The highly-developed skills and laser-sharp precision of a dermatologist and professor of medicine, GLENN GOLDMAN, M.D., make him a true craftsman in his field. Specializing in Mohs surgery, a microscopic surgical treatment procedure for skin cancer, he combines a keenly focused accuracy with the detective skills of a pathologist and the restorative eye of a reconstructive surgeon to deliver successful results for his patients. His dedication to excellence and leadership roles both nationally and on the American College of Mohs Surgery Board of Directors, and on campus as director of the Division of Dermatology at the University of Vermont College of Medicine.
When we decided to increase the frequency of our newsletter to four times a year—two in print and two on-line—I was worried that it might be a challenge to find enough material. That clearly hasn’t been a problem! In this issue we feature another of our outstanding divisions, Infectious Disease, and two very exciting new programs supported by generous donors that will greatly enhance our research. We welcome new faculty and celebrate the transition to Emeritus Professor for five of our senior faculty. The faculty, resident and fellowship accomplishments continue to be amazing: national honors, new grants, high impact publications and significant research advances.

In the last newsletter we welcomed new residents and fellows and noted where our graduating residents were headed. In this edition you can see where all of the fellows that graduated this summer have gone. Their career paths span private practice and academic medicine across the country. Once again, look for “Who Knew.” I am always amazed at how accomplished the department is both at and away from work.

Polly E. Parsons, MD
E.L. Amidon Professor and Chair, Department of Medicine

Submissions to this newsletter, as well as address corrections may be sent to: thechart@med.uvm.edu or THE CHART UVM/Fletcher Allen Department of Medicine Fletcher 311 111 Colchester Avenue Burlington, Vermont 05401

Cover photo by: Raj Chawla, UVM Medical Photography
New Clinical Service Highlghts

- 24/7 In-House Attending Physician Service in the Medical Intensive Care Unit
- Expansion of Cancer Multidisciplinary Clinics with the addition of a GU clinic led by Drs. Steven Ades and Scott Perrapato.
- Dermatology added a volunteer clinic at the Community Health Center in Burlington
- Gastroenterology launched a new mobility center and esophageal pH/laboratory.
- Infectious Disease established a dedicated ID ICU consultant.
- Rheumatology developed the expertise to perform musculoskeletal ultrasound.
- Steps to Wellness: A medically based fitness program for cancer survivors led by Dr. Kim Dittus, Hematology-Oncology. http://stepstowellnessvt.org
- Transcatheter Aortic Valve Insertion (TAVI) (featured in Spring 2012 newsletter)
- Renal denervation to reduce blood pressure. Drs. Harold Dauerman, Cardiology, and Richard Solomon, Nephrology, are the UVM investigators for a clinical trial that introduces a new procedure, renal denervation, for the treatment of refractory hypertension.
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Hood Receives Distinguished Service Award

VIRGINIA L. HOOD, MBBS, MPH, Professor of Medicine and a nephrologist at Fletcher Allen Health Care, was recognized by The Vermont Medical Society as one of five Vermonters (three of them with ties to the University of Vermont) for their outstanding contributions to the health and wellbeing of the state’s residents during its 199th annual meeting held October 27, 2012 in Woodstock, Vt. Dr. Hood was presented with the Distinguished Service Award, the highest award the Society can bestow upon one of its members. This award is given on the basis of meritorious service in the science and art of medicine and for outstanding contributions to the medical profession, its organizations, and the welfare of the public. Earlier this year, Hood concluded a term as president of the American Association of Cardiovascular and Pulmonary Rehabilitation (the AACVPR), which is a national committee.

STEVEN GRUNBERG, MD was an invited delegate to the 2012 World Cancer Leaders’ Summit, held in Montreal, Canada, in conjunction with the biannual meeting of the International Union for Cancer Control (UICC).

MARIE E. WOOD, MD has accepted to serve as Chair of the ASCO’s Genetics Committee (CaPC).

