Spreading the Word on Technological Advances in Medicine

Conversations with a neighbor while walking near his Charlotte, Vt., home in part inspired JOHN "JACK" STETSON, M.D. ’60 (UVM ’56) to create a new endowed lecture series dedicated to Technological Advances in Medicine at the College of Medicine.

During his recovery from double knee replacements, Dr. Stetson walked daily around Thompson’s Point in Charlotte. On one of those walks he met a neighbor whose life was saved through a Trans-Aortic Valve Replacement (TAVR), a fairly new minimally invasive procedure that replaces a damaged heart valve via catheter. Moved by the neighbor’s story — and fascinated by the technology that made it possible — Stetson and his wife, Bobbie, decided to fund the lectureship through a $100,000 estate gift.

The Stetsons’ generous gift will allow leading edge thinkers and researchers from around the world to come to UVM for an annual lecture devoted to exploring how technology is continually advancing patient care.

Thanks to an additional gift from the couple that will provide current operating funds, The John W. Stetson ’56 M.D. ’60 and Roberta B. Stetson ’57 Technological Advances in Medicine Lectureship is set to begin in the summer of 2016.

For more information about supporting the College of Medicine, please contact the Medical Development and Alumni Relations Office.
As this academic year comes to a close, we prepare to send more than a hundred new physicians out into their residencies across the country. We were especially happy to see 100 percent of our seniors successfully match this year, keeping in mind that the competition for residency slots has become even greater in the last few years. Once again, this is a testimony to the quality of students we attract and the caliber of education they receive under the Vermont Integrated Curriculum.

In mid-April we celebrated very exciting news — the announcement of a record-breaking new gift from Helen and Robert Larner, M.D.’42. Dr. Larner is no stranger to our alumni — over 1,200 of our graduates have benefitted from the loan and scholarship fund he initiated more than 30 years ago. Just as important, he has carefully fostered the growth of philanthropic culture among those who have benefited from his generosity, underscoring the need for “giving back” from all who enter the medical profession.

The Larner’s latest gift, totaling $19.7 million, sets a record at both the College and the University. I had the pleasure, along with President Tom Sullivan, of visiting Bob and Helen at their home in California shortly after their gift was announced. I was impressed once again that, even 74 years after his graduation, Bob is keenly interested in the continuous improvement of medical education. You will see more news about this in the near future as we build a “Larner Learning Commons” at the College that will allow us to use experiential learning throughout our curriculum.

You’ll see the first of our “Campaign News” columns in this issue that will regularly keep you up-to-date on the progress of Move Mountains: The Campaign for the University of Vermont. Many alumni and friends of the College have come forward in recent months to offer their support in our efforts in medical education, research, patient care, and community engagement. Among those are Vermonters Bob and Holly Miller, who have funded an important new endowed professorship in palliative care in our Department of Family Medicine.

As of late May, the Move Mountains campaign has generated over $298.3 million of its $500 million goal. Of that current total, more than $93 million has been designated in support of the College of Medicine. This is a testimony to the deep connection we have to our graduates and our community — partners in all our work.

Jennifer Nachbur
Assistant Dean for Communications
Paul Reynolds, David Seaver
Steve Wetherby, Wetherby Design

If you have an idea for something that...
The University of Vermont Vaccine Testing Center (VTC) has been chosen to take part in the clinical trials and research on a vaccine for Zika virus, which was declared a global health emergency by the World Health Organization in February.

The VTC has a longstanding partnership with the National Institutes of Health (NIH) lab that developed a dengue vaccine and is developing the Zika vaccine, and the VTC, together with the Center for Immunization Research at Johns Hopkins University in Baltimore, Md., will be one of two sites to test the safety and immune response testing of an NIH-developed Zika vaccine candidate in humans. Because of the potential for a link of Zika infection with birth defects, pregnant women or those who may become pregnant will be excluded from Zika vaccine trials.

