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## Departments

- Cardiology
- Endocrinology and Metabolism
- Gastroenterology
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- Gerontology and Geriatric Medicine
- Hematology and Oncology
- Infectious Diseases
- Molecular Medicine
- Nephrology
- Pulmonary, Critical Care, Allergy and Immunologic Diseases
- Rheumatology
It is with considerable enthusiasm that I welcome you to the 2006/2007 Annual Report of the Department of Internal Medicine, Wake Forest University School of Medicine (WFUSM). In these pages we have attempted to capture and celebrate the many achievements of our faculty, students, and staff as well as to call attention to the generous support bestowed on the Department by our many benefactors through philanthropic support.

Our primary mission is to provide an educational environment conducive to developing physicians prepared for a lifetime of study, problem solving, and making critical judgments in the practice of Internal Medicine. The fulfillment of our educational mission requires the provision of exemplary clinical services. We are very fortunate that our program is located within WFU Baptist Medical Center as it offers unique opportunities for training through its exceptional facilities. It is a mutually beneficial collaboration. In the last two decades, both the Department and WFU Health Sciences have advanced to the very first rank of American academic medical institutions.

The cornerstone of our program is our faculty, a multi-disciplinary group that is engaged in leadership roles on campus, in the community, and in a multitude of national organizations seeking to advance education, research and patient care. The faculty and our predecessors have created an environment that fosters collaboration, inspiration, and ultimately knowledge. The product of a dedicated faculty and superlative teaching is best exemplified by a successful training program in internal medicine. In 2006/2007, our residents achieved a ninety-six percent pass rate on Internal Medicine Board Examinations, a source of pride for the Department.

*Principles of Internal Medicine, 1st Edition, 1950
The Department’s reputation as a nationally prominent research department continues to be sustained by substantive extramural funding from prestigious agencies such as the National Institutes of Health (NIH). Our overall objective is to move into the ranks of the top thirty Departments of Internal Medicine, as ranked by NIH funding. Total extramural research funding is approximately $24 million dollars annually. In the last available rank of Departments of Medicine by NIH funding, our Department was ranked forty-eighth among all U.S. Departments of Medicine.

Faculty are vital to the success of major research programs at WFU Health Sciences, including the Center for Human Genomics, the J. Paul Sticht Center on Aging and Rehabilitation, the WFU Comprehensive Cancer Center, the Diabetes Research Center, a unique training and research program in Molecular Medicine, and the General Clinical Research Center. Opportunities exist within these Centers of Excellence for the development of multi-disciplinary research groups composed of bench and patient-centered investigators and clinicians. The Department opened a Clinical Trials Unit in 2007 to help match faculty interest with that of potential industrial and agency sponsors and to encourage greater patient participation in research protocols. We also introduced the Tinsley R. Harrison Translational Research Training Program, a new initiative designed to introduce clinical and basic research principles to residents and fellows. Internal Medicine residents also may apply to enter the Internal Medicine Resident Research Pathway, which provides an intensive research experience leading toward career development as academic physician-scientists.

The Department is committed to delivering outstanding clinical service to patients in a community that reaches well beyond the boundaries of Winston-Salem, NC. As our reputation has grown, so has our market, and we now attract patients from throughout North Carolina; parts of South Carolina, Virginia and West Virginia; and from across the country. We are fortunate to have as an integral partner in support of the clinical mission, the Wake Forest University Baptist Medical Center. The Department is now responsible for fifty-four percent of inpatient admissions at North Carolina Baptist Hospital. This year we have made significant advances in our clinical enterprise. The hospitalist program has grown substantively and its success is an example of partnership with the hospital. We also opened a Palliative Care Unit, a freestanding Dialysis Access Center, and have established a surgical co-management service. In 2007 we commenced plans to develop new and unique multidisciplinary outreach programs that will build on the success of existing regional programs in oncology, infectious diseases, heart and kidney diseases. These initiatives are designed to improve not only the quality of care, but access to care for our patients.

Please explore this report as it contains many examples of how the Department of Internal Medicine is creating and translating knowledge, which directly benefits our patients, city and region, state and nation.

Thomas D. DuBose, Jr, MD
Tinsley R. Harrison Professor and Chair of Internal Medicine
Professor of Physiology and Pharmacology

“The Department of Internal Medicine is committed to the creation of new knowledge and the translation of these findings to the overall wellbeing of patients from our community, region and nation.”

– Thomas D. DuBose, Jr, MD
The Department of Internal Medicine provides an exceptional educational experience to residents and fellows. Nine subspecialty training programs as well as the residency training program meet or exceed all accreditation standards of the American College of Graduate Medical Education (ACGME) and the Residency Review Committee (RRC). This year, ninety-six percent of our graduates passed the Internal Medicine Board Examinations.

Greater emphasis is being placed on preparing the researchers of tomorrow. In 2007, the Department established the Tinsley R. Harrison Research Program, identifying faculty researchers in each section to mentor residents. The first resident and fellow research day was held in May. These and other efforts have increased resident research productivity.

The Department continues to evolve training to achieve ACGME-mandated competencies in medical communication, professionalism, systems-based practice, and practice-based learning and improvement. Wake Forest has been selected as a site for assessing the American Board of Internal Medicine (ABIM) Practice Improvement Module in the Care of the Vulnerable Elderly. Chief residents collaborate with program directors in teaching evidence-based medicine. All residents are taught basic principles of health care systems and the systems perspective is integrated into conferences such as Morning Report and Morbidity and Mortality Review. The internship includes workshops and seminars in advanced communication skills and professionalism.

To foster excellence and innovation in teaching, Wake Forest University Health Sciences established the Core Teaching Faculty program in 2004. Composed of senior and junior faculty from across the WFU School of Medicine, this elite group of individuals is charged with leading campus-wide efforts in curriculum development, teaching faculty development, and educational research, with the ultimate goal of achieving national prominence in educational program design. Five members of the Department were chosen to serve as inaugural Core Teaching Faculty: Hal H. Atkinson, MD; Kenneth S. O’Rourke, MD; James E. Peacock, Jr., MD; Walter M. Roufail, MD; and Robert J. Sherertz, MD.
The Department of Internal Medicine is a significant financial force. Its total annual operating budget is in excess of $100 million, a figure that has increased sixty-seven percent in the last five years. The Department continues to compete well for external funding, with growth also exceeding sixty percent over the same time period.

The environment in which the Department operates has grown increasingly complex over the years. Maintaining adequate funding for academic, clinical, and research endeavors presents a significant challenge as money from government payers and the National Institutes of Health have become increasingly tight and in some cases nonexistent. The net effect is increased pressure on the Department to create new income-generating service lines, increase operational efficiency, and identify new funding sources.

The Department responded in 2006/2007 with strategic initiatives that place greater emphasis on strengthening its long-term financial position. In addition to traditional cardiovascular care and procedural revenue, the Department has identified new ways to practice medicine and generate income through the growth of chemotherapy and infusion treatments and new outreach initiatives, including a Vascular Access Center. Department faculty provide professional services at ten institution-owned dialysis centers located throughout a seven-county region. Plans are underway for a new ambulatory endoscopy center and outpatient heart center. Bringing services to communities is not only a more patient-friendly practice model, improving access to specialty care at the community level also has the potential to be more profitable.

We strive to remain a vibrant force in the tripartite mission of the Department and institution by continually evaluating our operational processes. To that end, we are restructuring our existing coding practices, actively evaluating our Division staffing and organizational structures, and continually assessing our information technology. Our ability to be successful in the delivery of excellent patient care, the fostering of learning, and the translation of our faculty knowledge is achievable if we are a healthy financial unit.

“In fiscal year 2006/2007, the Department of Internal Medicine was responsible for 114,000 outpatient visits, 16,000 hospital admissions, and gross collections of $64.2 million, making it a solid economic engine for Wake Forest University Baptist Medical Center.”

– Vickie W. Russell, MBA
The Department of Internal Medicine is dedicated to excellence in research, education and patient care.
Our overarching mission is to achieve preeminence as an exceptional academic department by expanding our national reputation for innovation in translational research, patient-centered investigation, exemplary patient care, and the education of the next generation of physicians.
Our ideal is to be a progressive and truly academic department consisting of a diverse and accomplished faculty that leaves an indelibly positive mark on patients, students, residents, and colleagues.

Located in Winston-Salem, a city of approximately 205,000 in the Piedmont Triad region of North Carolina, Wake Forest University offers an exceptional quality of life, professionally and personally.
Diversity: Changing the Face of Medicine

Racial and ethnic minorities compose twenty-six percent of the total U.S. population, yet just six percent of practicing physicians are African American, Latino or Native American. In academic medicine, under-represented minority faculty account for about four percent of medical school faculty.

The disparity has not gone unnoticed at Wake Forest. The motivation for increasing minorities in medicine is simple. A diverse physician workforce is critical in making health care available to all. African American and Latino physicians tend to practice in communities of the same racial background, which often are medically underserved. Under-represented minority physicians are more likely than their non-minority counterparts to do research addressing racial disparities.

In 2005, the Department established a Minority Task Force Committee at the behest of Chair Thomas D. DuBose, Jr., MD, who serves on the Association of Professors of Medicine Diversity Task Force. “Historically Wake Forest has not been racially diverse. We’ve made it a top priority to change the face of the Department,” says Dr. DuBose.

The Minority Task Force Committee, under the leadership of Ramon Velez, MD, MSc, is charged with raising the consciousness of the Department and increasing minority representation at all levels. “We have a mandate to train physicians who reflect our different communities,” Dr. Velez explains.

In less than two years, the Department’s diversity initiative has begun to achieve results. The Cardiology section now has two African American fellows and a new African America faculty member, William Ofori Ntim, MB, ChB. Pulmonary Medicine has recruited a faculty member from Puerto Rico. General Internal Medicine has recruited African Americans to its faculty. The Department is developing exchange relationships with medical schools in Mexico and Puerto Rico. Minority house staff now play an active role in residency recruiting.

The Department is fortunate to have the Maya Angelou Research Center for Minority Health, named for author and Wake Forest faculty member Dr. Maya Angelou. In addition to promoting career advancement and leadership development of under-represented minorities in the biomedical sciences and healthcare professions, the Center aims to improve the wellness and quality of life of African American, Native American, and Latino communities through research and foster innovative programs in health awareness and education for minority populations.