FACULTY NEWS

SUSAN LAKOSKI, MD was appointed as Faculty Senate Representative to the UVM Athletic Advisory Board.

STEVEN LIDOFSKY, MD, PHD has been appointed Chair of the American Association for the Study of Liver Diseases/American Liver Foundation Research Awards Committee as of July 2012.

SHELDON COOPER, MD and JAMES TRICE, MD recently participated in the ECHO Center’s presentation of the Human Body discussing arthritis and osteoporosis.

STEVEN GRUNBERG, MD was an invited delegate to the 2012 World Cancer Leaders’ Summit, held in Montreal, Canada, in conjunction with the biannual meeting of the International Union for Cancer Control (UICC).

MARIE E. WOOD, MD has accepted to serve as Chair of the ASCO’s Cancer Genetics Committee (CaPC).

CHARLOTTE TENEBACK, MD has been selected to serve on the Research Committee of the American Association of Cardiovascular and Pulmonary Rehabilitation (the AACVPR), which is a national committee.

JAMES VECCHIO, MD, PETER MOSES, MD, and RICHARD ZUBARIK, MD were elected to the Green Mountain Care Board Health Care Professional Technical Advisory Group (TAG) in Montpelier. HAROLD DAUERMAN, MD was named as incoming Chairman, Clinical Cardiology programming, American Heart Association Committee on Scientific Sessions and Programming for 2013-2014.

MATTHEW WATKINS, MD was named to the General Advisory Group to the Green Mountain Care Board. He is the sole Fletcher Allen Health Care physician representative.

JOEL SCHNURE, MD was recently appointed to the Editorial Board of Coronary-Artery Disease.
Infectious Disease

Grappling with the subjects of national headlines – antibiotic resistance, infection prevention and control, HIV/AIDS, and emergency preparedness – is an everyday occurrence for the members of the Infectious Disease (ID) Division. Committed across all missions of the academic medical center, faculty members are actively engaged in patient care, conduct cutting-edge research, and serve as educators of medical students, residents, fellows, patients, and state health officials.

Although the Division has been in existence for many decades, the program re-build began in 1987, when Director Christopher Grace, MD, joined UVM/Fletcher Allen. The Division has a wide catchment area that includes the state of Vermont and northern New York, and essentially functions as the infectious disease specialty unit for the region. Since Grace’s arrival, the unit has grown from two to nine ID-trained physicians and also includes one full-time and one part-time nurse practitioner, two PhD-trained faculty, four graduate students and two postdoctoral fellows.

In addition, 2012 marks not only Grace’s 25th anniversary, but the 25th anniversary of the establishment of the unit’s HIV/AIDS Comprehensive Care Clinics program, which serves as the state’s exclusive provider of HIV/AIDS care at four outreach clinics across the state.

Among all the divisions in Medicine, ID enjoys a somewhat unique status – each faculty member is engaged in the missions of clinical care, research and teaching, plus another major role to ensure the Division’s success. While Grace runs the fellowship training program and state’s HIV/AIDS clinics, Professor Kemper Alston, MD, MPH, serves as the hospital epidemiologist and infection control officer. Associate Professor Beth Kirkpatrick, MD, has established the Vermont Vaccine Testing Center currently focusing on Dengue vaccine development, vaccines against other enteric pathogens and mucosal immunology. Kirkpatrick is assisted by Assistant Professor Janet Lindow, PhD, investigating the immunology of the vaccines and enteric pathogens.