VTC faculty Kristen Pierce, M.D., an infectious disease specialist and associate professor of medicine, and Sean Diehl, Ph.D., an immunologist and assistant professor of medicine, have expertise in the characteristics of flavivirus—a group of viruses, mostly transmitted via insects, that cause such human diseases as Zika virus, yellow fever, dengue, various types of encephalitis, and hepatitis C—and related viruses. An infectious disease physician, Pierce has led or co-led several Dengue and West Nile virus vaccine-related trials at the VTC. Dach studies the basic mechanisms of flavivirus, vaccines against flaviviruses, and the immune responses triggered by flavivirus natural infection or vaccination.

Currently, there is no available vaccine to prevent infection with the Zika virus. However, the National Institutes of Health has made the development of an effective Zika vaccine a priority.

Notables

Bernstein and Bates Named 2016–17 University Scholars

College of Medicine faculty members Ira Bernstein, M.D., and Jason Bates, Ph.D., have been named as two of four University Scholars for 2016–17. Led by the UVM Graduate College, the University Scholars program recognizes “sustained excellence in research, creative and scholarly activities.” Bernstein is professor and John Van Sicklen Mauch Chair of Obstetrics, Gynecology and Reproductive Sciences and medical director of Women’s Health Care Services at the UVM Medical Center. A 1983 alumus of the College of Medicine who joined the UVM faculty in 1989, his primary research focuses on the investigation of human integrative physiology and its pathophysiologic variations during the course of pregnancy.

Bates, professor of medicine and molecular physiology & biophysics, served as the interim director of the UVM School of Medicine in 1998 as a postdoctoral fellow in environmental pathology, and later received funding to launch his own lab in affiliation with the Vermont Lung Center, of which he is associate director.

UVM Vaccine Testing Center Works to Combat Zika

Morielli is New Director of Neuroscience Graduate Program

Associate Professor of Pharmacology Anthony Morielli, Ph.D., was recently named director of UVM’s Neuroscience Graduate Program (NGP). Morielli is one of 54 faculty members across nine departments and four colleges in the 10-year-old Neuroscience Graduate Program (NGP), which is jointly run by the Colleges of Medicine and Graduate College. The program includes about 25 doctoral students who work on research projects in the labs of 48 faculty mentors, sometimes collaborating with more than one.

Morielli earned his Ph.D. in biology from the University of California, Santa Cruz, and joined the UVM faculty in 1999. During his postdoctoral training at Stanford University and Harvard University, he studied the regulation of ion channels — proteins that allow charged particles to pass through the cell membrane. His research now focuses on the interaction of these channels in the process of learning and consciousness.

Poynter Named Director of Cellular, Molecular and Biomedical Sciences Graduate Program

Matthew Poynter, Ph.D., a professor of pulmonary medicine, has been named director of the Cellular, Molecular and Biomedical Sciences (CBM) graduate program at UVM. The CBM program brings together researchers from 16 UVM departments in a collaborative community that provides personalized training in a graduate-student focused, state-of-the-art research environment. Poynter came to UVM in 1998 as a postdoctoral fellow in environmental pathology, and later received funding to launch his own lab in affiliation with the Vermont Lung Center, of which he is associate director.

Sullivan Piano Debut

When Senior Associate Dean for Research Gordon Jensen, M.D., Ph.D., was officially welcomed to the College at a special reception in February, at an event also honored the many contributions of Russell Tracy, Ph.D., professor of pathology and outgoing interim senior associate dean for research, the event also heralded the arrival of another new presence at the College—the Sullivan Piano. Permanently housed in the Hoehl Gallery, the Steinway grand piano is a gift from the estate of College of Medicine alumnus Thomas Sullivan, M.D.’s66. Three members of the UVM College of Medicine community played in this debut performance, including medical student Anita Li ’19, Department of Surgery staff member Rejeanne Jabert, and Martin LeWinter, M.D., professor of medicine and longtime jazz enthusiast.

