Welcome to the inaugural edition of The Chart, the new iteration of the Department of Medicine newsletter. Over the past year it became clear that we needed a way to capture and share the depth and breadth of accomplishments of the entire Department. This is not an easy task. The Department of Medicine includes 168 full-time faculty, 188 volunteer faculty, 96 residents and fellows, 29 graduate students and postdoctoral PhD fellows, and 303 staff. The Department is a leader in clinical care, research, education and service and virtually every day someone publishes a paper, is awarded a grant, initiates a new clinical enterprise, is asked to serve locally, nationally and internationally, or achieves a personal milestone.

The Chart will be published quarterly and each edition will have a profile of one of our divisions, a feature story, news of accomplishments and a column called “Who Knew?” highlighting one of our colleagues. In this edition, we feature The Emerging Physician Scientist. Nationally, there has been increased attention to the importance of physician scientists in academic medicine and the apparent decline in their numbers. Our Department is doing our part to reverse that trend and in this issue we introduce several outstanding young physician scientists who are becoming recognized nationally, even early in their careers, for their contributions.

Our division profile features Pulmonary and Critical Care Medicine, which excels across our missions of clinical care, research, education and service. This is a recurring theme throughout our divisions, and we look forward to showcasing their outstanding work in future editions. Individual and group accomplishments are noted throughout and, as always, there were more than could be included even if The Chart was double the size.

The back cover is from the physician recognition project that we initiated in the College of Medicine. The goals of the program were to recognize the unique talents and contributions of our faculty in clinical care, research and service, and to share that information with as many students, residents, fellows, faculty, staff, patients, visitors, prospective students and faculty and community members as possible. Although six were selected for the pilot project, every single member of our faculty could just as easily been recognized for their achievements and we are pleased that the project will expand across the College of Medicine. The posters are on display in the Atrium Cafeteria in the College of Medicine and I encourage everyone to go see them.

The Chart, like the Department, will continually evolve so I look forward to your feedback and encourage you to share your story ideas, news, and accomplishments.

Polly E. Parsons, MD
E.L. Amidon Professor and Chair, Department of Medicine, University of Vermont, Medicine Health Care Service Leader, Fletcher Allen Health Care
VERSCHRAEGEN NAMED HEMATOLOGY-ONCOLOGY DIVISION CHIEF

**CLAUDE VERSCHRAEGEN, MS, MD, FACP**, began June 1 as Professor and Chief of Hematology Oncology, and will also serve as the Interim Director of the Vermont Cancer Center and as the Cancer Service Line Director at Fletcher Allen.

**PROMOTIONS**

SEAN DIEHL, PhD, Immunobiology, promoted to Assistant Professor

ANNE DIXON, MD, Pulmonary and Critical Care, awarded Associate Professor with tenure

BONITA LIBMAN, MD, Rheumatology, promoted to Associate Professor

RICHARD PINCKNEY, MD, MPH, Internal Medicine, promoted to Associate Professor

ALLEN REPP, MD, Internal Medicine, promoted to Associate Professor

KATHRYN SCHWARZENBERGER, MD, Dermatology, promoted to Professor

JEFFREY SPEES, PhD, Cardiology, promoted to Associate Professor with tenure

**WELCOME NEW FACULTY**

Varun Agrawal, MD
Assistant Professor, Nephrology

Allen Lee, MD
Assistant Professor, Gastroenterology

Zechariah Gardner, MD
Assistant Professor, Primary Care Internal Medicine

Cindy Noyes, MD
Assistant Professor, Infectious Disease

**NOTABLE**

**VERSCHRAEGEN NAMED HEMATOLOGY-ONCOLOGY DIVISION CHIEF**

Claude Verschraegen is a board-certified oncologist with expertise in the areas of rare cancers such as mesothelioma, metastatic melanomas, sarcomas, and gynecologic malignancies, as well as the study of new anticancer drugs and treatments for solid tumors. She joins us from the University of New Mexico Cancer Center where she was a tenured Professor of Medicine in the Division of Hematology and Oncology, and had been Director of Translational Therapeutics and Clinical Research since 2002.