Associate Professor Christopher Huston, MD, with support from Assistant Professor Jose Teixeria, PhD, investigates the molecular biology of Entamoeba histolytica and therapeutic drug development against Cryptosporidium. Both Drs. Kirkpatrick and Huston have NIH and other funding to conduct their research programs. Assistant Professor Kristen Pierce, MD, assists Kirkpatrick with vaccine research and serves as Associate Director of the Fellowship Training Program. Associate Professor Mary Ramundo, MD, serves as an Associate Director for the Internal Medicine Residency program, and Louis Polish, MD, directs the Inpatient Medicine Clerkship. Cindy Noyes, MD joined the faculty in 2011 as assistant professor, and in addition to her clinical work will be the Assistant Hospital Epidemiologist working with Dr. Alston. Sarah Mooney, MD, a 2012 graduate of the I.D. Fellowship program, splits her time between Fletcher Allen and Rutland Regional Medical Center. She will be assuming responsibility for the Vermont AIDS Education and Training (ETC) program.

Open five days a week, the ID Clinic receives referrals from all specialties, offering general ID consultation and hospital follow up, HIV/AIDS care, HCV care, and home IV antibiotic management. An International Travel Medicine clinic and refugee screening clinic is coordinated by Deborah Kurzko, N.P. Grace estimates that the group has performed 1,800 new inpatient consults and 6,300 outpatient consults in the past year, not including follow-ups, and says this number increases annually due to the complexity of infections and quality of service. The Division also provides outreach services through contracts with regional hospitals, including Northwestern Medical Center in St. Albans, Rutland Regional Medical Center and Canton-Potsdam Hospital in New York, and provides about 1,000 telephone-based consults yearly.

Three attending physicians support the inpatient service at a time and – as part of a new initiative with Pulmonary and Critical Care – one attending at the Medical Intensive Care Unit (MICU). The Division’s antibiotic stewardship program aims to preserve the efficacy of currently-available antibiotics and reduce antibiotic resistance and costs. Faculty participate in the Fletcher Allen antibiotic control program and write the Guide to Antimicrobial Therapy for Adults, universally referred to as the “Green Book.” Through their antibiotic use stewardship, the ID Division has helped the hospital to reduce pharmaceutical costs.

Education holds a prominent place in the roles of ID faculty. In addition to daily teaching rounds with medical students, residents and fellows, they are actively involved in the Vermont Integrated Curriculum courses Attacks and Defenses, Neural Sciences, Generations, Connections, Convergence, and Doctoring in Vermont, as well as Medicine Clerkships and Acting Internship levels. For more than continued on page 13

**INFECTION DISEASE at-a-glance**

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<th>Number of clinic visits</th>
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<th>9 Peer-reviewed publications</th>
<th>1,000 telephone-based consults</th>
<th>Bangladesh Most distant clinical site</th>
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<td>$1,087,723</td>
<td>9</td>
<td>1,000</td>
<td>Bangladesh</td>
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Statistics from FY2012
RESIDENTS PRESENT

The Department of Medicine was again well represented at the American College of Physicians Vermont Chapter Meeting in Fall 2012, with a number of residents presenting posters:

AARON SHAMS HELMINSKI, MD
Title: Feeling Your Heart in Your Throat: A Case of Dysphagia Aortica

PATRICK HOHL, DO, MPH
Title: Lyme Carditis and Underlying Cardiac Conduction Disease: A Treatment Dilemma. Winner of Clinical Vignette.

DEVA SHARMA, MD, DERINDA TROBAUGH, MD, JAMES WOLF, MD and KRYSI SIESS, DO
Title: An Unusual Case Of Septic Shock, Pancytopenia And Acute Renal Failure In A Wildlife Enthusiast

ZUBIN AGARWAL, MD
Title: An Unusual Case of Dizziness: A Case of West Nile

BENJAMIN KEVESON, MD
Title: A Patient with Hereditary Hemorrhagic Telangiectasia Presenting with Acute Cor Pulmonale

HEATHER SHENK, MD
Title: Haemophilus apiornphilus in Bacterial Endocarditis

JUSTIN STINNETT-DONELLY MD, and PATRICIA BOUCHARD, RN, MS, CPHQ
Title: Choosing Wisely Vermont Edition, developing a process to implement Choosing Wisely principals at Fletcher Allen Health Care
Winner of Research Presentation

SAMREEN R RAZA, MD
Title: A curious case of weakness: calcium pyrophosphate dehydrate deposition disease (CPPD) of the cervical spine

JASMOL JAYAPRAKASH-SARDANA, DO
Title: The First Two Cases of Eastern Equine Encephalitis in Vermont Linked to an Emu Farm.