Class of 2018 Medical Student Thura Named to UVM Board of Trustees

Second-year medical student Leura Thura has been appointed by the Associated Directors for the Appointment of Student Trustees to the UVM Board of Trustees. Her two-year term of service became effective in March. UVM’s Board of Trustees sets policies, budget and strategic planning. Originally from Falls Church, Va., Thura graduated magna cum laude with University Honors from Virginia Commonwealth University with a degree in economics in May 2014 and began her medical school career at UVM in August 2014.

President and CEO Claude Deschamps, M.D., have announced the appointment of Mazen A. Maktabi, M.B.B.Ch., as chair of the Department of Anesthesiology and health care service chief of anesthesiology, effective August 1, 2016. Maktabi will succeed David Adams, M.D., who has served as interim chair of anesthesiology since 2013. Adams will continue as a senior clinical-scholar in the department and as the founding chair of the UVM College of Medicine/UVM Medical Center Learning Environment and Professionalism Committee.

Currently an associate professor of anesthesiology at Harvard Medical School, Maktabi also serves as chair of the Division of General Surgery Anesthesia, which he established at Massachusetts General Hospital. In 2014, he also established the General Surgery Regional Anesthesia Service in the Department of Anesthesia, Critical Care and Pain Medicine at Mass General, which he co-directs. Prior to joining the Harvard faculty, he was director of the Division of Neuromonitoring and associate director of the anesthesiology residency program at the University of Iowa College of Medicine and University of Iowa Hospitals and Clinics, where he also held numerous elected college and university governance positions. Maktabi earned his medical degree from Cairo University in Egypt and completed residency in anesthesiology at the American University of Beirut in Lebanon.

A fellowship-trained neuroanesthesiologist with special interest in base of the skull surgery and major spine surgery, Maktabi’s research focuses on the difficult airway in neuroanesthesiology, postoperative vision loss, and informed consent by patients. He is the author of more than 50 published articles and book chapters.

Maktabi earned his medical degree from Cairo University in Egypt and completed residency in anesthesiology at the American University of Beirut in Lebanon.

UVM in 1998 as a postdoctoral fellow in environmental pathology, and later received funding to launch his own lab in affiliation with the Vermont Lung Center, of which he is associate director.
From anxiety to elation, emotions ran high on Match Day, the nationwide event during which graduating medical students open the envelopes that tell them where they will first officially work as physicians. This annual rite of passage marked students' completion of four years of rigorous coursework, exams, clinical training, as well as months of residency applications and interviews. On March 18, 2016, more than 100 members in the College of Medicine's Class of 2016 gathered in the Hoehl Gallery at the College to learn and celebrate their match results as family, friends and faculty listened or watched from around the world via a livestream video. All 108 students in the Class of 2016 secured matches to residencies — a significant achievement at a time when there is a national shortage of residency positions.

The UVM Match Day celebration opened with a "parade" of students in the Class of 2016, who were led by H. James Wallace, M.D.'88, bagpiper, faculty member and outgoing Medical School Dean. This annual rite of passage marked students' completion of four years of rigorous coursework, exams, clinical training, as well as months of residency applications and interviews. On March 18, 2016, more than 100 members in the College of Medicine's Class of 2016 gathered in the Hoehl Gallery at the College to learn and celebrate their match results as family, friends and faculty listened or watched from around the world via a livestream video. All 108 students in the Class of 2016 secured matches to residencies — a significant achievement at a time when there is a national shortage of residency positions.

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College Hosts Global Health Celebration

In honor of World Health Day, the College of Medicine hosted nine distinguished international guests from Russia, Dominican Republic, Vietnam and Uganda on April 4 and 5 for a “Celebration of Global Health Day” featuring a broad range of activities.

Designed to showcase the global health education, scholarship, and service partnerships accomplished through the Global Health Program at Western Connecticut Health Network and UVM, the celebration highlights included a Dean’s Distinguished Lecture on Global Health delivered by Alexey Sozinov, M.D., Ph.D., D.Sc., of Kazan, Russia, a Special Family Medicine Grand Rounds and Community Medical School presentation by Uganda’s Robert Kajjesuuba, M.D., and a photography exhibit and academic poster session showcasing the work of medical students, nursing students and residents.