MINORITY TASK FORCE
Ramon Velez, MD, MSc, Chair
Ronny A. Bell, PhD
Cynthia Burns, MD
Jorge Calles, MD
Cesar Y. Cardona, MD
Kattron Cofield, MD
Julia Cruz, MD
Nancy Denizard-Thompson, MD
Thomas D. DuBose, Jr, MD
Kristen G. Hairston, MD
William L. Harris, MD
David Herrington, MD
Peter Lichstein, MD
Sandi Manus, MD
Catherine Messick, MD
Jimmy Ruiz, MD
Sarah Fahey, Staff Support
AN OUTSTANDING RESIDENCY PROGRAM

The Department’s Internal Medicine Residency Program is among the best in the nation, training some ninety residents each year. More than ninety-five percent of our graduates pass their boards, a reflection of our challenging academic environment and high quality house staff. Graduates pursue careers in subspecialties like cardiology, gastroenterology, and nephrology, as well as becoming traditional internists, ambulatory care physicians and hospitalists. Each year a select group pursues careers in academic medicine, and the Department continues to encourage this path.

A hallmark of our program is the emphasis placed on training residents to be effective clinicians. Wake Forest University Baptist Medical Center is an exceptional hospital, drawing patients from a nineteen-county region of North Carolina as well as from surrounding states. Residents are intimately involved in patient care and have significant autonomy in decision-making. While nearly all rotations occur at the medical school/medical center, the Department also has a large community-based ambulatory health center. New initiatives are increasing residents’ interface with community-based generalists and subspecialists. They spend time in underserved areas of the Winston-Salem community, giving them insight into the challenges faced by patients and providers.

Faculty mentors and formal initiatives like the Tinsley Harrison Translational Research Program promote and support resident research. Our house staff’s impressive research productivity is reflected by published manuscripts, abstracts, and presentations at local, regional and national meetings.

Wake Forest is a national leader in evidence-based medicine (EBM). Residents are taught to be leaders in EBM and learn to critically appraise and apply the best evidence from the medical literature at the bedside and in clinic. Upper level residents assume an important role in teaching EBM to medical students and junior house officers.

Residents also receive a solid foundation in medical systems. In 2006/2007 residents played an active role in implementing an electronic medical record system for ambulatory and inpatient services, a highly successful project.

“We are committed to training effective clinicians who are imbued with respect for patients and colleagues; who practice medicine with unquestionable professionalism; who appreciate honest communication; and who possess an innate curiosity to know more and a desire to pursue answers.”

-Peter R. Lichstein, MD
Director, Internal Medicine Residency Program
Nearly twenty years ago, the Department converted its chief medical resident positions into full-time faculty appointments called Assistant Chiefs of Medicine (ACMs). ACMs are appointed at the instructor level with full admitting/billing privileges at Wake Forest Baptist Medical Center. Outstanding residents are invited in late fall of their second year to serve as ACMs when they complete residency. Residents consider it an honor to be selected as an ACM, viewing it as an opportunity to solidify their knowledge base and develop critical teaching and administrative skills. Most have academic aspirations.

Each year, four ACMs are selected, reporting to the program director and ultimately the chairman of the Department of Medicine. ACMs make significant contributions to the ongoing quality improvement of the program. They also collaborate with program directors in teaching evidence-based medicine (EBM) in conferences and clinical settings.

ACMs divide their time between teaching, clinical, scholarly, and administrative responsibilities. Teaching responsibilities include facilitating Morning Report, participating in the Medical Information Management Seminar, Journal Club, and tutoring EBM small groups. They also lead case discussion conferences, teach bedside physical diagnosis, and frequently participate in small group sessions for Wake Forest’s medical students. Clinically, they serve as the attending of record for three to four months per year as well as work in the Department’s faculty practice for urgent care and precept in the residents’ clinic.

ACMs are expected to develop a scholarly project, ranging from original research to formal curriculum development to quality improvement.

The Department’s ACM program has attracted national attention, with other Departments of Medicine seeking to model their ACM year after ours. This recognition reflects the efforts of our faculty, as well as the outstanding commitment and leadership demonstrated by the ACMs.

Peter Lenz, MD • Matt Thoma, MD • Jimmy Pirkle, MD • Shane Anderson, MD

2006/2007 Assistant Chiefs of Medicine
Medical research drives innovation in technology, treatments and processes. Research is a top priority of the Department of Internal Medicine. Currently ranked forty-ninth based on the most recent figures on National Institutes of Health (NIH) funding, the Department’s goal is to move into the top thirty Departments of Internal Medicine.

This year total extramural research funding was $24 million. Of this, nearly $16 million was NIH funding, with $4.2 million from foundations and other sources, and $3.7 million from industry. The Department is actively seeking to increase extramural research funding from multiple fronts. This includes actively pursuing a Clinical Translational Science Award (CTSA) from the NIH, for which applications are due in October 2007.

Research relies on intellectual capital. Department faculty members play vital roles in major interdisciplinary research programs at Wake Forest, including the Center for Human Genomics, J. Paul Sticht Center on Aging and Rehabilitation, the WFU Comprehensive Cancer Center, the Diabetes Research Center, the Section on Molecular Medicine, and the General Clinical Research Center.

The Department has focused significant effort on recruiting additional physician-scientists and PhD scientists with active research programs and recognizing existing talent with the naming of important administrative positions. This year’s successes include Stephen Kritchevsky, MD, director, Sticht Center Center on Aging, Section on Gerontology and Geriatric Medicine; Donald Bowden, MD, director, Diabetes Research Center; Cristina M. Furdui, PhD, and Allen W. Tsang, PhD, both in the Section on Molecular Medicine. Aggressive
recruiting efforts are underway in other Sections for individuals who will complement the exceptional talent already in place.

The Department strives to expand its reputation as the region’s indisputable leader in areas such as cancer, cardiovascular, renal, and pulmonary diseases. This is accomplished by developing an environment that fosters interplay between clinical services and clinical research by promoting translational research and clinical trials along with integrating the expertise of our faculty with corresponding basic science research programs. Many of our clinics combine expert medical care with research initiatives, benefiting current and future patients.

To further support growth in clinical and translational research, the Department is establishing a Clinical Trials Center in a space contiguous with the existing outpatient clinic. This will foster additional clinical trials and encourage great support from faculty, staff and patients.

**Kimbrrell Proteomics Research Laboratory**

The Department is expanding its efforts in proteomics, cellular, and molecular medicine to support and promote biotechnology-based research. With a gift of $1.5 million from private donors Duke and Dorothy Kimbrell, the Department established an endowed professorship in Molecular Medicine, currently held by Richard Loeser, MD, professor of Internal Medicine. An additional gift from the Kimbrell family of $500,000 inaugurated the Kimbrrell Proteomics Research Laboratory. Researchers from across the Department have benefited from the intellectual and technological resources of the Proteomics Laboratory. One investigation is examining signaling proteins that mediate cartilage destruction in osteoarthritis. The objective is to use the information to develop new therapies to block the activation of signaling proteins, thereby easing the physical challenges posed by osteoarthritis.

**Tinsley R. Harrison Research Program**

The Tinsley R. Harrison Research Program was established in 2006 to provide residents and fellows with the opportunity for initial research training thus encouraging translational research as a career path. Participants receive instruction and practical experience in basic and patient-centered investigation in a mentored environment away from the demands of patient care and other clinical obligations. Consistent with the NIH Roadmap, the program provides formal research experience, training in fundamental techniques in a wide range of disciplines, and interaction with clinical trials, while overcoming traditional barriers that hinder basic sciences application to clinically relevant questions.

Though in its infancy, the Department has already seen an increase in resident research productivity. The Department’s first annual Resident and Fellow Research Day was held in May, with more than thirty-six participants presenting posters.

**Family Investigation in Nephropathy and Diabetes (FIND) Consortium**

Variations in specific genomic regions have been associated with a prevalence of diabetic nephropathy in certain populations such as African Americans, Latinos and Native Americans. Because families of patients with diabetic nephropathy have an increased prevalence of renal disease and certain populations appear to be more susceptible, delineating the genetics of diabetic nephropathy could lead to improved outcomes. To accomplish this, the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), part of the NIH, and the National Center for Minority Health and Health Disparities have established the Family Investigation of Nephropathy of Diabetes (FIND) Consortium. The overall goal is to identify genetic pathways that may be critical for the development of nephropathy and identify therapeutic strategies to prevent the onset or progression of nephropathy. Such data might help identify people at risk for the development of progressive renal disease.

Wake Forest is the lead investigator in this multi-center investigation that also includes the University of California, Los Angeles; University of Texas Health Science Center, San Antonio; and Johns Hopkins University among others.
A Commitment to Providing Exceptional Patient Care

Among the Department’s goals for 2006/2007 was to lead the Institution in programs designed to enhance quality of care for both inpatient and ambulatory medicine. Our faculty played key roles in the overall quality of care initiative of the Wake Forest University School of Medicine, leading and developing programs in a number of areas. These efforts have made a significant contribution to reducing mortality and improving outcomes in our hospitals and clinics. This year, a number of programs were added or expanded, delivering new services or expanding access to the medically underserved. The Department’s new or expanded programs include:

Palliative Care Unit

Established in 2003 as a part-time consult service for physicians treating patients with chronic illnesses, the Palliative Care Program focuses on patients’ quality of life, taking an interdisciplinary approach to addressing their physical, emotional and social issues. In August 2006, the Department opened a new ten-bed Palliative Care Unit under the direction of Morgan Bain, MD, in the Sticht Center. The response has been overwhelmingly positive with the unit receiving many letters thanking physicians and staff for their compassion and professionalism. Also in 2006, the American Board of Medical Specialties approved Palliative Care as a subspecialty of Internal Medicine.

Ryan White HIV and Infectious Diseases Specialty Clinic

The WFU Health Sciences Infectious Diseases Specialty Clinic was founded in 1983 and now serves 1,100 HIV positive adults annually.
Some 175 newly diagnosed HIV positive adults are expected to enroll in 2007. More than half of our patients reside in Forsyth County. The rest reside in the surrounding ten counties. Clinic staff deliver a wide range of services, including primary and specialized medical care, pharmacy assistance and counseling, specialized nursing and social work services, oral health care, and benefits advocacy. Additionally, the clinic sponsors a consumer advisory board composed of HIV positive clinic patients working in conjunction with clinic staff on quality management projects.

Nearly ninety percent of clinic patients live at or below the federal poverty level. Over the last five years, the clinic has seen a twenty-five percent increase in patients. More than forty percent are uninsured, while Medicaid/Medicare cover about fifty percent.

