I am always proud to announce the exciting new work our faculty and staff are doing to advance and define the future of research, education, and clinical care. Highlights of this issue include: Dr. Whellan and his team on leading the region in clinical research and related outcomes; Dr. Most on his German roots and directing the Laboratory for Cardiac Stem Cell and Gene Therapy; Dr. Fink on the Hospitalist Program; and Dr. Jaffe on the Sleep Disorders Center and its new state-of-the-art facility here on campus.

I also thank the many generous organizations and individuals (listed on pages 5–6), who support our work through gifts to the Department. Without them we would be facing an even greater struggle for disappearing federal grants and research dollars. We treasure them as members of the Jefferson family and welcome them to visit us regularly to see first-hand all of our latest initiatives.

As the largest and most diverse department within the University, we have many more exciting initiatives and updates to share than we can contain in these few pages. For this reason we are now including more in-depth articles on the department website (www.jefferson.edu/medicine). We look forward to sharing all of the future developments, which keep us very hard at work.

Arthur M. Feldman, MD, PhD
Magee Professor of Medicine and Chairman of the Department

From the Chairman

A Comprehensive Pursuit: The Jefferson Clinical Research Program

Clinical research within an academic institution like Jefferson is a complex and unique endeavor. Beyond the painstaking procedures, analysis, and publishing is the leadership and vision, which is where Assistant Professor David Whellan, MD, MHS, comes in. Board-certified in both internal medicine and cardiology, he is also Director of Clinical Outcomes Research for the Department of Medicine and Director of Clinical Research for the Jefferson Heart Institute (JHI).

Dr. Whellan has extensive experience in clinical trial design and outcomes research, having worked with the National Heart, Lung, and Blood Institute, as well as industry sponsors, to develop and complete clinical studies. He also sees patients at the JHI Advanced Heart Failure and Cardiac Transplant Center and was recently named an Associate Editor of the American Heart Journal.
Cardiology

Patrick Most: Knocking on the Door for a Cure

Patrick Most, MD, PhD, is an Assistant Professor and directs the Center for Translational Medicine's Laboratory for Cardiac Stem Cell and Gene Therapy. He recently sat down with Translations editors to shed some light on his training in Germany, his research, and his aspirations as a clinician.

You run a lab in Heidelberg as well as here, yes?

Yes — I go back and forth between the two, since both labs have their unique advantages, resulting in some synergistic effects. Two of my former doctoral students, Mirko Völkers and Sven Pleger, now both working as physicians at the University of Heidelberg, help me run the lab there. And for now, my wife's career keeps her in Germany, so I get back as often as my work here allows me.

Where did you grow up and do your training?

I was born just outside Frankfurt in a small town, but I studied medicine in Heidelberg. I then started my doctoral thesis in the lab of Dr. Katus, at that time the senior staff of the cardiology division at the University of Heidelberg. I finished in 1996 and then went with him to the University of Lübeck, where he became head of the medical department. This coincided with the start of my clinical education as a physician.

How did you come to the Center for Translational Medicine at Jefferson?

A friend from Hamburg put me in touch with Dr. Walter Koch [now Director of the Jefferson Center for Translational Medicine], who was then at Duke, doing research in gene transfer. We were interested in gene transfer strategies to intensify our research, and this new technique was almost at its height. So starting in 2001, I joined Dr. Koch's lab for the first of several successful projects.

In 2003, I joined his new lab at Jefferson for my post-doc and we had two major breakthroughs. It was exciting to join the Center in its early days and see it grow so successfully. In 2004, I returned to Germany to complete my clinical training, but Dr. Koch made me an attractive offer to return afterwards.

What's the connection between what you studied then and what you are researching now?

The protein we are currently working on was already the subject of my doctoral thesis 11 years ago. Looking back, it's fascinating that we started almost from scratch — literally knowing nothing 11 years ago — and now are knocking on the door of a clinical breakthrough. We now know that this cardiac-specific protein (S100A1) has the ability to enhance cardiac function without any negative consequences. We discovered that failing hearts lose most of their S100A1 protein, which causes them to fail more rapidly. And now that we understand the molecular mechanism, we are pushing forward to develop this as therapy to support the failing heart and restore its contractile function.