Established in 2012, the Global Health Program is directed by Michael Toth, Ph.D., associate professor of medicine and an infectious disease specialist at Danbury Hospital in Connecticut.

Research Team Uncovers Critical Genetic Element Driving Rodent-Hosted Virus Behavior

A team of UVM researchers has pinpointed a unique self-controlling characteristic of an arenavirus that offers hope in counteracting the muscle loss that commonly occurs in cancer patients. What causes this loss in muscle mass — or atrophy — with cancer and its treatment is still not known, but Toth believes that the reduction in physical activity during cancer treatment may be an important factor.

Fatigue is a common side effect of cancer and its treatments, and these patients are about 50 percent less physically active than before their treatment, which can drive muscle atrophy and weakness and even more inactivity, in a disabling downward spiral. Toth, an expert in muscle physiology, and his research team will utilize a new two-year grant from the National Cancer Institute to study whether neuromuscular electrical stimulation (NMES) can help combat the effects of muscle atrophy in breast cancer patients.

NCI Grant Tests Muscle-Rebuilding Strategy in Breast Cancer Patients

Associate Professor of Medicine Michael Toth, Ph.D., is exploring a theory for counteracting the muscle loss that commonly occurs in cancer patients. What causes this loss in muscle mass — or atrophy — with cancer and its treatment is still not known, but Toth believes that the reduction in physical activity during cancer treatment may be an important factor.

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New Findings Highlight Potential Treatment for Heart Mutation

Two UVM molecular physiologists have taken a step toward a possible new treatment to address the underlying root cause of familial hypertrophic cardiomyopathy, an inherited disease that causes the heart muscle to thicken and struggle to pump blood. The latest research of Professor and Chair of Molecular Physiology and Biophysics David Ward, Ph.D., and Assistant Professor Michael Prinex, Ph.D., published in the Proceedings of the National Academy of Sciences (PNAS), provides insight into structural changes to a protein critical to tuning the heart’s pumping process and what might go wrong if it is mutated. They found that phosphorylation — or the addition of phosphate to a key point — alters the structure of “protein C,” one of the key controllers of the heart’s ability to properly contract and relax during each heartbeat. Their findings suggest the possibility of developing a new therapy, a chemical way to provide phosphorylation and, essentially, keep the cardiac engine “tuned.”

Potential New Therapeutic Target for Hypertension Ears Patent

A team of Vermont investigators led by Professor of Pharmacology Wolfgang Dostmann, Ph.D., has been issued a patent for their discovery of a molecule that rescues damaged blood vessels, yet preserves healthy vessels, and could serve as a springboard for a new pharmaceutical therapy with fewer side effects for hypertension. The group’s findings were published in the journal Chemistry & Biology, and yielded an important discovery for which they were issued a U.S. patent in February.

New DNA Response Mechanism Discovered

A team of researchers led by UVM immunologists, have discovered a novel mechanism that provides life support to cells while DNA double-strand breaks are in repair. The study, authored by Professor of Medicine Mercedes Rincon, Ph.D., and Research Associate Tina Thumino, Ph.D., was published recently in Nature Communications.

Their findings reveal that a novel mechanism, which is selectively initiated in response to DNA breaks, is vital to ensuring that both our immune system stays alive while the cell produces protective antibodies, which is a natural process that involves DNA breakage.

Kalyesubula, M.D., associate professor of medicine and Global Health Program at Western Connecticut Health Network and UVM, the College welcomed Robert Gramling, M.D., D.Sc. in May as the inaugural chair in Palliative Care Medicine. Gramling, who comes to the position from the University of Rochester Medical Center with a strong research agenda related to end-of-life communication between patients, families and clinicians, will also serve as the chief of the Division of Palliative Medicine in the Department of Family Medicine.

This most recent gift builds on the Miller’s long history of philanthropic work, the Millers have been honored as Vermont Philanthropists of the Year, and in 1995, the Visiting Nurse Association dedicated and named their Colchester headquarters The Holly D. Miller Building. At Commencement 2015, the Millers were issued a U.S. patent, which they were issued a U.S. patent in February.