The program is funded by numerous sources such as the North Carolina Baptist Hospital, WFU Health Sciences and private foundations. The largest sources of funds for the clinic are Parts B and C of the Ryan White Treatment and Modernization Act. This year Ryan White funding increased from about $460,000 annually to more than $800,000. The increase helps offset the cost of unreimbursed care, and in so doing, allows the Department to fulfill our mission of caring for the medically underserved in our community.

**Outpatient Dialysis Centers**

The Department continues to seek new ways to bring vital services to patients. A prime example is Wake Forest University Health Sciences owned and operated dialysis clinics. Members of the Nephrology Section serve these clinics as well as a Wake Forest-managed facility. A freestanding Dialysis Access Center staffed by two of the Department’s interventional nephrologists opened in January 2007. Intended to streamline patient care, it also opens the door for new research opportunities.

**Downtown Health Plaza**

The Downtown Health Plaza is designed to meet the needs of a growing, increasingly diverse population. The Department plays a major role in the delivery of care. The 47,600-square-foot medical facility serves all Forsyth County residents and surrounding communities. A tremendous community resource, it provides access to care not available to many otherwise.
Several years ago, Petro Kulynych sensed something was wrong with his wife, Roena. She was having trouble remembering everyday things and become disoriented in new places. After seeing a variety of doctors and specialists he was told there was nothing they could do and that she was suffering from dementia. It was soon necessary for him to place Roena in an assisted living facility. Petro visited his wife there on a daily basis. Because so many of his questions went unanswered, he made a decision to do something about it.

Kulynych and his daughters, Janice Story and Brenda Cline, donated $3.7 million to Wake Forest University Baptist Medical Center to create the Roena B. Kulynych Center for Memory and Cognition Research, housed in the J. Paul Sticht Center on Aging. “I want her to leave a legacy,” Kulynych said, “My job is to give the money to the people who can do the work and let them make the decisions.”

The Kulynych Center will undertake new and innovative studies of the relationship between memory impairment, dementia and physical disability in the elderly, according to Jeff Williamson, MD, director of the Center.

The need for this research is evident in the fact that one in four Americans over the age of seventy-five and forty percent of those over eighty suffer some degree of disability due to dementia. These numbers increase with each decade in age.

The Kulynych family is committed to continued research in the area of memory loss and dementia. “We have witnessed the steady deterioration of a wife, mother and grandmother due to dementia,” Kulynych said. “My daughters and I want Roena’s life to make a difference. Our hope is that through medical research, inroads can be made against the devastating effects of dementia and Alzheimer’s disease.”
With funding from the National Institutes of Health shrinking and little financial surplus available from clinical services, Wake Forest University Baptist Medical Center, along with its peers in academic medicine, is turning to a new source of funding, philanthropy, to fuel research, education and patient care.

"We are very fortunate at Wake in that we have a very loyal, motivated group of donors and friends. Everywhere you turn on the medical campus, you see beneficiaries of their generosity," says Norman Potter, vice president, Development and Alumni Affairs. "Our challenge is to broaden our donor pool to institutions and individuals in and outside of our community."

Communications to alumni also have increased using traditional vehicles like direct mail as well as email blasts. Messaging also has changed to ensure a connection with prospective donors.

Today’s infatuation with reality shows has inspired a future message to alumni. "We plan to produce a video that captures medical students after their first day of Gross Anatomy," explains Potter. "What alum can forget that day in their lives? It will send a powerful message about the importance of funding medical education."

The need for philanthropy will continue for generations so Potter is building for the future. "We’ve just established a Young Professionals Council for 20-somethings. Everyone I’ve talked to wants to get involved," says Potter. "That tells me we’re on the right track; people believe in our mission of research, education and patient care, and want to play a role in achieving it."

"If you would like to explore ways you can advance medical research and facilitate the discovery of life-saving treatments, support the education of future physicians and researchers, and provide hope to those in need, please contact:

NORMAN D. POTTER
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Development and Alumni Affairs
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On March 27, 2007, J. Paul Sticht, former chairman of R.J. Reynolds and long-time supporter of Wake Forest University, passed away after suffering from long-term health problems. He was eighty-nine.

Sticht left behind a legacy as a business and community leader in Winston-Salem. The J. Paul Sticht Center for Aging and Rehabilitation was named in recognition of his vision for and passionate belief in the Center’s ultimate benefit to the length and quality of life for the aging population in his community. It was the first facility in the world to incorporate geriatric acute care, transitional care, psychiatry, and rehabilitation under one roof. The Sticht Center is one of the premier centers in North America for geriatric medicine, education and research.

"We are saddened by the loss of a dear friend and supporter, Paul Sticht," said Thomas D. DuBose, Jr., MD, chair, WFU Department of Internal Medicine. "His vision and generosity have touched the lives of thousands."

Sticht’s passing is mourned as his generosity is celebrated

J. Paul Sticht Center on Aging and Rehabilitation is the result of a gift from noted Winston-Salem businessman, J. Paul Sticht, who passed away at the Center in March 2007.
The Section on Cardiology is among the Department of Internal Medicine’s largest sections, overseeing a highly active research program, an exceptional training program, and an extensive clinical practice that is a nationally recognized leader in cardiac imaging, coronary intervention, electrophysiology, interventional cardiology, and heart failure.

The Section’s training program also is nationally recognized, each year receiving more than six hundred applicants for five fellowship spots. These include clinical fellowships along with a combined clinical/research program and additional subspecialization in interventional cardiology and electrophysiology. Two fellowships are sponsored by the National Institutes of Health (NIH) as part of a grant to develop future leaders in academic cardiology and research.

With more than $4.3 million in external funding, the Section operates an active basic and clinical research program. NIH-funded investigators include Che-Ping Cheng, MD, PhD; David M. Herrington, MD, MHS; William G. Hundley, MD; Dalane W. Kitzman, MD; William C. Little, MD; and David C. Sane, MD. NIH-funded studies of left ventricular pump function, sarcomere dynamics of normal and failing muscle, and the molecular biology of thrombosis and restenosis are underway in our basic laboratories. Clinical projects include studies of the mechanism and prevention of restenosis following PTCA, the pathogenesis of MI, pharmacologic regression of atherosclerosis assessed by quantitative coronary angiography, three-dimensional echocardiography, the pathophysiology of aging on LV function, and radio-frequency ablation techniques.

The Section is a major cardiac referral source. Each year, more than 2,489 heart catheterizations, 1,545 coronary percutaneous revascularization procedures, 17,185 echocardiograms, 681 electrophysiology studies (including radio-frequency ablations), 715 pacemakers and implantable cardioverter defibrillators (ICDs), and 750 open-heart surgical procedures are performed.

The heart transplant program continues to gain momentum with the addition of Vinay Thohan, MD, who joined the faculty as an associate professor of cardiology and medical director of the Heart Center’s Congestive Heart Failure and Heart Transplant Program in 2006. Dr. Thohan has extensive experience in evaluating and treating patients with advanced heart disease, the use of ventricular assist devices, and the selection and management of patients receiving cardiac transplantation. Under Thohan’s leadership, Wake Forest University Baptist Medical Center provides the region’s only ventricular assist device (VAD) program.

SECTION HEAD: William C. Little, MD
Professor of Internal Medicine
Vice Chair, Department of Internal Medicine
Doug Brinkley of Pilot Mountain spent twenty-four years serving the public as an officer in the Winston-Salem Police Department. A viral infection forced Doug to take early retirement. However, he soon received the call to pursue a new career as a pastor in the Presbyterian Church.

Brinkley and his wife Debbie, who also switched careers from social worker to registered nurse, were looking forward to another twenty years of new challenges and new opportunities to serve. In their early fifties, the Brinkleys' youthful looks and energy gave no indication that they were anything other than in the prime of their lives. Unfortunately, Doug and Debbie's life took an unexpected turn when his health began to worsen.

The Brinkleys chose the Heart Center at Wake Forest University Baptist Medical Center for care. He also selected Gretchen L. Wells, PhD, MD, assistant professor of Medicine-Cardiology at Wake Forest Baptist as his cardiologist.

“He had viral myocarditis and had to retire from the police force due to his cardiomyopathy,” said Wells. “He was followed in the clinic for a number of years, but his condition began to deteriorate despite maximal therapy. He was then evaluated for a heart transplant.”

A viral infection is the most common cause for heart failure among people under age fifty. Doug was put on the transplant waiting list in November 2006 and spent weeks preparing for a phone call with news of an available healthy heart. His condition continued to deteriorate during the Christmas holidays and he was admitted to the Heart Center's cardiac care unit.

Fortunately for the Brinkleys, a suitable heart was soon available. The family of an accident victim chose to help save another life through organ donation. Today, Doug continues to improve with the support of Debbie, friends and family, and the Congestive Heart Failure/Heart Transplant Program's team. “Wake Forest Baptist has great doctors and nurses,” said Doug. “We were very pleased with the care I received.”

Retired police officer Doug Brinkley is a successful “graduate” of the Heart Center's Congestive Heart Failure and Transplant Program. Heart failure cardiologist Vinay Thohan, MD, is the program’s medical director and plays a critical role in evaluating, treating, and managing heart transplant patients.
The Section on Endocrinology and Metabolism had a productive year in 2006/2007. External research funding exceeded one million dollars. Nearly half of the faculty received awards for outstanding teaching and clinical care. Two book chapters, two abstracts, 11 journal articles, and one online article were published.

The primary focus and strength of the Section is education. The Section chair, K. Patrick Ober, MD, also serves as the associate dean for Education for the Wake Forest University School of Medicine and medical director for the Department of Physician Assistant Studies. Students have recognized Dr. Ober’s commitment to excellence by selecting him for eight major teaching awards during his career at Wake Forest.

The Section’s research efforts concentrate on clinical investigations, primarily addressing diabetes mellitus, a disease affecting more than seventeen million Americans and whose numbers are escalating in white and minority populations. Patients with type two diabetes mellitus die of cardiovascular disease (CVD) at rates two to four times higher than non-diabetic populations of similar demographic characteristics. With the growing prevalence of obesity in the United States, CVD associated with type two diabetes is expected to become an even greater public health challenge in the coming decades.

To this end, the Section is heavily involved in the multi-center National Institutes of Health (NIH) investigation, Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial, an eight-year study involving more than 10,000 participants. The purpose of research is to identify ways to prevent heart attack, stroke, or cardiovascular death in adults with type two diabetes mellitus using intensive glycemic control, blood pressure control, and lipid management. The trial is testing three complementary medical treatment strategies to enhance the options for reducing morbidity and mortality.

Other NIH-funded grants include the Translating Research Into Practice (TRIP) trial, directed by Jorge Calles, MD, addressing type two diabetes mellitus prevention in high-risk patients, and the Gastroparesis Registry, a joint effort with the Section on Gastroenterology.