How does your work benefit from training both as a clinician and as a basic researcher?

The two have definitely guided my research interests. My clinical background puts me in the unique position to combine medical needs with hypothesis-driven research to find new ways to cure our patients. The challenge of heart failure — with a mortality rate of 50%, which rivals cancer mortality — is that there are currently no therapies that target defective cardiac function, only ways to avoid or suppress the maladaptive compensatory reactions of the body if a patient has already sustained damage. So I sought a research path that was going to break the vicious cycle and would actually enhance cardiac function and improve survival by directly targeting the mechanisms that cause hearts to fail.

What is your hope that the outcome of this research will offer patients?

I am currently following a new lead showing that one tiny end of S100A1 protein can be chemically synthesized and penetrate cardiomyocytes (heart cells) and then improve their function, protect from arrhythmias, and even prevent death of those cells. With this simpler approach, we are advancing to animal models. I'm hoping that this could constitute an alternate means to the same end, but could be administered through an IV. My hope is that I will meet the first patient to receive these therapies I have been developing over the past decade.

http://jdc.jefferson.edu/translations/vol3/iss2/1
The Problem of Rest
Continued from page 4

many people, including physicians, still view sleep disorders as largely psychologically based," he says, so they can frequently go unchecked or misdiagnosed. "Our goal," says Jaffe, "is to raise awareness of talking to patients about sleep during regular health assessments, since treatments can have a tremendous positive impact on people's overall health."

In June 2007, the Center opened its new state-of-the-art facility at 9th and Walnut Streets on the Jefferson Center City campus. Patients who require overnight evaluations and monitoring sleep in one of ten bedrooms, which not only are equipped with the most advanced sleep-monitoring technology, but are also hotel standard: with private baths, flat-screen televisions, and individual temperature controls. The Center also offers a kitchen, study and lounge area, and indoor parking.

To learn more about sleep disorders and the Jefferson Sleep Disorders Center visit us online at www.jeffersonhospital.org/psychiatry/article11031.html.

Jefferson Clinical Research Program
Continued from page 1

The first component of the Cardiology Clinical Research Program is outcomes research, which creates databases that enable researchers to do retrospective analyses. To implement the outcomes research projects, Dr. Whellan works with Suzanne Adams, RN, MPH, Assistant Director of Clinical Outcomes Research, and a number of Jefferson investigators in the Center for Translational Medicine; the Center for Research in Medical Education and Health Care, and the Biostatistics Division of Pharmacology and Experimental Therapeutics. "Once the data is compiled into an analysis dataset," Dr. Whellan says, "physicians-in-training can explore different hypotheses with mentors and statisticians and experience the entire research process, from developing a protocol and IRB submission to presenting results at national meetings."

The second component involves design and development of prospective research projects initiated by Jefferson faculty.

JHI currently has several such projects that are funded. "We provide the infrastructure, from development of proposals and budgets to implementing the study, collecting data, performing analyses, and writing up the results," Dr. Whellan explains. A third component is the JHI Cardiovascular Research Group (JCRG), managed by Elizabeth Grace, RN, which supports both industry-sponsored and investigator-initiated clinical trials by managing regulatory documents, enrolling subjects, and managing research accounts.

Dr. Whellan also directs the Jefferson Clinical Trials Group (JCTG), overseen by Deborah Moretti, RN. This academic research organization (ARO) manages large clinical trials at a number of other academic and clinical centers throughout the U.S. They are currently preparing two studies that would include enrollment at Jefferson Hospital and other JCTG-managed sites.

"JHI is positioning itself to provide a full range of clinical research opportunities for faculty, fellows, residents and medical students," says Whellan. "We are in an exciting phase of development in supporting research that we hope will improve the care and health of our patients."

Helping Patients Write New Life Stories
Continued from page 3

small intestine — an area of bowel that could previously be evaluated only by x-ray.