Dr. Verschraegen earned her Master’s and Medical Degrees, both magna cum laude, at the Universite Libre de Bruxelles in Belgium, where she also earned her postgraduate degree summa cum laude in Internal Medicine. In 1985, she was named both a Fullbright Scholar and a Belgian American Educational Foundation Fellow. She then completed a three-year research fellowship at the Stehlin Foundation for Cancer Research in Houston, Texas, followed by an Internal Medicine residency at the University of Texas. After completing a Medical Oncology fellowship at the MD Anderson Cancer Center, she joined the faculty there in 1995.

**HOOD BEGINS ACP PRESIDENCY**

In April, Professor of Medicine **VIRGINIA L. HOOD, MBBS, MPH, FRACP, FACP**, began her term as 2011-2012 president of the American College of Physicians (ACP), the nation’s largest medical specialty organization. UVM medical alumnus **DAVID BRONSON, MD’73, FACP**, president of Cleveland Clinic Regional Hospitals, has been named president-elect. Their terms began during Internal Medicine 2011, ACP’s annual scientific meeting, held April 7 to 9, 2011 in San Diego, Calif.

**MARCY EARNS NATIONAL ALA RECOGNITION**

The national American Lung Association (ALA) and the C. Everett Koop Foundation have honored Professor **THEODORE MARCY, MD, MPH**, with the 2011 Unsung Heroes’ Award. The honor recognizes an individual who has made important strides in the effort to control tobacco use. Dr. Marcy’s many contributions to reduce the burden of tobacco use range from patient care to program development to health care systems change. He was nominated by the ALA of New England, and will receive the award at the National Conference in June.

Currently an ALA of New England board member, Dr. Marcy has served as an ALA Vermont board and leadership council member, including two terms as chair, since 1999. He is credited as the creative force behind the network of the multi-state Asthma Clinical Research Centers. For more than a decade, he has educated colleagues, lawmakers and the public in Vermont, the region and U.S. about the three most effective ways to prevent and reduce tobacco use, including a comprehensive tobacco control program, 100 percent clean indoor air laws and increased cigarette excise taxes. He helped develop Vermont’s tobacco control program, based on the Centers for Disease Control and Prevention Best Practices for Tobacco Control. Since the program began in 2001, the youth smoking rate has been cut in half and over 20,000 adults have quit smoking.

A former chair of the Vermont Tobacco Evaluation and Review Board (TERB) and current chair of TERB’s evaluation committee, he ensures the continued effectiveness of the program.

**NOTABLE**

Named to the UVM Inventor Hall of Fame were **BENJAMIN LITTENBERG, MD** and **CHARLES MACLEAN, MD**, for the Vermont Diabetes Information System; and **MERCEDES RINCON, PhD**, and **TINA THORNTON, PhD**, for Inhibition of GSK by p38 MAPK. The Hall of Fame awards honor inventors whose product or service has reached the market and achieved sales.

The Vermont Society of Health System Pharmacists has named Assistant Professor **AMANDA KENNEDY, PHARMD, BCPS**, as the 2011 Pharmacist of the Year. This annual award to a pharmacist is based on peer nominations and was presented to Dr. Kennedy at the society’s annual meeting on May 25. In addition to receiving the award, Dr. Kennedy also presented “Primary Care Prescribing in Vermont: A Research Update.”

**YOLANDA MAGETO, MD, MPH** (at right) chaired the 2011 Diversity Forum of the American Thoracic Society, which featured Estelle Gauda, MD, as guest speaker.
Pulmonary and Critical Care Medicine

They take care of the sickest patients, study new therapies for some of the most chronic, widespread diseases, and help train students, residents and fellows from near and far. The Division of Pulmonary and Critical Care Medicine is a busy group these days. With an active clinical practice, a nationally recognized research program and key roles in medical education and training, the division excels in many areas, and brings to life what it means to work in academic medicine.

TAKING CARE OF PATIENTS

The division’s 18 members include physicians who specialize in pulmonology and critical care, doctorate-level researchers, a critical care nurse practitioner and a pulmonary disease physician assistant.