 DAMON HOUGHTON, MD
Title: Acute eosinophilic pneumonia after restarting cigarette smoking.

AAP Inducts Budd

RALPH BUDD, MD, Professor and Director of Immunobiology, and Director of the Vermont Center for Immunology and Infectious Diseases, was inducted in the Association of American Physicians, the national honorary society for physician-scientists. He was formally introduced at the organization’s annual meeting in Chicago, Ill., on April 28, 2012.

A nonprofit, professional organization founded in 1885 by seven physicians, including William Osler, M.D., for “the advancement of scientific and practical medicine,” the Association of American Physicians has more than 1,300 active members and approximately 600 emeritus and honorary members from the U.S., Canada and other countries.

Budd’s research focuses on infection and immunity. His many accomplishments include the identification of memory T cells and a previously unknown subset of T lymphocytes (NKT cells).

Rincon Named University Scholar

MERCEDES RINCON, PHD was named as a University Scholars for 2012-13. Each year, four distinguished faculty members – two from the basic and applied sciences, and two from the social sciences and humanities – are named University Scholars in recognition of their sustained excellence in research and scholarly activities. University Scholars are selected by a panel of faculty scholars, based upon nominations submitted by UVM faculty.

NOTABLE NEWS

BETH KIRKPATRICK, MD, Associate Professor, was awarded the Bailey K. Ashford Medal at the annual meeting of the ASTMH on Sunday, November 11, 2012 in the Atlanta Marriott Marquis. She received the award for distinguished work in tropical medicine.

ELIZABETH CHEN, PHD, Assistant Professor, is a Study Section Member, Special Emphasis Panel, National Library of Medicine, National Institutes of Health.

RECENT RESEARCH ADVANCES

MARY CUSHMAN, MD
• Only about half of the excess stroke risk in blacks can be explained by traditional risk factors.
• Higher levels of inflammation explain about 15% of the excess stroke risk in blacks compared to whites.

JASON BATES, PHD
• Development of new model to explain power-law stress relaxation in biological soft tissue
• Development of computational model of development of ventilator-induced lung injury in mice
• Development of an agent-based model of allergic inflammation in the lung
• Development of a method for choosing tidal volume in acute lung injury based on fuzzy logic

RALPH BUDD, MD
• Fas regulates homeostatic proliferation of T cells. Cytokines regulate the level of caspase activity in T cells

EDWARD LEIB, MD
• Use of large Osteoporosis Center database to demonstrate that spine bone density affects risk of fracture predicted by femoral neck density and that clinical risk factors for fracture diminish in influence with age.

MARKUS MEYER, MD
• Development of a biological sensor to study the interaction SERCA2a and PLB
• Patent application for a new method to assess cardiac pump function

DAVID SCHNEIDER, MD
• Patent application for a new method to assess platelet function
Community Donors Generously Support Critical Research in Cancer and Cardiology

Generous gifts from two local families – one from Morrisville and the other from Stowe, Vt. – demonstrate how Department of Medicine faculty have had a positive impact on the community. Their two donations, which total $1.4 million, aim to facilitate important research in two areas that have a considerable effect on Vermonters – cancer and cardiology.

Heart disease is the leading cause, and cancer the second leading cause, of death in Vermont and the U.S. Each of these gifts will help enhance research that addresses improved understanding about and treatments for these diseases.

The $400,000 bequest from the estate of the late Barbara G. Stevens of Morrisville, Vt., was directed to the Vermont Cancer Center at UVM/Fletcher Allen and will support the development of innovative translational research that improves care and extends and enhances the lives of cancer patients. Professor and Division Chief of Hematology/Oncology CLAIRE VERSCHRAEGEN, MD, an oncologist who also serves as co-director of the Vermont Cancer Center, has already identified laboratory space to support the physician-scientist translational teams that will benefit from Mrs. Stevens’ generosity. The next step of identifying the most promising cancer research projects is underway, with work to begin as soon as the New Year.