A specialist in ulcerative colitis and Crohn's disease, as well as microscopic colitis, Dr. Kozuch now leads Jefferson's IBD Diagnostic and Treatment Center. She and her colleagues from the GI Division as well as the departments of Surgery, Radiology, and Pathology offer a multidisciplinary approach to treatment and provide comprehensive, cutting-edge care for patients suffering from both of these chronic conditions. The Center staff also conducts clinical trials to evaluate new medications. Dr. Kozuch's own research interests include trying to better delineate the factors that contribute to the established increased risk of colon cancer in patients with ulcerative colitis and Crohn's disease of the colon. "The more we understand, the more we can do for people," she says. "It's incredibly exciting to be involved as we make discoveries that will ultimately change the lives of the people we care for every day."

For more information about the IBD Center, visit www.jefferson.edu/gi/institute/centers1.cfm.

Assistant Professor Patricia Kozuch, MD, directs the Irritable Bowel Disease Diagnostic and Treatment Center at Jefferson.
At a gala held October 11, 2007, Thomas Jefferson University (TJU) and Thomas Jefferson University Hospital (TJUH) honored Anthony J. DiMarino, Jr., MD, with its Achievement Award in Medicine. This award goes to “individuals who have achieved and maintained excellence in their profession and who have actively contributed to the growth and development of their field.”

A preeminent consultative gastroenterologist, Dr. DiMarino joined Jefferson in 1996 as the William Rorer Professor of Medicine and Chief of the GI Division. He has been honored as “Physician of the Year” by the Delaware Valley Chapter of the Crohn’s & Colitis Foundation of America, as a “Top Doc” in Philadelphia Magazine (1991–2007), and as one of America’s “Best Doctors” by Castle Connolly Medical, Ltd.

The reception and dinner, held at the Marriott Hotel Grand Ballroom in Center City, was co-chaired by Ira Brind, Joanne and Jack Dorey, Marjorie and Jeffrey Honickman, Adele and Harold Schaeffer, and Tonia and Fred Tecce. The event also recognized Lynne and Harold Honickman with the Award of Merit.

This is the second time in three years that a Department of Medicine Division Chief has been honored by the hospital and university in this capacity. Bernard L. Segal, MD, was similarly recognized in 2005.
It was not so many years ago that the word “hospitalist” would inspire blank stares, although this model of “hospital specialists” was developed a decade ago. The Jefferson Hospitalist program continues to expand, and the 2007–08 academic year includes the addition of three new physicians, two of whom were recently graduated residents at Jefferson.

“Jefferson picked up early on this model for care,” says Hospitalist Program Director James Fink, MD. “But over the past few years the institution has invested significantly in the program, to ensure the best possible care for patients, the most efficient use of hospital resources, and excellent training for its medical students and residents.”

Dr. Fink explains that “before hospitalist medicine, the attending physicians would come into the hospital only as needed to check on patients and order tests, and then might not be available to patients or families until the next day.” But by definition, hospitalists are on-site specialists focusing on in-patient care and efficiency — a critical role given the costs and other realities of the current health care climate.

The Hospitalist program assists specifically with case management issues, from coordinating follow-up care to helping patients handle insurance. The program also plans to become more involved in areas like patient safety and improving the transition of patients into and out of the hospital. “This is a natural progression,” says Dr. Fink, “given that we are stationed in the hospital. We act as advocates for the patient and, simultaneously, help to advise the hospital on its procedures and resources.”

The Hospitalist program oversees approximately 100 patients every day through five in-patient services; four of these are teaching services, on which the physicians round for 2-3 hours every morning, instructing their residents while they see patients. Hospitalists are then available to their patients and resident teams — throughout the day.

One advantage of hospitalist medicine, says Fink, is that physicians can choose from a range of niches based on their interests. For example, Jeff Riggio, MD, has leveraged his interest in technology to focus on how best to address patients’ needs using the latest computer and software systems available. Two others focus especially on case management, working closely with social workers and staff. Some concentrate on medical consultation either at TJUH or at the Jefferson Hospital for Neuroscience, where the hospitalist group co-manages the patients admitted to the neurosurgery service.

