and Hamill expanded his faculty, clustering them around the areas of systems neuroscience and neural development to enhance the University’s "world-class clinical and basic science capacity,“ says Hamill. The two chairs’ joint work also had a significant effect on research at the College. “The NIH COBRE grants [Center of Biomedical Research Excellence] have really been important,” says Hamill, “they have been instrumental in providing the concept of cross-campus neuroscience, and have formed support for the importance of having a translational science program,” he says. While Parsons and Forehand were the Neuroscience COBRE principle investigators, the translational core was run jointly by Hamill, whose combined clinical-biological science background further strengthened the role.

“I’m proud of what the COBREs have done. They’ve supported a lot of the...
young faculty across the campus,” says Parsons, whose role as chair has been similarly focused. “The greatest thing has been watching people grow and exceed expectations — Cindy Forehand becoming a major support for the institution. Gary Mawe, who has soared. /T_h e development of our size, the amount of extramural funding per faculty member — it’s been very high,” says Hamill. One of the great feelings to start with a department of six and see where we’ve been able to grow together.”

Indeed, the vision he and Parsons launched more than fifteen years ago has been realized. They engineered a proposal to merge their departments into the Department of Neurological Sciences. It was approved by the UVM Board of Trustees in 2012 and, in May of this year the newly recruited Gregory Holmes, M.D., took the helm. Hamill and Parsons couldn’t be more proud.

“The uniqueness of this department — it spans an educational realm from undergraduates to residents — makes serving as chair challenging,” says Parsons. “We’re glad to leave our legacy in such capable hands.”

— James Boyd, M.D.
Assistant Professor of Neurological Sciences

It has been through [Dr. Hamill’s] mentorship and by his example that I have become the neurologist and clinical researcher that I am today.”

James Boyd, M.D.
One thing that struck me was the span of history that our attendees at reunion reflected. In the course of one evening, I had the pleasure of talking to Stanley Feiber, M.D.’48, who was as engaged as everyone else in attendance at the Celebration of Achievements on Friday evening. It all started on the cadaver. “For some we loved, the loveliest and passing. It all started on the cadaver.”

For updates on events see: www.uvm.edu/medicine/alumni
College of Medicine graduates are also members of the UVM Alumni Association. See those events at: alumni.uvm.edu

One who did that was the span of history that our attendees at reunion reflected. In the course of one evening, I had the pleasure of talking to Stanley Feiber, M.D.’48, who was as engaged as everyone else in attendance at the Celebration of Achievements on Friday evening. It all started on the cadaver. “For some we loved, the loveliest and passing. It all started on the cadaver.”

For updates on events see: www.uvm.edu/medicine/alumni
College of Medicine graduates are also members of the UVM Alumni Association. See those events at: alumni.uvm.edu

If you have news to share, please contact your class agent or the Development & Alumni Relations office at medalumni.relations@uvm.edu or (802) 656-4014. If your email address has changed, please send it to medalumni.relations@uvm.edu. For complete list of class agents, please see page 38.

HALL A | M.D. CLASS NOTES

If you have news to share, please contact your class agent or the Development & Alumni Relations office at medalumni.relations@uvm.edu or (802) 656-4014. If your email address has changed, please send it to medalumni.relations@uvm.edu. For complete list of class agents, please see page 38.
The College of Medicine Marathon Team Raises Funds for Steps to Wellness

This year’s College of Medicine marathon team braided a cold and rainy Day 26 to run the Vermont City Marathon in support of cancer survivors who are participants in the Steps to Wellness program. More than 70 people made up the team, which included 33 full marathoners, 20 half marathoners, and about 40 individuals running a leg on one of the College’s relay teams. A total of 45 UVM medical students, eight graduate students, 10 faculty/staff members, one current Steps to Wellness patient, and several friends and family members participated on the team, which collectively raised more than $12,000 to benefit Steps to Wellness, a medically based rehabilitation program for cancer survivors. Class of 2014 medical students Sirena Reddy, Brea Higgins, and James Levine IV served as co-leaders for this year’s team. Fletcher Allan Health Care marathon teams also raised money for Steps to Wellness.