A $1 million performance grant to Fletcher Allen pledged by Stowe residents and cardiology patients Tom and Mary Evslin will support research into improving treatment for atrial fibrillation (AF), a common type of rapid heartbeat that affects approximately 5.5 million Americans and increases the risk of stroke and death. UVM Professor of Medicine and Director of Cardiology DAVID SCHNEIDER, MD, recommended the couple direct their gift toward a research project led by UVM Professor of Medicine and Director of Cardiac Electrophysiology PETER SPECTOR, MD. According to Spector, the most common treatment alternative for AF patients is a procedure called catheter ablation that uses targeted application of heat to change how electricity flows through the heart, but this approach has a relatively low success rate. With support from the Evslins, he aims to use information from CT scans and recordings of the heart’s electrical activity to design patient-specific ablation therapy, which is expected to significantly increase the rate of cure. The $1 million will be provided in $250,000 increments over four years as benchmarks are met for both scientific and clinical aspects of the project.

By providing funding for world-class research at UVM/Fletcher Allen, these Vermont donors have an impact not only the future of patient care in the state, but in ensuring the academic medical center continues to attract high-caliber faculty member who will sustain this level of research and care.
Marie Sandoval, MD
Nurse practitioner and Medical students and Their preceptors developing Best practice in Communication when using the ehR for providers struggle with the necessary communication skills when using the EHR. The identification of EHR-patient-provider “Best Practices” for communications must be developed and tested. The implications of this change of documentation to provider to one in which the computer can now be considered part of a triad of communication in the clinical office interaction is changing from a communication highway of patient to provider satisfaction and quality of delivered care. The proposal will also support comprehensive instructor training in medical simulation of Dr. Laurie Leclair and Dr. Garth Garrison to ensure the necessary faculty development to implement and maintain such a curriculum.

PATRICIA KING, MD
Teaching Professionalism through lessons from the Board of Medical Practice
I proposed to develop an innovative curriculum for applying the licensing, regulatory, and disciplinary activities of state medical boards to the teaching of professionalism to medical students. Most medical schools, but not UVM, have some curriculum for understanding the professional licensing and regulation of medical practice, and a few states have started to incorporate exposure to disciplinary hearings as part of medical education. I will work with existing courses and clinical activities to incorporate case-based studies, “real world” events, and personal reflection, across the four years.

MARIE SANOVAL, MD
Developing Best Practice in Communication when using the EHR for Nurse Practitioner and Medical Students and Their Preceptors
In June of 2009, our academic medical center began the implementation of PRISM, our electronic health record (EHR). Over the past two and a half years, the EHR has been “rolled out” across our entire medical facility. At this time, all providers are expected to document their patient clinical visits in the EHR. The provider’s primary task in a clinical visit is to actively listen and effectively communicate with the patient in order to produce an accurate history of present illness (Frankel & Stein, 1999). The clinical office interaction is changing from a communication highway of patient to provider to one in which the computer can now be considered part of a triad of communication in the examination room (Morrow et al., 2009). The computer can affect the provider’s ability to accomplish their primary task of actively listening. The implications of this change of documentation are just now beginning to become apparent (Frankel et al., 2008). The students and novice providers struggle with the necessary communication skills when using the EHR. The identification of EHR-patient-provider “Best Practices” for communications must be developed and tested.

Recent Education Awards

WILLIAM PRABHU, MD was selected by the Class of 2013 as one of six residents chosen from the 198 residents at Fletcher Allen Health Care, Danbury Hospital, and Eastern Maine Medical Center to receive the Gold Honor Society Humanism and Excellence in Teaching award based on his demonstrated commitment to teaching and compassionate treatment of patients and families, students and colleagues. The Department of Medicine welcomed Dr. Prabhu as a Chief Medicine Resident July 1, 2012.