“This is a young and extremely motivated group,” Dr. Fink says, “and we look forward to continuing to provide great care to our patients, excellent teaching to our students and residents, and expanding our roles as physicians who are integral to the future of health care at TJUH.”

Internal Medicine

Hospitalist Program: Care Tailored to Being There

Gastroenterology and Hepatology

Helping Patients Write New Life Stories

“I love learning each patient’s unique history, personally and medically,” says Assistant Professor Patricia Kozuch, MD. Having joined the Division of Gastroenterology and Hepatology (GI) in September 2006, she focuses on the all-too-common Inflammatory Bowel Disease (IBD).

“Attending to these nuances,” says Dr. Kozuch, “helps me to devise treatments that are more artful and individualized.”

Dr. Kozuch first became interested in gastroenterology as a medical student at Cornell University. Later, she pursued an advanced fellowship in IBD at the University of Chicago Hospitals with Stephen Hanauer, MD, who leads an internationally recognized IBD referral center and team of doctors.

“The study of IBD is truly burgeoning,” Dr. Kozuch explains. “And a greater understanding of disease pathogenesis translates into the development of new medical therapies, which provide us with a greater range of equipment, technology, and medication.” She notes that recent technology such as capsule and double-balloon endoscopy has significantly improved physicians’ ability to diagnose IBD and other diseases that affect the
We humans spend a third of our lives asleep. We need close to eight hours a day to function productively and maintain good health. “Yet 70 million people a year have difficulty sleeping and approximately 60 percent suffer from a chronic sleep-related disorder,” says Fredric Jaffe, DO, Assistant Director of the Jefferson Sleep Disorders Center as well as Assistant Professor of Medicine in the Division of Pulmonary and Critical Care Medicine.

Since 1978, the Jefferson Sleep Disorders Center — now a joint initiative of TJUH and Jefferson University Physicians — has been working to understand and treat rare and common sleep disorders, including sleep apnea syndromes, insomnia and narcolepsy, sleep walking and talking, head banging, and nightmares.

The Problem of Rest: Jefferson Sleep Disorders Center

Jefferson's program was the first of its kind in the Delaware Valley. Although more than 30 centers now exist in the area, the center continues to distinguish itself by approaching sleep from a multidisciplinary and team-based perspective.

“Every patient presents with unique and complex medical needs,” says Dr. Jaffe. “Our job is to provide the best diagnostic evaluation and appropriate course of treatment in collaboration with other medical disciplines.” Each patient receives an objective physical assessment using the latest technology that examines everything from neurological and pulmonary conditions to potential otolaryngological and psychiatric causes.

For Chief Residents It’s All in a Day’s Work

The daily responsibilities of the department’s chief residents might daunt even the most hardworking among us. Elected by their peers, they are responsible for administrative and educational duties that include planning a daily morning report, conferences, and weekly lectures. Additionally, they coordinate grand rounds, represent the department on numerous committees, and run the weekly morbidity and mortality report, in which residents discuss and learn from mistakes.

Sharing these responsibilities this year are the 2007–2008 chief residents: Mary Kate McCullen, MD; Andrew Rose, MD; and Joanna Kipnes, MD.

Dr. McCullen, a Havertown, PA, native and graduate of Jefferson Medical College (elected to honor medical society Alpha Omega Alpha, or AOA), plans to specialize in Endocrinology, with a focus on diabetes, “because it can be such a debilitating disease if not controlled,” says Dr. McCullen. In addition to spending time with her husband — a Jefferson anesthesiology resident — the classical violinist even squeezes in some hours of practice each week.