Reunion Giving 2013

The Celebration of Achievements during Medical Reunion May 31–June 2 honored the Class of 1963 in their 50th anniversary year by introducing class members in attendance and presenting each individual with a medal. The College also celebrated the generosity of alumni from all of the class years; they collectively raised $370,700, a 6% increase from the previous year. In 2008, the Class of 1963 raised $143,700 — $5,000 short of goal — and $138,700 in 2009.

Development News

Annette R. Plante, Daughter of Class of 1915 A Scholarship

A generous bequest from Evelyn Anton, who died at the age of 92 in July of 2011, has added $200,000 to a fund established in memory of her husband, Harry Anton, M.D. ’40. The endowed fund was established in 1997 by Evelyn and her son, Ray Anton, M.D., a member of the Class of 1970, to honor the older Dr. Anton. A surgical intern in his day, Dr. Anton also served during his career as a general practitioner in his community. Ray Anton, an anesthesiologist, carried on the family’s spirit of involvement at the College; he is a past president of the Medical Alumni Association and serves as a class agent. His parents, Evelyn and Harry, married in 1942; for many years she served as a nurse and office manager at his practice in Palmer, Mass.

Request Adds to Fund Honoring Harry Anton, M.D. ’40

A generous bequest from Evelyn Anton, who died at the age of 92 in July of 2011, has added $200,000 to a fund established in memory of her husband, Harry Anton, M.D. ’40. The endowed fund was established in 1997 by Evelyn and her son, Ray Anton, M.D., a member of the Class of 1970, to honor the older Dr. Anton. A surgical intern in his day, Dr. Anton also served during his career as a general practitioner in his community. Ray Anton, an anesthesiologist, carried on the family’s spirit of involvement at the College; he is a past president of the Medical Alumni Association and serves as a class agent. His parents, Evelyn and Harry, married in 1942; for many years she served as a nurse and office manager at his practice in Palmer, Mass.

College of Medicine Reunion 2013

The Celebration of Achievements during Medical Reunion May 31–June 2 honored the Class of 1963 in their 50th anniversary year by introducing class members in attendance and presenting each individual with a medal. The College also celebrated the generosity of alumni from all of the class years; they collectively raised $370,700, a 6% increase from the previous year. In 2008, the Class of 1963 raised $143,700 — $5,000 short of goal — and $138,700 in 2009.

Development News

Annette R. Plante, Daughter of Class of 1915 A Scholarship

A generous bequest from Evelyn Anton, who died at the age of 92 in July of 2011, has added $200,000 to a fund established in memory of her husband, Harry Anton, M.D. ’40. The endowed fund was established in 1997 by Evelyn and her son, Ray Anton, M.D., a member of the Class of 1970, to honor the older Dr. Anton. A surgical intern in his day, Dr. Anton also served during his career as a general practitioner in his community. Ray Anton, an anesthesiologist, carried on the family’s spirit of involvement at the College; he is a past president of the Medical Alumni Association and serves as a class agent. His parents, Evelyn and Harry, married in 1942; for many years she served as a nurse and office manager at his practice in Palmer, Mass.

Request Adds to Fund Honoring Harry Anton, M.D. ’40

A generous bequest from Evelyn Anton, who died at the age of 92 in July of 2011, has added $200,000 to a fund established in memory of her husband, Harry Anton, M.D. ’40. The endowed fund was established in 1997 by Evelyn and her son, Ray Anton, M.D., a member of the Class of 1970, to honor the older Dr. Anton. A surgical intern in his day, Dr. Anton also served during his career as a general practitioner in his community. Ray Anton, an anesthesiologist, carried on the family’s spirit of involvement at the College; he is a past president of the Medical Alumni Association and serves as a class agent. His parents, Evelyn and Harry, married in 1942; for many years she served as a nurse and office manager at his practice in Palmer, Mass.