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The time has come for UVM to move forward, to pursue excellence with even greater confidence and to assert our position among the nation’s finest public research universities. To move mountains is to change lives. This is our passion and our calling. — UVM President Tom Sullivan

**Grateful Patient Gifts Help to Establish Endowed Professorship in Cardiac Disease Prevention**

UVM Professor of Medicine Philip Ades, M.D., has impacted thousands of lives through his work in cardiac rehabilitation and disease prevention. Now thanks in part to $650,000 raised by grateful patients and family members, the University of Vermont has created the Philip Ades, M.D., Endowed Professorship in Cardiovascular Disease Prevention to ensure his legacy continues. A $350,000 gift from the estate of Professorship in Cardiovascular Disease Prevention Kay and Richard Ryder, M.D. is our passion and our calling. — UVM President Tom Sullivan

**Bequest Provides Loan Assistance for Vermont Residents**

Kay and Richard Ryder understand the importance of financial support for medical students, as their son and daughter-in-law — both alumni of the UVM College of Medicine — benefited from such help. Inspired by how much this assistance meant to their family, the Ryders have recently added to their already significant bequest to provide no fee, no interest loans, and favorable repayment terms. Both Kay and Richard Ryder are active in the Burlington, Vt. community: Kay is a retired health care lobbyist and public relations director for home and community-based health care, and is host of the popular local television show “Conversations with Kay.” Richard, a 1936 graduate of the University of Vermont, is partially retired from his career in internal medicine in Burlington and occupational medicine at IBM. He continues to consult part-time for various Vermont businesses.

**Gift in Memory of Father Funds Parkinson’s Research**

UVM Associate Professor of Neurological Sciences James Boyd, M.D., made a deep impression on Katharine Laud when he heard him speak at a University of Vermont Development Grand Rounds talk. As associate vice-president of administration for the UVM Foundation, she had attended these events in the past, meant to familiarize development staff with the range of important causes in need of support. But this time she knew she had to take action. Boyd’s research focuses on movement disorders including Parkinson’s Disease, a condition Laud’s father, Stephen Wiley, struggled with until his death in October of 2015. The $100,000 gift she and her husband, Paul Laud, made will support Boyd’s leading edge research into potential therapies for Parkinson’s — including studies that look at whether nicotine patches may help slow disease progression — as well as help to fund the next generation of researchers through scholarships and stipends. After Laud learned that Boyd had also treated her father, the gift became even more special. “I’ve never felt as good about giving a gift as I did when I gave that one,” says Laud. “You couldn’t have stopped me.” A lawyer, politician, and author of three books of poetry, Wiley was a celebrated leader in Morristown, New Jersey, where he is remembered for arguing a historic case in front of the state Supreme Court that averted school segregation by merging two school districts. His roots in Vermont also run deep, as he and his wife, Judith, enjoyed a summer home for years in South Hero. Vt.

**Bequest To Support MacKay Scholarship Fund**

The Bruce R. MacKay, M.D.’57 and Phyllis Davis MacKay Endowed Scholarship Fund has been supporting medical students at the UVM College of Medicine since 2012, the year MacKay celebrated his 55th reunion. A recent $58,000 bequest from the estate of Dr. MacKay, who died in April 2015, ensures the doubling of the scholarship fund, bringing the total fund amount to $650,000. The Beacon Theatre in Burlington, Vt., is the setting for the MacKays’ annual fund-raising event, “Conversations with Kay,” which has contributed proceeds to the scholarship fund. John MacKay, a 1987 graduate of the UVM College of Medicine, recently supported the fund with a $50,000 gift. The MacKays’ recent $58,000 bequest will support Boyd’s leading edge research into potential therapies for Parkinson’s — including studies that look at whether nicotine patches may help slow disease progression — as well as help to fund the next generation of researchers through scholarships and stipends. After Laud learned that Boyd had also treated her father, the gift became even more special. “I’ve never felt as good about giving a gift as I did when I gave that one,” says Laud. “You couldn’t have stopped me.” A lawyer, politician, and author of three books of poetry, Wiley was a celebrated leader in Morristown, New Jersey, where he is remembered for arguing a historic case in front of the state Supreme Court that averted school segregation by merging two school districts. His roots in Vermont also run deep, as he and his wife, Judith, enjoyed a summer home for years in South Hero. Vt.