The Section maintains a comprehensive endocrinology practice, with each faculty member maintaining a clinic. Diabetes education and community outreach extends to primary care physicians and to the public at large as disease management remains a major challenge with diabetes mellitus.

SECTION HEAD: K. Patrick Ober, MD
Professor of Internal Medicine
Associate Dean for Education
The caller was hesitant at first, possibly shy about speaking to a stranger, even one who spoke Spanish, about a personal health matter. His gentle questioning reassured her so that the words soon tumbled from her mouth in a feverish torrent. At last, someone with answers to her medical concerns.

Since October 2004, Jorge Calles, MD, has hosted Clinica del Pueblo, a radio talk show dedicated entirely to medical topics of interest to Latinos. Funded by a grant from the Kate B. Reynolds Foundation, the hour-long program airs once a week on seven AM radio stations across North Carolina.

The program is a combination research/community outreach initiative designed to educate North Carolina’s fast growing Latino population on health topics, help listeners find culturally appropriate healthcare providers and social services, and ultimately, change health behaviors. Clinica del Pueblo follows a yearlong curriculum so that it can be replicated in other regions. Each program features a guest speaker. After 15 minutes presenting the topic—one week it might be diabetes, the next week teen pregnancy, the next heart disease—the phone lines are opened to callers. Each program averages fifteen to twenty callers.

Dr. Calles says Clinica del Pueblo fulfills important needs of an underserved population. “Members of North Carolina’s Latino community often do not know how to access the healthcare system and cannot find a doctor. We help them overcome this barrier,” explains Dr. Calles.

Latinos also have significant health issues. “Before coming to America, many of these people were poor and had simple diets. Now, they have jobs, money, and are exposed to fast food diets. This has created a host of healthcare woes such as diabetes, cardiovascular disease and obesity,” says Dr. Calles.

Dr. Calles and his colleagues have developed a healthcare resource guide for Latinos. The ultimate goal is to make this database available in kiosks placed at clinics and state agencies. The Section is currently pursuing a grant from the National Institutes of Health for this purpose.
The Section on Gastroenterology strives for excellence in medical education, research and clinical care. In 2006/2007, our medical students recognized several faculty members for their teaching prowess. Walter Roufail, MD, received the Class of 2008 Basic Science Teaching Award, and Joel Bruggen, MD, received the Class of 2009 Clinical Sciences Teaching Award. The residents in the Department of Internal Medicine honored Dr. Bruggen by naming him a 2007 Master Teacher. Demand for positions in the Section’s fellowship program, under the leadership of Girish Mishra, MD, MS, continues to grow. This year the Section received more than 300 applications for two fellowship positions.

With almost $1 million in National Institutes of Health funding, the Section’s research efforts are active and growing. Pharmaceutical, alternative medicine, and device-related studies are ongoing. Studies range from hypnosis for chronic nausea to enzyme therapies for dyspepsia to biological therapies for severe inflammatory bowel disease. Exciting collaborations with other medical departments within Wake Forest University as well as with other universities create an intellectually stimulating and enthusiastic environment for gastrointestinal research.

Clinical services in Gastroenterology continue to evolve. The Section’s Digestive Health Center, which opened in 2003, features the region’s only Gastrointestinal Neuromuscular Disorders Center. The Center specializes in the detection and prevention of colon cancer, and has extensive expertise in the diagnosis and treatment of biliary-pancreatic disorders and inflammatory bowel diseases. The novel combination of two sophisticated technologies (ERCP and endoscopic ultrasound) by the hepatobiliary service under the direction of John Baillie, MD, and Dr. Mishra, have led to more sensitive diagnostics and sophisticated treatment approaches in complex biliary and pancreatic disease. John Gilliam, III, MD, is leading a new service with double-balloon enteroscopy for the diagnosis and treatment of occult bleeding in the small intestine. There is increased active collaboration between the Gastrointestinal Neuromuscular Disorders Center and the Voice and the Swallowing Center in Otolaryngology.

The Section has recruited two women gastroenterologists, Deborah Kretzschmar, MD, and Nyree Thorne, MD. We are pleased to recruit these dedicated physicians who have special interests in women’s health, gastrointestinal cancers, and constipation/incontinence to our Section.

SECTION HEAD: **Kenneth Koch, MD**

Professor of Internal Medicine
When most people eat, they feel good. When a person with gastroparesis, a condition that causes mild or severe paralysis of stomach muscles, eats, they feel terrible. The stomach is distended. There is nausea and vomiting. The unpleasantness can cause the person to stop eating certain foods or to switch to a liquid diet, compromising nutrition and causing weight loss. For those with type one and two diabetes mellitus, gastroparesis can make glucose management a nightmare as food sits in the stomach instead of naturally moving through the digestive tract.

Despite the fact that an estimated forty percent of people with diabetes have gastroparesis along with another thirty percent of those with heartburn, little is known about gastroparesis and how to treat it. That may change with the establishment of the Gastroparesis Registry, a five-year, multi-center consortium sponsored by the National Institutes of Health and a $1.5 million grant. Wake’s Kenneth L. Koch, MD, is the principal investigator of the effort, which began enrolling patients in April.

“When people have stomach problems, the natural inclination is to think acid. But the gastro-intestinal tract is a sophisticated system of muscles that moves food from the stomach to the bowels. With gastroparesis, the muscles stop working and food stalls in the stomach, causing serious problems. The Registry’s purpose is to clarify the epidemiology, natural history, clinical course, treatments, and other outcomes of gastroparesis,” explains Dr. Koch.

Participants are being enrolled at five sites across the United States. In addition to observing patients, investigators will be obtaining blood work for genetic studies as well as facilitating the development of clinical trials. The ultimate goal is to obtain benchmarks for treatment.

Dr. Koch currently follows ten gastroparesis patients in the Section’s clinic, many of whom are candidates for the Registry. “They often come to us as a last resort. With the Registry and related research, we hope to find answers and relief for those suffering from paralysis of the stomach.”
The Section on General Internal Medicine is one of the largest within the Department of Internal Medicine and education represents a significant responsibility. Faculty hold numerous positions of leadership, serving as program director, associate directors (two), and chief residents (four) for the Department’s residency program. James L. Wofford, MD, MS, continues in his role as director of the Ambulatory Clerkship. Catherine Messick Jones, MD, MS, serves as director of the Bedside Teaching Course. Kirsten Feiereisel, MD, is in charge of the Evidence-based Medicine/Journal Club Series in Phase V of the medical school curriculum. Additionally, Section faculty contributed more than 275 hours of time as small group facilitators and SPA evaluators.

Research interests of the Section are diverse, with funding sources that include the National Institutes of Health (NIH), the American Cancer Society (ACS), and the state of North Carolina. Frank M. Millman, MD, is the local principal investigator for the NIH-sponsored study, Transfusion Trigger Trial for Functional Outcomes in Cardiovascular Patients Undergoing Surgical Hip Fracture Repair (FOCUS) that is currently enrolling patients. Carolyn F. Pedley, MD, continues her work with the NIH-sponsored ACCORD trial. She also is in the process of implementing a new grant from the state Medicaid program to use nursing interventions at the Wake Forest University Downtown Health Plaza to increase compliance with the state’s diabetes management goals. David Mount, MD, has been awarded a minority supplement from the NIH-sponsored Look AHEAD and ACCORD clinical trials.

Additionally, David P. Miller, Jr, MD, the principal investigators on the ACS-funded Overcoming Literacy Barriers in Colorectal Cancer Screening, received a three-year mentored faculty development award. Elizabeth Gamble, MD, has funding from the North Carolina Medicaid program for a project seeking to integrate behavioral health services into primary care practices.

The Section provides primary care services at University Internal Medicine Associates, the Medicine Out-Patient Department and the Downtown Health Plaza. The General Internal Medicine Service, including Wake Forest Inpatient Physicians and the four teaching services, is the largest inpatient service at Wake Forest University Baptist Medical Center. The Section initiated new clinical services, including a Palliative Care Unit and surgical co-management.
Growing up in Africa, the daughter of a veterinarian and a nurse, Patience Agborbesong, MD, quickly learned the value of hospitals.

“The controlled environment of hospitals did not exist. My parents treated whoever needed them with whatever was at hand, be it chimps and hyenas or humans. There were few doctors, even fewer hospitals. By age nine, I knew how to draw blood and get vitals,” she says.

Today, Dr. Agborbesong is the leader of the Section’s rapidly growing hospitalist program. In 2007, the program doubled in size, going from eight to sixteen full-time hospitalists. The Section is committed to transforming the hospitalist program from an overflow service to one with greater academic and research orientation.

A convergence of external forces also is playing a role in the program’s growth, says Dr. Agborbesong. “Primary care physicians are under intense time pressures. Hospital rounds are time-consuming. They can see more patients in less time in their practices. Then there is the issue of patient safety. It is very beneficial in terms of quality of care and safety to have hospitalists available to patients and their families 24/7. Finally, because of limitations on house staff duty hours, academic medical centers like ours must look to new ways to meet clinical demands.”

Dr. Agborbesong says hospitalists add value to academic medical centers as well as community hospitals in many ways. This includes the ability to address patients’ concerns in real time, improve patient safety, and co-manage patients with others on the medical staff such as surgeons. At Wake Forest University, hospitalists will have roles as teaching faculty, researchers and clinicians, as well as looking at ways to meld the practice of hospital medicine with the business of hospital medicine.

The opportunity to shape this emerging discipline is exciting. “Hospitalists can make a difference on many fronts. At this point, there are not limits and we are committed to playing a leadership role,” Dr. Agborbesong says.

Patience Agborbesong, MD, is an assistant professor and lead hospitalist. She is spearheading the effort to transform the hospitalist program from an overflow service to one with greater emphasis on academics and research.
The Section on Gerontology and Geriatric Medicine had two major appointments in 2006/2007. In January, Jeff D. Williamson, MD, MHS, was named Section head. His roles include leading the clinical programs at the J. Paul Sticht Center on Aging and Rehabilitation and directing the Roena Kulynych Center for Memory and Cognition Research. Stephen Kritchevsky, PhD, was named director of the Center on Aging, a research program focused on improving the health of older adults and preventing age-related disability.