College of Medicine Reunion 2013

The Celebration of Achievements during Medical Reunion May 31–June 2 honored the Class of 1963 in their 50th anniversary year by introducing class members in attendance and presenting each individual with a medal. The College also celebrated the generosity of alumni from all of the class years; they collectively raised $370,700, a 6% increase from the previous year. In 2008, the Class of 1963 raised $143,700 — $5,000 short of goal — and $138,700 in 2009.
infected people today who have class of drugs has resulted in near combinations of drugs and especially monotherapies failed. But AIDS patients as the early drug about the deaths of thousands of 1997, were very depressing, reading years of my research, 1995 to to characterize HIV strains they have Serbia to teach HIV researchers how Netherlands, India, South Korea and Africa, Switzerland, Portugal, The world, and I have traveled to South HIV/AIDS researchers all over the vaccine design. I correspond with tracking the epidemiology and Alamos National Laboratory, primarily and Immunology Databases at Los in two years! I hit the primary care market, likely geriatrics. I’ll keep you posted when chief residency, then likely a year at Anne Kieryn ’06.

I joined the faculty at UIC after residency and I am busy opening a new OB/GYN practice. I will be getting married this summer in Galton, Vermont! My fiancé and I could not be more excited.

That 70s Show

Maybe it’s the sideburn-and-full-beard quotient, or the level of plaid, but this photo (whose label identifies its subjects as students in the Given Building Hall A) screams “1970s.” Bruce R. MacPherson, M.D. ’71, now an associate professor emeritus, leads the class. Note the Kodak Cameral and Bell & Howell projectors by the rear wall. This shot was either “flipped” when originally printed, as the window-wall of Hall A was on the right of the seated audience, or it may actually have been taken in the slightly smaller Hall B. Hall A survived until renovations in the Given Building in 2012. Hall B was renovated into office space a few years earlier. Medical students today attend lectures in the Sullivan Classroom. Do you recognize yourself, or anyone else in this photo? Send in your IDs to edward.neuert@uvm.edu and we will include them in a future issue of Vermont Medicine.
Class agents are dedicated alumni who volunteer their time as the voice of their classmates at the College of Medicine, and who work to encourage support of the College each year. Agents help deliver information to their fellow classmates about upcoming events and to keep abreast of the news and views of their class. If you would like to learn more about serving as a class agent, contact Cristin Slade at (802) 656-3044 or cristin.slab@uvm.edu.

Class Agent Directory

Class Agent Rebecca Drakely, M.D.

Sue-An McCarty, suemcarty@uvmmed.edu
Richard Nicholas Hubbell, rich@uvmmed.net
Richard Lawton Louisiana, rich@uvmmed.net
Lisa Alavi, michael_alavian@yahoo.com
Julie Smail, julie.alosi@vtmednet.org

Seth H. Lanier, Seth.Lanier@bhs.org

Contact Cristin Slade at (802) 656-3044 or cristin.slab@uvm.edu.
Alumni of the College of Medicine traveled far and wide to attend Reunion 2013, May 31 to June 2. All told, the attendees represented 25 states plus Canada. Alumni came from as far away as Hawaii, Washington, California, New Mexico, Colorado, and Minnesota to reconnect with their classmates and former teachers, and visit familiar and new areas of the campus. The oldest class represented was the Class of 1948, with two members attending, and the youngest alumni were from the Class of 2003. Over 30 current medical students took part in reunion this year, mingling with and meeting their predecessors on tours and over meals.

If you’re in a class that ends in 4 or 9, mark your calendar for Reunion 2014: June 6–8, 2014!
Burton E. Sobel, M.D. Dr. Sobel died at home in Colchester, Vt., on May 3, 2013. He received his M.D. at Harvard, graduating magna cum laude in 1962. He completed his internship and residency training at the Peter Bent Brigham Hospital in Boston, and his fellowship training at the National Heart, Lung, and Blood Institute, followed by an administrative leadership positions at the University of California, San Diego, Washington University and Barnes Hospital in Saint Louis (Director, Cardiovascular Disease Division) in 1984. Dr. Sobel began serving as Chair of the Department of Medicine and the E.L. Davies Professor of Medicine at the UVM College of Medicine. His vision and energy revitalized the Department of Medicine, expanding its research endeavors, education programs and clinics. During his tenure as Chair, Dr. Sobel created the Cardiovascular Research Institute at the UVM and Fletcher Allen Health Care to enhance the research mission of both institutions, and in 2005 he stepped down as Chair to become the institute’s first director. He advised more than 800 manuscripts published, and edited major cardiovascular and medical scientific journals.