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**Gift in Memory of Father Funds Parkinson’s Research**

UVM Associate Professor of Neurological Sciences James Boyd, M.D., made a deep impression on Katharine Laud when he heard him speak at a University of Vermont Development Grand Rounds talk. As associate vice-president of administration for the UVM Foundation, she had attended these events in the past, meant to familiarize development staff with the range of important causes in need of support. But this time she knew she had to take action. Boyd’s research focuses on movement disorders including Parkinson’s Disease, a condition Laud’s father, Stephen Wiley, struggled with until his death in October of 2015. The $100,000 gift she and her husband, Paul Laud, made will support Boyd’s leading edge research into potential therapies for Parkinson’s — including studies that look at whether nicotine patches may help slow disease progression — as well as help to fund the next generation of researchers through scholarships and stipends. After Laud learned that Boyd had also treated her father, the gift became even more special. “I’ve never felt as good about giving a gift as I did when I gave that one,” says Laud. “You couldn’t have stopped me.” A lawyer, politician, and author of three books of poetry, Wiley was a celebrated leader in Morristown, New Jersey, where he is remembered for arguing a historic case in front of the state Supreme Court that averted school segregation by merging two school districts. His roots in Vermont also run deep, as he and his wife, Judith, enjoyed a summer home for years in South Hero. Vt.

**Bequest To Support MacKay Scholarship Fund**

The Bruce R. MacKay, M.D.’57 and Phyllis Davis MacKay Endowed Scholarship Fund has been supporting medical students at the UVM College of Medicine since 2012, the year MacKay celebrated his 55th reunion. A recent $58,000 bequest from the estate of Dr. MacKay, who died in April 2015, ensures the doubling of the scholarship fund, bringing the total fund amount to $650,000. The Beacon Theatre in Burlington, Vt., is the setting for the MacKays’ annual fund-raising event, “Conversations with Kay,” which has contributed proceeds to the scholarship fund. John MacKay, a 1987 graduate of the UVM College of Medicine, recently supported the fund with a $50,000 gift. The MacKays’ recent $58,000 bequest will support Boyd’s leading edge research into potential therapies for Parkinson’s — including studies that look at whether nicotine patches may help slow disease progression — as well as help to fund the next generation of researchers through scholarships and stipends. After Laud learned that Boyd had also treated her father, the gift became even more special. “I’ve never felt as good about giving a gift as I did when I gave that one,” says Laud. “You couldn’t have stopped me.” A lawyer, politician, and author of three books of poetry, Wiley was a celebrated leader in Morristown, New Jersey, where he is remembered for arguing a historic case in front of the state Supreme Court that averted school segregation by merging two school districts. His roots in Vermont also run deep, as he and his wife, Judith, enjoyed a summer home for years in South Hero. Vt.

**Bequest Provides Loan Assistance for Vermont Residents**

Kay and Richard Ryder understand the importance of financial support for medical students, as their son and daughter-in-law — both alumni of the UVM College of Medicine — benefited from such help. Inspired by how much this assistance meant to their family, the Ryders have recently added to their already significant bequest to provide no fee, no interest loans, and favorable repayment terms. Both Kay and Richard Ryder are active in the Burlington, Vt. community: Kay is a retired health care lobbyist and public relations director for home and community-based health care, and is host of the popular local television show “Conversations with Kay.” Richard, a 1936 graduate of the University of Vermont, is partially retired from his career in internal medicine in Burlington and occupational medicine at IBM. He continues to consult part-time for various Vermont businesses.