The Section offers unparalleled opportunities for aging-related research, patient care, and education. It is home to the Claude D. Pepper Older Americans Independence Center, one of ten such centers in the United States. Located in the Sticht Center, the Pepper Center works to improve understanding of risk factors for disability and loss of independence in the elderly, develop new prevention therapies, and train new investigators in research on aging disability. A growing research focus is the relationship between aging, obesity, and disability. Current studies include Optimizing Body Composition for Function in Older Adults (OPTIMA); Diet, Exercise and Metabolism in Older Women (DEMO); and Rehabilitation Exercise and COPD Trial (REACT II). Also in the Sticht Center is the Roena Kulynych Center for Memory and Cognition Research, made possible through a private $3.7 million endowment from the Kulynych family. The Kulynych Center focuses on the relationship between memory loss, chronic diseases, and disability, and currently coordinates several international studies evaluating methods for preventing memory decline. These include the ACCORD-MIND trial and the GEM Study.

The Section has one of the few Acute Care units for Elders (ACE Unit). Led by Franklin Watkins, MD, and located within the Sticht Center, the unit treats patients with an average age of eighty-five. A Palliative Care Unit, led by geriatrician Morgan Bain, MD, opened in August 2006 to care for older dying patients. The Section also has one of the only geriatrician-led Memory Assessment Clinics in the United States, directed by Kaycee Sink, MD, MAS.

Under the direction of Hal Atkinson, MD, Jameel Demons, MD, and Mary Lyles, MD, the Section’s teaching program continues to gain national recognition for such innovations as the ACE Translational Program.
Used to a controlled hospital environment, John Piede, MD, a first-year resident in Internal Medicine, found visiting elderly patients at home as part of the ACE Transitional Program to be a real eye opener.

“Some patients have as many as twenty pill bottles; their day revolves around taking their meds. Based on age and mental status, they may require help keeping them straight. Seeing how and where patients live showed me that as doctors, we need to understand the whole person to deliver the best care,” Piede says.

The gap between an inpatient hospital stay and the return home can be a trying time for elderly patients. Getting back under the wing of their primary care physician after being hospitalized can take time. Bridging the gap in care and communications was one of the reasons faculty members Hal Atkinson, MD, and Jamehl L. Demons, MD, created the ACE Transitional Program as a pilot in 2003 and a formal part of the geriatrics rotation for residents in 2005.

The program is straightforward. Residents, with the support of a multi-disciplinary care team, follow older people from the hospital into their homes or nursing homes during the first ten days after discharge to ensure the hospital plan is implemented.

“For many residents, it’s the first time they have visited patients in their homes. These home visits allow residents to see how difficult it can be for elderly patients to follow a physician’s orders without the right resources at home,” Dr. Atkinson explains.

The program, which now sees about 250 patients each year, has two goals. The first is helping a vulnerable population make a safe transition from hospital to home. The second is to teach the next generation of physicians to understand the best way to manage the transition and to know what problems may occur and how to avoid and resolve them.

While faculty and residents see tremendous value in the ACE Transitional Program, patients aren’t complaining either. “Having a doctor visit them in their own home makes patients feel special and cared for; they really appreciate it,” says Dr. Piede.
The Section on Hematology and Oncology strives for excellence in each of its missions: education, research, and patient care. The research and clinical interests of the faculty span the spectrum of benign and malignant hematologic diseases and solid tumors. The faculty includes PhD scientists with laboratory research focus and two psychologists. Many members of the Section are important contributors to the Comprehensive Cancer Center of Wake Forest University (CCCWFU). Fellows are attracted to the program because of the unsurpassed integration of education, research and clinical care.

Clinical trials have long been an emphasis of the Section. Wake Forest is a member of Cancer and Leukemia Group B (CALGB) and multiple other cooperative groups. A number of research studies are initiated by Section faculty and coordinated with CCCWFU studies. The goal is to use clinical trials to translate laboratory research from the institution’s basic science researchers. In 2006/2007, the Section had 1,500 patients participating in various clinical trials.

Wake Forest University Baptist Medical Center is an NCI-designated comprehensive cancer center and as such, attracts patients from most of North Carolina and parts of South Carolina, Virginia, and West Virginia. The Section has four inpatient services, Hematology and Oncology A and B Services, Leukemia Service and Blood and Marrow Transplant (BMT) Service. All four inpatient services are located on the ninth floor of North Carolina Baptist Hospital. There are frequent multidisciplinary meetings to enhance interaction between members of the Hematology and Oncology Section and hospital personnel.

The Section has just completed its third full year in the Outpatient Comprehensive Cancer Center, a 257,000-square-foot facility that consolidates all outpatient cancer services into one convenient location, greatly enhancing care for patients and their families through a coordinated, multidisciplinary approach and enhanced support services. Other services located in this outpatient facility include Surgical Oncology, Radiation Oncology, Outpatient Radiology, the Psychosocial Oncology Program, a Personal Appearance Boutique, an outpatient pharmacy, administrative offices and conference facilities. The Outpatient Comprehensive Cancer Center has 33,000 patient visits per year to its hematology and oncology clinics, an average of 150 visits per day with one half receiving chemotherapy or supportive care.

*America’s Top Doctors for Cancer 2006* includes thirteen CCCWFU physicians, the only Piedmont Triad doctors included on the list.

**SECTION HEAD:**  
*Bayard L. Powell, MD*

*Professor of Internal Medicine  
Vice Chair, Department of Internal Medicine*
In many respects it is a once in a lifetime opportunity, both for patients with advanced stage cancer who have run out of standard treatment options and for Wake Forest University investigators who have discovered a potentially life-saving cancer drug, Angiotensin-(1-7) or Ang-(1-7).

The initial discovery was made in the laboratory of Patricia E. Gallagher, PhD, and E. Ann Tallant, PhD. Gallagher and Tallant’s research suggested the compound had other effects as well. In the laboratory, Ang-(1-7) slowed the growth of lung cancer cells and the cells that form tumor blood vessels. When Ang-(1-7) was given to mice that had lung cancers implanted in them, the blood vessels that feed the cancers were reduced and the tumors shrunk.

The team brought their findings to Hematology and Oncology Section investigators two years ago for further study as a human cancer treatment drug. Ultimately, nine faculty members from five different Wake departments would collaborate on the bench-to-bedside project led by the Hematology and Oncology Section.

“What excited us was that Ang-(1-7) was showing positive results and was proven safe for use in humans,” says Jeffrey Petty, MD, part of the team of Hematology and Oncology Section investigators that includes Mebea Aklilu, MD; Antonius A. Miller, MD; Mercedes Porosnicu, MD; and Frank Torti, MD. The team set about developing the protocol and securing approval from the U.S. Food and Drug Administration (FDA) for phase 1 clinical trials of Ang-(1-7) in human cancer patients. The team enrolled its first patients—individuals with advanced solid tumors such as lung cancer—in April 2007.

“As physicians, we want the best for these patients. As investigators, we want the best for the world. We are very hopeful there will be clinical value for cancer patients,” Dr. Petty says. “If so, our next step is phase 2 clinical trials to test the activity of Ang-(1-7) for specific tumor types.”
The Section on Infectious Diseases is committed to excellence in its tripartite mission of research, clinical care and education. Faculty members are recognized locally, nationally, and internationally for their excellence in all three areas.

This year external research funding exceeded $1.2 million. The Section is currently conducting twenty clinical research trials in areas that include HIV and other immunocompromised patients, antimicrobial therapy, and vaccines. Extramurally funded basic and translational research activities focus on transmission of infections, HIV, antimicrobial resistance, infections in the elderly, hepatitis B and C, and viral bacterial interactions.

The Section’s physicians care for patients with acute and chronic infectious diseases. In 2006/2007, the Section had 1,378 consultations, 3,024 follow-up evaluations, and 4,412 clinic visits. Infectious Diseases’ attending physicians staffed five half days of Wake Forest University Physicians clinic each week, seeing 1,788 patients. The Infectious Diseases Specialty Clinic (IDSC) is the primary outpatient clinic and is one of the largest infectious diseases clinics in the state, following approximately 1,200 patients with HIV. Clinical services and research initiatives at the IDSC are being expanded through Ryan White funding to include a dental clinic and a HIV secondary prevention initiative. Faculty members, including P. Samuel Pegram, MD; Aimee M. Wilkin, MD, MPH; and Marina Nunez, MD, PhD; are nationally recognized for their expertise in HIV research and clinical care. The Section has one satellite clinic in High Point, NC.

Since establishing the ID Fellowship in 1974, approximately forty percent of graduates have assumed positions with academic affiliations and sixty percent are in clinical practice. In the last ten years, all board eligible fellows have passed their boards. Interest in the Infectious Diseases Fellowship is increasing; the Section received forty-nine applications for two fellowship positions in 2006/2007. Fellows are required to pursue research, with several fellows receiving local and national awards for their research presentations in the last three years. Section Chief, Kevin P. High, MD, MSc, and faculty members James E. Peacock, Jr, MD, and Christopher Ohl, MD, were each named a “Master Teacher” for 2006/2007 by the Department of Internal Medicine, and Dr. Peacock also received the Wake Forest University School of Medicine Class of 2007 “Friends of Students Award.”
Hospital-acquired infections are an all too common occurrence, each year affecting about two million patients and causing an estimated ten thousand deaths. Such infections take a financial toll on hospitals as well, adding significant costs to care.

Seizing an opportunity to improve the health of patients and hospitals, Wake established the Center for Antibiotic Utilization, Stewardship and Evaluation (CAUSE) in 2000, one of the first infection-focused centers of its kind in the United States. Christopher Ohl, MD, was recruited as the Center’s medical director. An associate professor in the Infectious Diseases section, Dr. Ohl’s passion is the diagnosis and therapy of bacterial, fungal, mycobacterial, and viral infections.

The goals of CAUSE are all-encompassing: reduce the amount and significance of antimicrobial resistance in hospital and community pathogens, improve patient outcomes, promote and implement outcomes analysis in antimicrobial utilization and resistance, and reduce the hospital’s antimicrobial costs. The center draws upon the intellectual resources of Infectious Disease, Microbiology, Pharmacy, and Epidemiology to battle infection causing “bugs.”

“Bugs are smart,” explains Dr. Ohl. “They are constantly adapting to antibiotics. If we use the same drugs, bacteria eventually figure it out and become resistant, making drugs ineffectual. One way to stay ahead is through data.”

CAUSE has developed ways to collect and monitor antimicrobe activity data by service line, section of the hospital and individual provider. They also monitor resistance in patients and in different areas of the hospital. These efforts have helped reduce microbial utilization for several complicated, expensive drugs and have provided important guidelines for physicians. Termed antimicrobial stewardship, it’s a concentrated effort to educate healthcare providers on the proper use of antimicrobials.