There will be a celebration of the life of Dr. Sobel at the Allen Chapel on the UVM campus on October 11 at 10 a.m.

Edgar J. Caldwell III, M.D. Dr. Caldwell died on November 25, 2012. He was 79 years old. He lived most recently in Bolton, Mass. He graduated from Pinkerton Academy in 1950 and graduated from the University of New Hampshire in 1954, before coming to the College of Medicine. Dr. Caldwell completed intern medical training at the Mary Fletcher Hospital. He was a member of the United States Public Health Service serving at the National Institutes of Health from 1963 through 1966. Following which he returned to the University of Vermont as an assistant professor of medicine, Department of Medicine, College of Medicine in the cardiology division, having been selected as a career development awardee of the NIH. He left the College of Medicine in 1971 to become the director of pulmonary medicine and respiratory medicine at the Maine Medical Center (MMC) in Portland, Maine, until 1982. As CEO, he completed his internship at Barnes Hospital in Saint Louis, Missouri, from 1964 to 1966. Dr. Whitney began private practice in Banfield/Idaho area of Maine in 1966 and the following year began the Vaughan Street Internal Medical practice in Portland, where he practiced until his retirement in 1997. He was on the medical staff at Maine Medical Center and the Mercy Hospital for thirty years. While at Maine Medical Center, he was Director of the Division of Internal Medicine from 1983-1992 and Medical Director of Nutrition Support Services 1987-1997. He was active in teaching medical, interns and residents at Maine Medical Center during his entire career, receiving Maine Medical Center’s Teacher of the Year in 1971 and 1976. He served as Assistant Professor of Clinical Medicine at Tufts University School of Medicine 1970 to1982 and associate professor of clinical medicine at the College from 1982 to 1997.

We note with sadness the passing on July 12, 2013 of Douglas Freeman who, along with her late husband, Houpton, was one of the strongest supporters of the College and of medical education in Vermont. An appreciation the Freemans will appear in the next issue of Vermont Medicine.
June 22, 2013
11:52 a.m.

Arthur J. Perelman, M.D. ’52 (center) and his sons Robert, left, and Jon, right, listen to speakers commemorating the establishment by the Perelman family and friends of a $1 million endowment at the Vermont Cancer Center to fund the Charlotte E. Perelman Cancer Research Fund, named in memory of Dr. Perelman’s late wife.

photograph by Jeff Clarke
VERMONT MEDICINE
89 Beaumont Ave.
Burlington VT 05405

Recall the good times. Renew old friendships.
Reconnect with faculty. Revisit the place where your medical career began.

The UVM Medical Alumni Association invites you and your family to plan now to join your classmates for Reunion 2014 — June 6–8, 2014. Come back to Burlington and the UVM campus, your home during medical school. You may have lost contact with your classmates and former teachers, but Reunion will give you the chance to reconnect, rekindle old friendships, check out favorite places, talk with faculty, meet the medical students of today, and experience first-hand the growth and evolution of your medical alma mater.


The UVM Medical Alumni Association invites you and your family to plan now to join your classmates for Reunion 2014 — June 6–8, 2014. Come back to Burlington and the UVM campus, your home during medical school. You may have lost contact with your classmates and former teachers, but Reunion will give you the chance to reconnect, rekindle old friendships, check out favorite places, talk with faculty, meet the medical students of today, and experience first-hand the growth and evolution of your medical alma mater.

EVENTS INCLUDE: Medical Education Today Session • Tours of the College, including the Clinical Simulation Laboratory Alumni Awards and Reception • Medical Alumni Picnic • Nostalgia Hour • Class Receptions

WWW.UVM.EDU/MEDICINE/ALUMNI