Before graduating (AOA) from Columbia University College of Physicians and Surgeons, Dr. Rose worked as a pharmaceutical researcher. “It’s much more satisfying to work with patients,” he says. Next year, Dr. Rose will do a fellowship in cardiology and critical care. He volunteers as editor of the Jefferson Medical Forum, resident advisor for the hospital’s Rapid Response Team, and executive member of the hospital’s curriculum committee. He’s also raised more than $40,000, through walks and marathons, for amyotrophic lateral sclerosis (ALS) research in honor of his brother, who was recently diagnosed with ALS. This fall Dr. Rose and his wife, a chief resident in pediatrics at Children’s Hospital of Philadelphia, welcomed their first child.

Internal Chief Medicine resident Dr. Kipnes has an MS in clinical pharmacology from Thomas Jefferson University and an MD (AOA) from Jefferson Medical College. She plans to continue with Internal Medicine and is interested in the Hospitalist track. She serves on the Jefferson Doctor-Nurse Communication Committee and Women’s Health Subcommittee and volunteers with Jeff HOPE, a student-run health program for Philadelphia’s homeless. She and her husband, also a physician, are new parents of twin girls.

For Chief Residents It’s All in a Day’s Work

The daily responsibilities of the department’s chief residents might daunt even the most hardworking among us. Elected by their peers, they are responsible for administrative and educational duties that include planning a daily morning report, conferences, and weekly lectures. Additionally, they coordinate grand rounds, represent the department on numerous committees, and run the weekly morbidity and mortality report, in which residents discuss and learn from mistakes.

Sharing these responsibilities this year are the 2007–2008 chief residents: Mary Kate McCullen, MD; Andrew Rose, MD; and Joanna Kipnes, MD.

Dr. McCullen, a Havertown, PA, native and graduate of Jefferson Medical College (elected to honor medical society Alpha Omega Alpha, or AOA), plans to specialize in Endocrinology, with a focus on diabetes, “because it can be such a debilitating disease if not controlled,” says Dr. McCullen. In addition to spending time with her husband — a Jefferson anesthesiology resident — the classical violinist even squeezes in some hours of practice each week.

Before graduating (AOA) from Columbia University College of Physicians and Surgeons, Dr. Rose worked as a pharmaceutical researcher. “It’s much more satisfying to work with patients,” he says. Next year, Dr. Rose will do a fellowship in cardiology and critical care. He volunteers as editor of the Jefferson Medical Forum, resident advisor for the hospital’s Rapid Response Team, and executive member of the hospital’s curriculum committee. He’s also raised more than $40,000, through walks and marathons, for amyotrophic lateral sclerosis (ALS) research in honor of his brother, who was recently diagnosed with ALS. This fall Dr. Rose and his wife, a chief resident in pediatrics at Children’s Hospital of Philadelphia, welcomed their first child.

Internal Chief Medicine resident Dr. Kipnes has an MS in clinical pharmacology from Thomas Jefferson University and an MD (AOA) from Jefferson Medical College. She plans to continue with Internal Medicine and is interested in the Hospitalist track. She serves on the Jefferson Doctor-Nurse Communication Committee and Women’s Health Subcommittee and volunteers with Jeff HOPE, a student-run health program for Philadelphia’s homeless. She and her husband, also a physician, are new parents of twin girls.
The Department of Medicine is grateful to all of our donors for their generous support of our centers, faculty, research, and education in the past year. Charitable gifts support the amazing work our physicians do every day and help the department to continue to expand its legacy as a leader in the region. This help makes it possible for us to recruit the finest physicians and residents, educate the most talented students, and advance our longstanding tradition of translating our patients’ problems today into the next generation of medical care. Thank You!

To learn more about giving opportunities within the Department of Medicine, please contact Margaret Fala, Director of Development, Department of Medicine at The Jefferson Foundation, at 215-955-7556 or margaret.fala@jefferson.edu.

Giving to Medicine

Supporting the Future

The Department of Medicine is grateful to all of our donors for their generous support of our centers, faculty, research, and education in the past year. Charitable gifts support the amazing work our physicians do every day and help the department to continue to expand its legacy as a leader in the region. This help makes it possible for us to recruit the finest physicians and residents, educate the most talented students, and advance our longstanding tradition of translating our patients’ problems today into the next generation of medical care. Thank You!