CAUSE directs and assists Wake providers through formal and informal education efforts as well as restriction programs. Dr. Ohl says common sense plays an important role, too. “It gets down to appropriately and adequately diagnosing the infection and then giving the right drug, in the right dose, for the right duration. Doing that has yielded better outcomes for our patients and a healthier bottom line for our hospital.”

Established in 2000, Wake’s Center for Antibiotic Utilization, Stewardship and Evaluation (CAUSE) has become a national model. While other hospitals’ antimicrobial drug costs increase fifteen to seventeen percent annually, CAUSE has helped Baptist Medical Center’s drug costs to remain flat.

SINCE 2000, CAUSE HAS HELPED WAKE AVOID MORE THAN $1 MILLION IN INFECTION-RELATED COSTS.
Unique within the Department of Internal Medicine, the Section on Molecular Medicine focuses on education and research. It operates one of 15 molecular medicine graduate programs in the United States funded by the National Institutes of Health (NIH) to train students in translational research.

In 2006/2007 external research funding totaled $3,887,932. The Section works closely with the Claude D. Pepper Older Americans Independence Center on numerous research initiatives, including the $3 million, NIH-funded Intensive Diet and Exercise for Arthritis (IDEA) study. This study, led by Dr. Stephen Messier in the Department of Health and Exercise Science on the Reynolda campus, is the first study of its kind, investigating whether intensive weight loss, alone or combined with exercise, can slow the progression of knee osteoarthritis.

The Section is investing heavily in cutting edge proteomics intellectual capital and technology, recruiting Cristina M. Furdui, PhD, from Yale University. Dr. Furdui leads the Dorothy Rhyne and Willard Duke Kimbrell Proteomics Research Laboratory made possible by a generous gift from the Kimbrells. Allen Tsang, PhD, a molecular biologist from the University of Massachusetts, was recruited to work alongside Dr. Furdui. The Proteomics Laboratory features an electrospray ionization ion-trap LTQ mass spectrometer coupled to an Ultimate 3000 nano-HPLC system, an electrospray ionization time-of-flight mass spectrometer, as computer technology for proteomics data analysis.

Although the Proteomics Laboratory is new, a number of collaborative research projects are underway. This includes an atherosclerosis study by Dr. Furdui funded by the American Heart Association (AHA), a study of the regulation of HKA transporters in acidosis by Thomas DuBose, MD, Nephrology; and a clinical drug trial with Mercedes Porosnicu, MD, Hematology and Oncology; among others. Molecular Medicine Section Chair Richard F. Loeser, MD, was recently awarded a $1.7 million, five-year grant extension from the NIH for his arthritis research on which Dr. Furdui is a co-investigator. The addition of a proteomics approach to the project was deemed highly significant and innovative by the NIH review committee.

Student research efforts reaped significant rewards in 2006/2007, with five students securing $413,750 in research awards. The award winners are Lan Coffman, $40,000, AHA; Dawn Delo, $126,500, NIH; JaNae Joyner, $40,000, AHA; Manisha Nautiyal, $82,250, AHA and NIH; and Jill Wykosky, $125,000, NIH.

SECTION HEAD: Richard F. Loeser, Jr., MD
The Dorothy Rhyne Kimbrell and Willard Duke Kimbrell Professor of Internal Medicine
After earning a BA in Biology from Carleton College, Faribault, MN, native Elizabeth Erickson accepted a yearlong Intramural Research Training Award at the National Institutes of Health (NIH). While working in a medical genetics laboratory, she often rounded with the lab’s principal investigator.

“It opened my eyes to the link between the lab and patient care. I really enjoyed it so I looked for a graduate program that offered something similar. Wake Forest University had one of the few programs in the country where I could earn a PhD in basic science while getting strong clinical exposure,” Erickson says.

Wake’s Molecular Medicine graduate program is one of just fifteen nationwide that combines laboratory knowledge with significant clinical exposure. Funded by the NIH, the program’s purpose is to help students gain a better understanding of patient care and ultimately perform translational research.

Physicians and basic scientists from various scientific fields, including regenerative medicine, genetics, cancer biology, microbiology/immunology, internal medicine, and neuroscience, teach the program for PhDs, MD PhDs, and MS candidates. Students make rounds in Wake Forest University Baptist Medical Center with ward teams and see patients in outpatient settings with physicians.

The growing complexity of medicine demands a new breed of scientists who can connect research to people, says Richard F. Loeser, Jr., MD, section head for Molecular Medicine. "Demand for translational researchers is growing, yet many basic scientists don’t have a good understanding of patient care. The clinical background our students receive helps them comprehend and appreciate the ultimate purpose of their research and how to apply it at the patient’s bedside.”

Erickson recently completed year two of a five-year PhD program and works in the Proteomics Laboratory with Cristina Furdui, PhD, and Dr. Loeser’s laboratory. She agrees her clinical training has put her research into perspective. It also has cemented her desire to work alongside physician researchers in the future.

“It’s been a tremendous motivator. Hearing disease symptoms and underlying problems has helped me to work backward from the patient to the molecular mechanisms of a cell,” she says.
The Section on Nephrology is home to a comprehensive education, research, and clinical program, providing students with a solid clinical foundation in this dynamic subspecialty; serving as a world leader in research on peritoneal dialysis, hemodialysis, and the genetics of kidney disease; while delivering highly specialized care to patients with high blood pressure, chronic kidney failure, and end-stage renal disease.

The research environment is increasingly dynamic. In 2006/2007, the Section had a major genetic discovery by its chair, Barry I. Freedman, MD, and research partner Donald Bowden, PhD, director of the Diabetes Research Center. Their findings on the kidney failure implications of the carnosinase gene will lead to novel research opportunities and has the opportunity to impact development of the most common cause of kidney failure worldwide.

The Section continues its success in extramural and National Institutes of Health (NIH) funding, with funds totaling nearly $1.6 million in 2006/2007. The ROI application, “Genetic Epidemiology of Hypertensive End-Stage Renal Disease in African Americans,” was awarded to Dr. Freedman. NIH studies conducted by Michael V. Rocco, MD, MS, continue to evaluate the impact of daily in-center and nightly nocturnal home hemodialysis on ESRD outcomes and the effects of intensive dialysis in acute renal failure. John M. Burkart, MD, received a new NIH award to evaluate the impact of rhubarb extract on the progression of diabetic nephropathy. Erica Hartmann, MD, received an ASN/Hartford Foundation grant to evaluate the impact of exercise on elderly patients awaiting kidney transplants. Anthony J. Bleyer, MD, MS, received an American Diabetes Association award to evaluate the genes that cause progressive nephropathy in diabetic mellitus.

Section physicians address all types of kidney disease, managing the progression of kidney failure and providing medical care for one hundred thirty kidney and kidney–pancreas transplants each year. Members of the Section round at ten Wake Forest University School of Medicine-owned dialysis clinics as well as at an eleventh dialysis facility owned by an outside entity. A freestanding Dialysis Access Center opened in January 2007 and two of the Section’s ASDIN-certified interventional nephrologists, Shahrriar Moossavi, MD, PhD, and Tushar J. Vachharajani, MD, staff the facility. The only academic Access Center in North Carolina, the Center provides excellence in patient care and new opportunities for research.

**SECTION HEAD:** Barry I. Freedman, MD

*John H. Felts, III, Professor of Internal Medicine*
Barry I. Freedman, MD, was struck by the large number of diabetic patients with severe kidney failure who had close relatives receiving dialysis treatments. He was often asked, “Hey doc, do you mind scheduling me for Monday-Wednesday-Friday kidney dialysis? I have a brother and cousin who go then and I would like to ride with them.”

That was eighteen years ago. Though the accepted belief was that high blood sugar and poor blood pressure control caused diabetic kidney failure, Dr. Freedman, chief of the Section on Nephrology, and research partner Donald Bowden, PhD, director of the Diabetes Research Center, felt that this was an inadequate explanation.

“In the field we vehemently disagreed with our new concept of genetic susceptibility,” recalls Dr. Freedman.

In 2006, there was a major breakthrough. After years of analyzing the DNA samples, Wake Forest investigators, in collaboration with the University of Heidelberg in Germany, demonstrated that the carnosinase gene caused severe diabetic kidney disease in white Americans, as well as in Europeans. Other genes appear to cause diabetic kidney disease in African Americans.

Poor blood sugar control was long believed to be the sole cause of diabetic kidney disease. Research conducted by Barry I. Freedman, MD, and Donald W. Bowman, PhD, now reveals that the carnosinase gene is an important cause of kidney disease among diabetic Americans.

“The number one cause of kidney failure in the world is diabetes. Last year alone, there were approximately 100,000 new dialysis patients in the United States. Identifying this and other genes provides a new approach for identifying diabetic patients who are at risk for kidney failure at a treatable stage and discovering novel therapies that may slow or prevent progression of kidney disease to dialysis,” says Dr. Freedman.
The Section on Pulmonary, Critical Care, Allergy and Immunologic Diseases is diverse, with responsibilities across the Department of Internal Medicine, the School of Medicine and Wake Forest University Baptist Medical Center. Education is a major priority with the Section providing didactic education and clinical training for medical students, residents, fellows, and community continuing medical education (CME). Faculty members are leaders in the educational arena and for the last five years have been selected by Internal Medicine residents as “Master Teachers.” The Section offers ten fellowships annually in Allergy/Immunology and Pulmonary Medicine and Critical Care and plans to expand because of increased training opportunities especially in critical care medicine.

The Section’s clinical, translational, and molecular research efforts are varied and well supported. In 2006/2007, external funding approached $3.7 million. This included grants for studies in asthma and chronic obstructive pulmonary disease, lung injury, occupational pulmonary disease, and the continuation of a fifteen-year National Institutes of Health (NIH) grant for Acute Respiratory Distress Syndrome Network (ARDSNet). Section chief, Eugene R. Bleecker, MD, is a co-director with Deborah A. Meyers, PhD, of Wake Forest’s Center for Human Genomics, investigating genetic susceptibility in respiratory and other common diseases in man.

The Section’s clinical services are diverse, addressing obstructive airway diseases, lung cancer, sleep disorders, occupational lung disease, and critical care. In Pulmonary and Critical Care Medicine, a comprehensive medical critical care service composed of two pulmonary critical care teams in the MICU continues to provide service for increased clinical needs at Wake Forest University Baptist Medical Center. The active development of co-management approaches in the Intermediate Care Unit (IMC) with a senior critical care consult service follows consultations with respiratory failure in the oncology critical care unit, CCU, and MICU. This year, several new clinical projects were initiated, including office spirometry and expanded interventional services using complicated Polyflex and Rusch Dynamic Y Stents. Asthma services expanded with the opening of an allergy practice in Greensboro staffed by Ana MacDowell. A new outpatient procedure for evaluation of upper airway allergies and infectious disease, nasopharyngoscopy was initiated.