On the clinical side, the group is responsible for managing critically ill patients in the Medical Intensive Care Unit. They perform inpatient pulmonary and critical care consults throughout the hospital, run a busy adult Cystic Fibrosis program, and provide outpatient pulmonary consults and care. Subspecialty clinics include asthma and interstitial lung disease, cancer survivorship and Fletcher Allen’s lung cancer multi-disciplinary clinic.

“These days, their clinical work is increasingly busy. ‘It’s a pretty diverse, very sick patient group that we take care of in the MICU,’ said Anne Dixon, MD, division director. ‘Patients are getting older and older and sicker and sicker. More and more patients are dying in the ICU… One of the challenges our division is facing is how do we deal with that.’

The division also provides pulmonary diagnostic services including bronchoscopy, complete pulmonary function testing and other services; evaluation of sleep disorders at Fletcher Allen’s Sleep Center; and outpatient pulmonary rehabilitation.

A NATIONAL REPUTATION FOR RESEARCH

Pulmonary and Critical Care Medicine has a national and international reputation in research, especially in the areas of asthma and more recently, in obesity and lung disease. It’s also home to an American Lung Association Asthma Clinical Research Center – one of 18 such centers in the country and the only one in New England.

A great deal of the division’s research takes place at the Vermont Lung Center, directed by Charles Irvin, PhD, funded by an NIH Center of Biomedical Research Excellence (COBRE) grant, now entering its third 5-year cycle.

Currently, division members are involved in 29 clinical research projects, including those in asthma, idiopathic pulmonary fibrosis, ICU/Critical Care, cystic fibrosis, sarcoidosis and other topics. Basic science and translational research focuses on airways disease biology and animal modeling of asthma and other airways diseases; acute lung injury; stem cells and lung disease; smoking cessation; and other areas.

A prestigious $4.26 million Opportunity Grant from the NIH awarded last fall to Daniel Weiss, MD, PhD, is supporting the division’s work on a novel approach with stem cells to engineer new lungs for patients with end-stage lung disease. This summer, UVM will again host more than 120 experts from around the world at the biannual “Stem Cells and Cell Therapies in Lung Biology and Lung Diseases” conference.

The division will also host an obesity and lung disease conference at in Stowe this fall – the first international conference on the topic. “This actually is becoming a big research focus,” Dixon said. “For many years people realized that obesity causes diabetes and causes heart disease. Only over the last few years have we realized that it significantly impacted pulmonary disease as well.”

A STRONG COMMITMENT TO EDUCATION

As it maintains a robust clinical practice and active research program, the division is equally committed to education and training.

Division members participate in the medical school curriculum, and lead the respiratory section of the popular Cardiovascular, Respiratory and Renal Systems course. They also train attendings and residents at the Clinical Simulation Laboratory on ICU procedures such as inserting central lines.

The division offers a Pulmonary and Critical Care Medicine fellowship program, and helps train graduate students – including those from Cellular and Molecular Biology, Engineering and other departments – as well as undergraduates and international students.

Fellows like the size of the program and the expertise in many areas. Dixon says, “I tell fellows coming through that in our program they can become who they want to be: a great clinician, an educator, a clinical and translational scientist. We have all those bases covered. ‘That, to me, is what is most exciting about this division.’

PULMONARY at-a-glance

5,000-5,500 Number of outpatient visits a year
17,000 Approximate number of total patient encounters (inpatient and outpatient) a year
$5.8 million External research funding in 2010
25 Number of peer-reviewed research papers published in 2011
Devoted to Science

There has been a great deal of discussion in recent years about the endangered future of the physician scientist, and the fact that we’ve seen diminishing numbers of these medically-trained researchers over the past 30 years.

Physician scientists are MDs or MD/PhDs who take care of patients but also spend a large percentage of their time engaged in research. As they bring firsthand knowledge of patient care and clinical practice to scientific pursuits, their perspective is unique and their contributions are critically important.

The National Institutes of Health has identified the development of physician scientists as vitally important to the future of research. Here in the Department of Medicine, the development of these professionals is alive and well, with several assistant professor physician scientists involved in new and innovative studies. Below are highlights of some of their most recent work.