To learn more about giving opportunities within the Department of Medicine, please contact Margaret Fala, Director of Development, Department of Medicine at The Jefferson Foundation, at 215-955-7556 or margaret.fala@jefferson.edu.

Gifts to the Department of Medicine

September 1, 2006, through October 1, 2007

Thomas J. Connelly
Gibbons G. Cornwall
Judith H. Cross
Iris C. Cutler
John V. D’Allessio
Kevin J. Daviau
Martha E. Diebold
Jeanne S. DiMarino
Marie Donlan
Jan E. Dubois
Christopher Elliott
Ronald Envis
Eugene Feiner
Fell Faculty Sunshine Fund
Edward Fernberger
Scott H. Fertels
Robert J. Fieldsteel
Gordon B. Fink
Howard E. First
Kay E. Fisher
Arthur J. Floyd
Stanford Frank
Gerald A. Friedman
William J. Gaughran
Milton Goldman
James J. Golden
Richard Goldborough
Joseph S. Gonnella
Gretchen R. Goodnow
Edward Gosfield
Richard C. Gozon
Albert Greenbaum
Lawrence M. Guenzel
Richard Guggenheim
Hie-Won Y. Hann
Marion Hazzard
Arthur E. Helfand
Walter H. Herbert
Hobart Armory, Hare Honor Medical Society
Dennis H. Hoffa
Chen I. Huang
Judy P. Hurvitz
William A. Hutchinson
Jackeline Iacovella
Joan J. Jaffe
Jewish Federation of Greater Philadelphia
Edward Jutkowitz
Charles Kahn
The Kahn Testamentary Foundation
Gregory C. Kane
Michael W. Kaplinsky
Grant W. Keller
Hye Hyun Kim
The Sidney Kimmel Foundation
Frederick C. Klein
M. L. Klein
Stephen B. Klein
The Raymond Klein Charitable Foundation
Benjamin A. Kohl
Herbert Kolsby
Gerald Kushner
Michael A. Kutell
George P. Lange
Lee E. Larson

Published by Jefferson Digital Commons, 2009
Five new faculty have joined the Division of Internal Medicine: Donna Williams, MD; Jennifer Cowan, MD; Albert Lee, MD; Taki Galanis, MD; and Nathan Negin, MD.

The Division of Nephrology welcomes Won Kook Han, MD, Yonghong L. Huan, MD, and JuFang Wang, PhD.

New Faculty
The Department of Medicine is pleased to announce that Barry S. Ziring, MD, has been named the Director of the Division of Internal Medicine, and Oscar Irigoyen, MD, has been named the Acting Director of the Division of Rheumatology.

The Division of Cardiology has two new faculty: Ira Cohen, MD, and Daniel Frisch, MD.

Glenn Radice, PhD, has joined the Center for Translational Medicine.

Wolfgang Bergmeier, PhD, and Saleh Ayache, MD, have joined the Division of Hematology.

The Division of Infectious Diseases welcomes Dionissios Neofytos, MD.

The Division of Endocrinology invites you to visit the Jefferson Weight Management Program’s new website at www.jefferson.edu/endocrinology/weightmanagement and learn more about our highly successful options for losing weight and keeping it off.

Awards and Honors
Thomas Force, MD, the James C. Wilson Professor of Medicine and Clinical Director of the Center for Translational Medicine, received the “Albrecht Fleckenstein Memorial Award” for distinguished contribution to basic research. Members of the Faculty of the International Academy of Cardiology—a world-renowned panel of 140 cardiologists and scientists—announced the award during the 13th World Congress on Heart Disease held in Vancouver in July 2007.

In September 2007, Nature Medicine published a paper by Hui Zhang, MD, PhD, Associate Professor, Division of Infectious Diseases and Environmental Medicine, and his colleagues, suggesting that cellular microRNAs can help HIV persist by shutting off viral replication and contributing to latency. To view the article online visit www.nature.com/nm/index.html.