Section physicians were recognized for excellence in state and national “best” lists. This includes Eugene R. Bleecker, MD, Best Doctors in America (1998–Present), Best Doctors in North Carolina (2006); John Conforti, DO, Best Doctors in America (2005–2006); and Jill Ohar, MD, Best Doctors in North Carolina (2003–2006).

SECTION HEAD: Eugene R. Bleecker, MD
Thomas H. Davis Professor of Internal Medicine
Co-Director Center for Human Genomics
Each year, Acute Respiratory Distress Syndrome (ARDS) affects approximately 150,000 people in the United States. Despite twenty-five years of research and numerous developments in ventilation technology, mortality associated with ARDS remained more than fifty percent. That began to change in 1994 when the National Institutes of Health (NIH) established a collaborative research network called ARDSNet to assess innovative treatment methods for ARDS. Wake Forest University has been a member of ARDSNet since 2000, when it successfully competed with fifty other applicants to be one of ten research institutions added to the original ten that started the effort in 1994.

ARDSNet was originally funded as a ten-year study. Buoyed by progress, the NIH extended the research for another seven years, beginning in 2005. Wake Forest is one of only twelve sites to be awarded funding through 2012.

ARDS treatment studies are not easy to perform. ARDSNet provided the infrastructure critical to performing therapeutic trials. The complicated clinical picture makes it difficult to accumulate a large number of comparable patients in any one center. Many patients do not meet study criteria due to the complexities of their other underlying medical problems other than ARDS.

R. Duncan Hite, MD, an associate professor of Internal Medicine in the Section of Pulmonary and Critical Care Medicine and the principal investigator of the Wake Forest site, says efforts continue to focus on practical research to improve the management and outcomes of ARDS patients such as defining the optimum size of breaths patients receive from ventilators and how much fluid patients need to best serve the function of the body’s multiple organs. “These are questions doctors ask everyday. NIH research is necessary because there is insufficient money and interest from other sources,” he explains.

ARDSNet investigators have made significant progress. “Through our research, we’ve been able to reduce ARDS-related mortality to about thirty percent. Survivors regain more than eighty percent of their lung function within two years. When you can save lives and help people regain quality of life, what more do you need,” asks Dr. Hite.

ARDSNet has helped cut mortality from acute respiratory distress syndrome to about thirty percent, down from over 50 percent.
The Section on Rheumatology promotes and supports education, research, and clinical care of rheumatic diseases. Under the direction of Kenneth S. O’Rourke, MD, the Section’s fellowship program offers four distinct tracts, allowing residents to focus their training to a desired career path. They include clinical rheumatology, for applicants interested in a career in patient care; clinical rheumatology-geriatric, an integrated clinical program leading to board eligibility in Rheumatology and Geriatrics; academic clinical rheumatology, for those who desire a career in clinical research; and basic sciences rheumatology, for those pursuing a career in independent laboratory-based research.

Members of the Section were recognized in 2006/2007 for excellence in teaching. Dr. O’Rourke was the recipient of the Class of 2008 Clinical Faculty Teaching Award. Dr. O’Rourke and Reidar Wallin, PhD, are both members of the Department of Internal Medicine’s core teaching faculty.

In 2006/2007, the Section received external funding for basic and clinical research approaching $1.3 million. The research interests of the faculty are broad and include clinical research in interventional rheumatology such as arthroscopy, rheumatoid arthritis, osteoarthritis, systemic lupus erythematosus (SLE), Sjogren’s syndrome, and Raynaud’s syndrome. Basic research studies of the faculty include molecular mechanisms of cellular immune dysfunction in SLE, signal transduction in B cells, and the control of macrophage functions in inflammation. The laboratory of Dr. Wallin has developed a system to study the molecular mechanisms of the anti-coagulant Coumadin and is currently isolating the Coumadin-sensitive enzyme present in the vitamin K cycle with a goal of creating better anticoagulant drugs and revealing the molecular cause of Coumadin resistance.

The Section’s clinical practice is multidisciplinary, utilizing the expertise of faculty rheumatologists, registered nurses, physical therapists, occupational therapists, and social workers to meet the needs of patients who come to the Section’s clinics and Wake Forest University Baptist Medical Center from throughout North Carolina. Clinical services address the diagnosis and treatment of rheumatic conditions such as rheumatoid arthritis, osteoarthritis, SLE, gout, scleroderma, and inflammatory muscle disorders.
It seems incomprehensible that for thirty years no new drugs have been developed to treat the multiple symptoms of systemic lupus erythematosus (SLE). For Nilamadhab Mishra, MD, an assistant professor of Internal Medicine who came to the United States in 1996 to find a cure for lupus, this has meant fertile ground for research.

His research centers on epigenetic changes, alterations in gene expression that do not involve changes in the DNA sequence, and the role these changes play in lupus. He and his Rheumatology Section colleagues have identified epigenetic alterations linked with a lupus-like disease in mice and their research was the first to demonstrate histone deacetylase inhibitors could be beneficial in treating lupus. Dr. Mishra is planning phase one clinical trials for two promising drugs: valproic acid, a histone deacetylase inhibitor, that is already approved by the U.S. Food and Drug Administration for the treatment of seizures, and vorniostat, recently approved for treating cancer. Dr. Mishra and his colleagues also were the first to demonstrate that not only will these drugs help lessen the severity of lupus-related kidney and brain disease, they also will prevent premature atherosclerosis, a common complication of lupus. Finally, the investigators found new biomarkers that can help in diagnosis, treatment, and prognosis.

There also is hope that Dr. Mishra’s findings might answer other mysteries such as why women are disproportionately affected by lupus. In an article published in JAMA, Dr. Mishra hypothesizes that a region of the active X chromosome containing genes that protect against lupus may be silenced, leaving women vulnerable. It seems, at long last, answers may be within reach.
Faculty Serving as President or Chair of Major Professional/Scientific Organizations

**CARDIOLOGY**

David Herrington, MD  
Chair, American Heart Association  
Interdisciplinary Working Group, Functional Genomics & Translational Biology

W. Gregory Hundley, MD  
Chair, American College of Cardiology  
Cardiovascular MRI Working Group  
Co-Chair, National American Heart Association Study Section (Cardiac Surgery and Imaging)  
Co-Chair, Noninvasive Imaging, American College of Cardiology

William C. Little, MD  
President, Association of Professors of Cardiology

**GASTROENTEROLOGY**

John Baillie, MB, ChB, FRCP, FACP  
Chair, American Society for Gastrointestinal Endoscopy (ASGE), Publications Committee  
Governor, North Carolina American College of Gastroenterology (ACG)

Kenneth L. Koch, MD  
President, International Electrogastrography Society

**HEMATOLOGY AND ONCOLOGY**

Glenn Lesser, MD  
Member, Medical Oncology Representative Board of Directors, Society of Neuro-Oncology

Antonius Miller, MD  
Vice Chair, Pharmacology and Experimental Therapeutics Committee of the Cancer and Leukemia Group B

Bayard L. Powell, MD  
Chair, Piedmont Oncology Association

**INFECTIOUS DISEASES**

Kevin P. High, MD, MSc  
Past President, Association of Sub Specialty Professors  
Member, Board of Directors, American Board of Internal Medicine

**MOLECULAR MEDICINE**

Richard F. Loeser, Jr., MD  
Board of Directors, Osteoarthritis Research Society International

**NEPHROLOGY**

John M. Burkart, MD  
Chair, National Kidney Foundation, DOQI Committee on Adequacy of Peritoneal Dialysis

Thomas D. DuBose, Jr., MD  
President, American Society of Nephrology  
Past Chair, Council on the Kidney in Cardiovascular Disease, American Heart Association

Michael V. Rocco, MD  
Member, Program Committee for ASN Annual meeting in 2006  
Vice Chair, Kidney Disease Outcome Quality Initiative, National Kidney Foundation

**PULMONARY, CRITICAL CARE, ALLERGY AND IMMUNOLOGIC DISEASES**

Eugene R. Bleecker, MD  
Chair, AAAAI Genetics, Molecular Biology and Epidemiology Committee  
Chair, Genetics, Molecular Biology and Epidemiology Committee, American Academy of Allergy, Asthma and Immunology  
Co-Director, NHLBI Course at Jackson Laboratories, “Genetic Approaches to Complex Heart, Lung and Blood Diseases”  
Chair, AAAAI Genetics, Molecular Biology and Epidemiology Committee

Gregory Hawkins, PhD  
Advisory Committee, Heritable Disorders and Genetic Diseases in Newborns and Children of the Health Resources and Services Administration. US Department of Health and Human Services. (White House Nominee)

Jill Ohar, MD  
Corporate Relations Chair, American Thoracic Society

Stephen Peters, MD, PhD  
Chair, Ad Hoc Committee on Long-Acting Beta Agonists, American Thoracic Society  
Asthma and Immunology Liaison to the European Respiratory Society, American Academy of Allergy

Kenneth S. O’Rourke, MD  
Chair, Section on Rehabilitative Rheumatology, American College of Rheumatology

RHEUMATOLOGY
Faculty Serving as Members or Consultants to the National Institutes of Health (NIH) or Other Federal Agency Review Boards

CARDIOLOGY
Che-Ping Cheng, MD
Consultant, NIH Clinical and Integrative Cardiovascular Sciences Study Section Review Committee

W. Gregory Hundley, MD
Consultant, NIH Clinical and Integrative Cardiovascular Sciences Study Section Review Committee

Co-Chair, American Heart Association
Radiology, Imaging, and Surgery Peer Review Study Section

Dalane W. Kitzman, MD
Leader, NIH Pilot Studies Core of the Older Americans Independence Center at Wake Forest University
Consultant, National Heart, Lung, and Blood Institute Data and Safety Monitoring Board—Trial of ACE Inhibition (TRAIN)
Chair, National Institute on Aging Data and Safety Monitoring Board—Arterial Stiffness and Age Effects on Circulatory Control (AGE)
Consultant, National Heart, Lung, and Blood Institute Design and Analysis Committee, Heart Failure—ACTION Trial
Consultant, National Heart, Lung, and Blood Institute Special Emphasis Panel—The Sardinha Study Teleconference
Consultant, National Institute on Aging—Pepper Centers Review Committee, May Council Consultant, National Institute on Aging Data and Safety Monitoring Board—Biologics of Aging Program