DEVA SHARMA, MD (second year internal medicine resident) has received a national award, the 2012 ASH Trainee Research Award, from the American Society of Hematology. Her award sponsors research she is conducting in collaboration with her mentor, Chris Holmes, MD, PhD (Hematology and Oncology). Her research will focus on characterizing the role of platelet activation pathways on the ex-vivo release of platelet-derived TGFβ1 in women with breast cancer, as well as the effects of P2Y12 receptor inhibition on this release.

Libman Receives ACR Fellowship Training Award

Congratulations to BONITA LIBMAN, MD, Director of the Rheumatology Fellowship Program, who has received a Research and Education Foundation Rheumatology Fellowship Training Award from the American College of Rheumatology (ACR) Research and Education Foundation for the last three consecutive years. These competitive awards go to excellent programs to ensure that there is a highly trained workforce in Rheumatology.
**Tisdale Lecture**

The Tisdale Lecture Series is named for our previous department chair William Allen Tisdale, MD. Dr. Tisdale came to Burlington in 1965 as Chair of the Department of Medicine, a position he held until 1974. He founded the geriatrics department and served as its director until his retirement in 1994. He received the teacher of the year award in 1985 and remained active in the department after his retirement. The Tisdale Lecture Series was founded in his honor in 1995. He died on November 12th, 2006.

The goal of the Tisdale Lecture Series is to highlight our Medical Grand Rounds Conference by bringing national and international leaders who are involved in relevant and cutting edge translational research. There should be a particular emphasis on the translational component, demonstrating the Bench to Bedside or Bedside to Practice aspect of the work.

**TISDALE SPEAKERS 2012-2013**

**STEVEN HOLLAND, MD**, Chief, Laboratory of Clinical Infectious Diseases, Chief, Immunopathogenesis Section, NIH, spoke on September 7, 2012. Molecular genetics of the host and the pathogen (host: Dr. Matt Poynter)

**MAURA GILLISON, MD, PHD**, Professor of Medicine, Ohio State College of Medicine spoke on October 12, 2012. The role of HPV in malignancies (host: Dr. Steven Grunberg)

**IAIN MCINNES, MD, PHD**, University of Glasgow, is scheduled to speak in spring 2013 on Cytokines in the pathogenesis of rheumatoid arthritis. (host: Dr. Ralph Budd)

*Infectious Disease — continued from page 5*

a decade, ID Fellowship program, which funds one fellow per year for two years, has enjoyed a high pass rate on the board exam. Several of the program’s graduates, who also completed Internal Medicine residencies at UVM/Fletcher Allen, have joined the division including Drs. Pierce (a 2003 College of Medicine alumna), Noyes (a 2006 College of Medicine alumna), and Mooney.

The ID conference schedule is robust, with a strong education program, says Grace, who shares that the group discusses two to three topics per week. While aimed at the fellows, the entire staff benefits from these meetings, which are often attended by Clinical Microbiology Lab partners and epidemiologists from the Vermont Department of Health, where both Grace and Alston have consultant contracts for tuberculosis, influenza, and bioterrorism preparedness. In addition, fellows go to the Health Department lab for some of their microbiology and immunology teaching. Many fellows present at the Infectious Disease Society of American annual meeting each fall. At this year’s conference, which took place in October in San Diego, Calif., Dr. Mooney presented her work on HIV-related inflammatory biomarkers (in collaboration with Dr. Russell Tracy) during the second year of her fellowship.

“The most important thing about this Division is the work ethic – it’s incredibly strong,” says Grace. “People are self-motivated and willing to help each other with service and everybody pushes hard. That’s why the unit works so well.” The Division’s secret to success though, says Grace, is Brenda Smith, the Program Support Generalist who “cheerfully keeps us all moving in the right direction.”