HEMATOLOGY-ONCOLOGY: KIM DITTUS, MD, PHD, is collaborating with Professor Jean Harvey-Berino, PhD, RD, UVM chair of nutrition and food sciences, to better understand the biologic links between obesity and post-menopausal breast cancer.

By analyzing study participants’ blood samples, they hope to identify shifts in adipose fat tissue mechanisms in obese patients. Dittus believes that concentrations of adipocytokines, which are produced by adipose tissue and at much higher levels in obese patients, may contribute to tumor progression and metastasis. Dittus and colleagues also have been involved in a study testing the effectiveness of behavioral weight loss programs among a group of breast cancer survivors.

CARDIOLOGY: FRIEDERIKE KEATING, MD, is focused on women and heart attacks. She is the local principal investigator for the NIH-funded VIRGO project that studies women under the age of 50 who have a heart attack. The goal is to find out why those women do worse than their male peers, and what makes them get heart attacks when heart attacks are generally so rare in that age group among women.

Keating is also engaged in basic and translational research on platelet function and inflammation as it relates to cardiac patients. She received a UVM Medical Group Research Award from Fletcher Allen to study whether stored blood (for transfusions) has properties that are prothrombotic in recipients, to understand why receiving transfusions correlates with poor outcome in cardiac patients.

CARDIOLOGY: MARKUS MEYER, MD, is seeking to better understand the causes of heart failure. Most recently, he has been studying the mechanisms underlying impaired cardiac relaxation. This condition, known as diastolic heart failure, affects approximately half of all heart failure patients.

Supported with a four-year, approximately $250,000 grant from the American Heart Association, Meyer conducted the research using samples of human heart tissue donated by patients during bypass surgery. He electrically stimulated the samples to make them contract, allowing him to investigate the causes of impaired relaxation. Meyer hopes to better define possible molecular targets for the treatment of diastolic heart failure, which may help to prevent heart failure symptoms and ideally improve outcomes.

PULMONARY & CRITICAL CARE: RENEE STAPLETON, MD, PHD, is examining nutritional support and pharmaco nutrient interventions in critically ill patients. She completed a multicenter Phase II study on the anti-inflammatory effect of Omega-3 fatty acids (fish oil) in patients with acute lung injury (ALI) and has a grant from the American Heart Association to study the pharmacokinetics of Omega-3s in patients with sepsis at risk for ALI. She is also studying the role of zinc as therapy in intensive care settings, which earned both a UVM College of Medicine Internal Grant Program Award and a UVM Medical Group Research Award from Fletcher Allen.

Stapleton also has research interests in treatment preferences and end-of-life care. She is investigating disease-specific outcomes and long-term survival after in-hospital CPR, and with funding from the National Palliative Care Research Center, she is investigating a novel informed asset approach to in-hospital CPR in chronically ill patients with reduced life expectancy.

HEMATOLOGY-ONCOLOGY: NEIL ZAKAI, MD, MSC, is currently conducting a study to determine why African-American people have a higher risk of venous thrombosis—a blood clot that forms in a vein.

In his “Reasons for Racial Differences in Venous Thrombosis” study, funded by a prestigious $500,000 Challenge Grant from the NIH, Zakai is seeking to understand why African-Americans have a higher incidence of venous thromboembolism (VTE) compared to other Americans.

Zakai is also capturing VTE events in the REGARDS (Reasons for Geographic and Racial Differences in Stroke) study, a study of more than 30,000 people throughout the U.S., half of whom are African-American, who have been traditionally underrepresented in venous thrombosis research studies. Zakai hopes to combine his results with those from other studies to understand the reasons for the increased risk in African-Americans.
Gates Foundation Grant Supports Vaccine Study

A $14.7 million grant from the Bill & Melinda Gates Foundation is supporting the work of scientists at UVM and the University of Virginia to determine why vaccines that work so well on children in the developed world don’t work as well on children in poorer countries. One key to solving this challenge lies in understanding what’s different in the biological makeup of children whose bodies reject the protection they so desperately need from these diseases.

The PROVIDE (Performance of Rotavirus and Oral Polio Vaccines In Developing countries) study is co-led by Beth Kirkpatrick, MD, UVM associate professor of medicine and William A. Petri Jr., MD, Wade Hampton Frost professor of medicine at the UVA School of Medicine. They are working with an international team of investigators to understand the spectrum of biologic reasons for failure of the oral vaccines for polio and rotavirus.

Recent Publications


Polish Appointed Director of Inpatient Medicine Clerkships

Associate professor and infectious disease specialist Louis Polin Sh, MD, was recently appointed director of the Inpatient Medicine Clerkship program. He leads students through the six-week rotation, guiding them as they gain valuable experience doing history and physical exams, presenting cases and making differential diagnoses. Every Monday morning, the students meet with Polish for a little over an hour. One student presents a patient case about which the others know very little; the session functions similar to a residents’ report.

“These are the some of the first student experiences in the hospital. We would like them to begin to integrate what they’ve learned in the first two years of medical school – combining pathophysiology and epidemiology with the information they get at the bedside – and learn how to manage not only acute problems but chronic illness, and promote health and well-being,” Polish said. “They’re expanding their medical knowledge by interpreting clinical information, laboratory information, imaging information, all while solidifying their clinical skills.”

In addition to the Clerkships, Polish teaches in the Vermont Integrated Curriculum’s Convergence course – a Foundations course that helps prepare students for their clerkship rotation schedules. He also teaches students, residents and fellows during his in-hospital infectious disease consultations.

Welcome New Residents

In late June, the Department of Medicine will welcome 12 new residents and nine new preliminary (one-year) residents. The residency program has increased the number of preliminary year slots, adding two new residents to that group. This will help ensure compliance with new duty hour reforms that eliminate overnight call for first-year residents.

“I’m very pleased with the group that we have,” said Mark Levine, MD, associate chair for education and director of the Internal Medicine residency program. “They are from very strong institutions, and we're going to have people from all over the country who have a diversity of backgrounds in terms of what their interests are.”

INCOMING RESIDENTS

Categorical
Robert Disantis, Penn State University
Adetayo Fashoyin, University of Wisconsin
Damon Houghton, University of North Carolina
Timothy Leclair, University of Vermont
Jacqueline Malekirad, University of Washington
Samuel Merrill, Washington University
Benjamin Parkhurst, University of Buffalo
Samreen Rizvi, Imperial College – United Kingdom
Krystine Spess, Kansas City Osteopathic Medicine
Deirdre Trobaugh, University of Arkansas
Heather Viani, University of Vermont

Preliminary
Mohammed-Ali Babi, Weill Cornell – Qatar
Adam Darby, Saint Georges
Sara Hardy, Case Western Reserve
William Hart, University of Toledo
Robert Hieronimus, University of Toledo
Veena Kalapatapu, Indiana University
Kendra Lesiak, University of Nebraska
Amy Odefey, University of Vermont
Kathryn Richard, University of Vermont

OF NOTE

Jan K. Carney, MD, MPH, gave a presentation entitled Healthy People and Medical Education: Strategies and Successes at the Association for Prevention Teaching and Research (APTR) meeting March 18, 2011, in Washington, DC.

G1 Resident E. Rosy Hill, MD, was selected by the leadership of the Southeast Center of Excellence in Geriatric Medicine (SCEGM) to participate in the 8th Annual SCEGM Resident Award Summit in May at The University of Alabama at Birmingham (UAB).

Pulmonary Fellow Prema Menon, MD, was awarded an ATS Fellow Track Symposium Travel Award for the American Thoracic Society meeting in Denver, CO, May 2011.

William Hopkins, MD, won Foundations Course Director of the Year award for an unprecedented fifth time, and the Cardiovascular, Respiratory and Renal Systems Course earned Outstanding Foundations Course also for the fifth time.
CHARLIE IRVIN, PHD, has been invited to serve on two study sections for the National Institute of Allergy and Infectious Disease of the National Institutes of Health.

DORIS STRADER, MD, was named 2011-13 Chair of the Data Safety Monitoring Board Chair for the NIH Hepatitis B Research Network.

MARY CUSHMAN, MD, has agreed to be the Senior Guest Editor of the journal Circulation, the premier cardiovascular journal.

DAVID KAMINSKY, MD, was named Editor of the Netter Collection for the respiratory system.

KATHRYN SCHWARZENBERGER, MD, was elected to serve on the Board of Directors of the American Academy of Dermatology Association. She will officially take office in March 2012.

STEVEN LIDOFSKY, MD, PHD, (at left) was appointed Vice Chair, Joint American Association for the Study of Liver Diseases and American Liver Foundation Research Awards Committee.

MERCEDES RINCON, PHD, was elected to serve on the Program Committee for the American Association of Immunologists commencing July 1, 2011. She will serve through 2014.

in the NEWS

APRIL
Vermont Public Radio
New Drugs for Hepatitis C Called Game Changers

DORIS STRADER, MD, provided commentary about the decision of the Food and Drug Administration advisory panel to recommend approval of the drugs boceprevir and telaprevir to treat Hepatitis C.

APRIL
Burlington Free Press
UVM Researcher Looks for Link Between Race, Deep Vein Thrombosis

Neil Zakai, MD, and his current research on the higher incidence of deep vein thrombosis in African Americans. Zakai hopes to understand more about risk factors, like hypertension, that affect this population.

APRIL
DBusinessnews.com & Fox TV-44 News
Pulmonary Fibrosis Clinical Trial

YOLANDA MAGETO, MD, was featured in news stories covering several new clinical trials that are examining potential treatments for idiopathic pulmonary fibrosis. Dr. Mageto will be the lead investigator at UVM’s Vermont Lung Center, one of seven sites participating in the clinical trials.

APRIL
WCAX-TV 3
Cardiac Rehabilitation

PHILIP ADES, MD, was a guest on “Across the Fence” discussing his upcoming Community Medical School lecture.

APRIL
The Department’s new “Club Med” events committee hosts a social gathering for the faculty at UVM’s Fleming Museum.

TEAM PLAYER: BOB LOBEL, MD

BOB LOBEL, MD is a cardiac electrophysiologist and assistant professor in the Department of Medicine – but few people know he was once a world-champion Ultimate competitor. Bob first started playing Ultimate as an undergrad at the University of Vermont. “People did it because they loved it and loved playing and they loved the camaraderie. We traveled all over New England,” he said.

A popular game played by hundreds of thousands worldwide, Ultimate involves elements of soccer, basketball and football, using a flying disc. It’s typically played by two seven-player teams, who score by catching a pass in the opponents’ end zone.

After college, Bob continued playing in Seattle for a few years, and then during medical school at Boston University. It was during his years with the Boston team – named “Death-or-Glory” after the Clash song – that he began playing more competitively. The first year he joined them, the team won the national championship. They went on to win the next five championships in a row. During that time, in 1996, they also won the world championship in Sweden.

Bob’s claim to fame with Ultimate also included getting his picture on the back of a Wham-o Frisbee box. The company was sponsoring his Boston team at the time.

He stopped playing competitively in 2000. After moving to Vermont, traveling to Boston became more difficult. He also had a 1½-year-old son at the time.

While still into sports, today he’s more likely to be found skiing, road biking, playing hockey or stand-up paddle surfing. However, he’s stayed in touch with his former Ultimate teammates and looks forward to a UVM Ultimate reunion this fall.

Looking back on his competitive Ultimate days, Bob said: “It was great. It made me realize if you set your mind to something you can accomplish more than you thought you ever could . . . I think playing the sport helped me in a lot of other aspects of my life.”
As a member of a prestigious FDA Advisory Committee, Associate Professor of Medicine DORIS STRADER, M.D., is writing the long-awaited update on groundbreaking research in protease inhibitor treatment for hepatitis C. After many years of research into the causes of and treatments for liver diseases, she was selected to co-author the Guidelines for the Diagnosis and Management of Hepatitis C for the American Association of the Study of Liver Disease, and also co-authored the National Institutes of Health Consensus Statement on the Management of Hepatitis B. She is one of the foremost experts in the world in this area, and every day she brings this expertise to her patients, students and colleagues at the University of Vermont College of Medicine.