GERONTOLOGY AND GERIATRIC MEDICINE
Stephen B. Kritchevsky, PhD
Member, Special Emphasis Panel, National Institutes on Aging (NIA)
Member, Special Emphasis Panel, Older American Independence Centers Review, NIA

Barbara Nicklas, PhD
GCRC Site Visit Review Panel, National Center for Research Resources
Member, Special Emphasis Panel, National Institute of Diabetes and Digestive and Kidney Diseases
Standing Member of Study Section, Clinical and Integrative Diabetes and Obesity

Michelle Nicolle, PhD
NIA workshop, Small Animal Models of Multiple Morbidity
NIH Reviewer, ZAG1 ZIJ-9 (T3) Special Emphasis Panel, Scientific Review Group

HEMATOLOGY AND ONCOLOGY
Steven Akman, MD
Member, NIH Special Emphasis Panel ZRG1 ONC-L (02)
Member, NIH Special Emphasis Panel for Review of T32 training grant, KOI and 99 career development award submission to the National Cancer Institute

INFECTION DISEASES
Kevin P. High, MD, MSc
NIH Study Section ZRG1 IDM-A 90

Christopher Ohl, MD
Antimicrobial Advisory Committee, FDA Consultant for Veterinary Medicine, FDA Advisor on Antimicrobials in Agriculture, USDA

Tobi Karchmer, MD
Committee Member, NC Public Health Intervention Team

MOLECULAR MEDICINE
Richard F. Loeser, Jr., MD
Study Section Member, NIH
Scientific and Medical Advisory Committee, Canadian Arteriosclerosis Risk
Scientific Advisory Council, American Federation for Aging Research

NEPHROLOGY
Barry I. Freedman, MD
Member, NIDDK, Experienced Reviewer Reserve
Member of Board of Directors and Chair of the Data Committee, Southeastern Kidney Council ESRD Network 6
Member at Large, Leadership Committee of the Council on Kidney in Cardiovascular Disease, American Heart Association

Michael V. Rocco, MD
Reviewer of grants for the NIDDK (Subcommittee D), NIH
Workgroup member, CMS ESRD Clinical Performance Measures/Quality Improvement Committee (CPM/QI)
Chair, PD Subcommittee for ESRD CPM/QI Committee

PULMONARY, CRITICAL CARE, ALLERGY AND IMMUNOLOGIC DISEASES
Stephen Peters, MD, PhD
Asthma Phenotypes Working Group, NHLBI/ATS/AAAAI
Asthma Clinical Research Network Steering Committee, NHLBI
Severe Asthma Research Program Steering Committee, NHLBI
Special Emphasis Panel ZHL1 CSR O (F1), NIH
National Heart, Lung, and Blood Institute
Special Emphasis Panel, RFA-HL-05-008, SCCOR in COPD, NIH, National Heart, Lung, and Blood Institute

Eugene R. Bleecker, MD
Permanent Member, Respiratory Integrative Biology and Translational Research Center for Scientific Review, National Institute of Health
Reviewer, Clinical Translational Science Award Review Panel
National Institute of Health
Steering Committee Member, Severe Asthma Research Program
National Heart, Lung and Blood Institute

R. Duncan Hite, MD
Steering Committee Member, ARDS Network National Heart, Lung and Blood Institute Member, DSMB, National Heart, Lung and Blood Institute Lung Injury SCCOR Program

RHEUMATOLOGY
Nilamadhab Mishra, MD
Consultant, NIH & AHA Study Sections

Dama Laxminarayana, PhD
Member, National Institute of Arthritis and Musculoskeletal and Skin Diseases Special Emphasis Panel: ZARI EHB-G (01)
Member, Rheumatology and Dermatology: Special Emphasis Panel/Scientific Review Group 2006/01 ZRG1 MOSS-K(12)
Member, National Institute of Arthritis and Musculoskeletal and Skin Diseases Special Emphasis Panel: Center Core Grants (P30): ZARI EHB-D (01)

Peter E. Morris, MD
Board Member, Critical Illness and Critical Care in Older Adults Translational Workshop National Institute of Health, National Institutes of Aging
Appointed Member, U.S. Food and Drug Administration, Center for Drug Evaluation and Research (CDER), Pulmonary and Allergy Drugs Advisory Committee

Reidar Wallin, PhD
Grant Review Panel, United States Department of Agriculture

Grant Review Panel, United States Department of Agriculture
Faculty Awards and Recognition

**CARDIOLOGY**
- Dalane W. Kitzman, MD
  - Mid-Career Investigator's Award
- William C. Little, MD
  - Best Doctors in America Recognition
  - American Society for Clinical Investigation
- Killian Robinson, MD
  - Tinsley R. Harrison Faculty Excellence Award for Bedside Teaching
- David Sane, MD
  - Master Teacher Award, Wake Forest University Department of Internal Medicine
- Gretchen Wells, MD, PhD
  - Master Teacher Award, Wake Forest University Health Sciences

**ENDOCRINOLOGY**
- Cynthia Burns, MD
  - Brooks Scholars in Academic Medicine Award
- Larry Cantley, MD
  - Master Teacher Award, Department of Internal Medicine
- K. Patrick Ober, MD
  - WFU School of Medicine Medical Alumni Association Distinguished Faculty Service Award
  - Best Doctors in North Carolina Recognition
  - Best Doctors in America Recognition

**GASTROENTEROLOGY**
- Girish Mishra, MD, MS
  - Research Excellence in GI and Liver Disease Award (REGAL)
- John Baillie, MB, ChB, FRCP, FACG
  - Best Doctors in America Recognition

**GENERAL INTERNAL MEDICINE**
- Kenneth L. Koch, MD
  - Young Investigator Award, Functional Brain-Gut Research Group
  - Best Doctors in America Recognition
- David P. Miller, Jr., MD
  - Master Teacher Award, Wake Forest University Department of Internal Medicine
- Phillip Ray Morrow, MD
  - Master Teacher Award, Wake Forest University Department of Internal Medicine
- Sonal Singh, MD
  - Tinsley R. Harrison Faculty Excellence Award for Outpatient Teaching
- James L. Wofford, MD, MS
  - Master Teacher Award, Wake Forest University Department of Internal Medicine

**GERONTOLOGY AND GERIATRIC MEDICINE**
- Hal Atkinson, MD
  - Core Teaching Faculty Award, Wake Forest University Department of Internal Medicine
- Jingzhong Ding, MD, PhD
  - New Investigator Award, National Heart Lung and Blood Institute (Cardiovascular Health Study)
- Stephen B. Kritchevsky, PhD
  - Presidential Poster Award, American Geriatrics Society
  - Health Outcomes Research Scholar Award, John A. Hartford Foundation

**HEMATOLOGY AND ONCOLOGY**
- Mebea Aklilu, MD
  - Master Teacher Award, Wake Forest University Department of Internal Medicine
- Julia Cruz, MD
  - Charles Clark Outstanding Service Award, Medical School Class of 2006
- Mary Ann Knoechl, MD
  - Amgen Oncology Institute Career Development Award
- Richard McQuellon, PhD
  - Outstanding Alumni Award for Distinguished Achievement College of Arts and Science, Appalachian State University

**INFECTIOUS DISEASES**
- Kevin P. High, MD, MSc
  - Tinsley R. Harrison Faculty Excellence Award for Case-based Teaching
- James E. Peacock, Jr., MD
  - Wake Forest University School of Medicine Class of 2007 "Friends of Students Award"
- Leonard Tow 2006 Humanism in Medicine Faculty Award
- James E. Peacock, Jr., MD
  - Wake Forest University School of Medicine
- Stephen Peters, MD, PhD
  - The John M. Karibo, MD, Lectureship
  - University of Louisville School of Medicine
  - Mentored Clinical Scientist Development Award

**MOLECULAR MEDICINE**
- Richard F. Loeser, Jr., MD
  - Dorothy Rhyne Kimbrell and Willard Duke Kimbrell Professor of Arthritis and Rheumatology

**PULMONARY, CRITICAL CARE, ALLERGY AND IMMUNOLOGIC DISEASES**
- Eugene R. Bleecker, MD
  - Chairman, AAAAI Genetics, Molecular Biology and Epidemiology Committee
  - Who's Who in American Education Recognition
  - Global Registry Who's Who in Executives and Professionals
  - Thomas Davis Professor of Pulmonary Medicine Award
  - Best Doctors in North Carolina Recognition
  - Collegium International Allergologicum
  - The Best Doctors in America Recognition
- John Conforti, DO
  - Master Teacher Award, Wake Forest University Department of Internal Medicine
  - Best Doctors in America Recognition
- Jill Obar, MD
  - The Best Doctors in America Recognition
  - Best Doctors in North Carolina Recognition
  - Who's Who in the ATS Recognition
- Stephen Peters, MD, PhD
  - The John M. Karibo, MD, Lectureship Award
  - University of Louisville School of Medicine
  - Mentored Clinical Scientist Development Award

**RHEUMATOLOGY**
- Kenneth S. O'Rourke, MD
  - Class of 2008 Annual Clinical Faculty Award, WFU School of Medicine
  - Member, Core Teaching Faculty
- Reidar Wallin, PhD
  - Member, Core Teaching Faculty

**Great Accomplishments Deserve Recognition**
Faculty Promotions

**CARDIOLOGY**

Heng-Jie Cheng, MD, PhD  
From Research Instructor to Assistant Professor

David M. Fitzgerald, MD  
From Associate Professor to Professor

Sanjay K. Gandhi, MD  
From Assistant to Associate Professor

W. Gregory Hundley, MD  
From Associate Professor to Professor

Thomas Wannenburg, MB, ChB  
From Assistant to Associate Professor

Gretchen L. Wells, MD, PhD  
From Assistant to Associate Professor

**GASTROENTEROLOGY**

Richard S. Bloomfeld, MS, MD  
From Assistant to Associate Professor

Joel T. Bruggen, MD  
From Assistant to Associate Professor

**HEMATOLOGY AND ONCOLOGY**

Gregory L. Kucera, PhD  
From Assistant to Associate Professor

Scott G. Satko, MD  
From Assistant to Associate Professor

**GENERAL INTERNAL MEDICINE**

Franklyn M. Millman, MD  
From Assistant to Associate Professor

William Y. Rice III, MD  
From Assistant to Associate Professor

Sonal Singh, MD  
From Instructor to Assistant Professor

**NEPHROLOGY**

Gregory L. Kucera, PhD  
From Assistant to Associate Professor

Scott G. Satko, MD  
From Assistant to Associate Professor

**PULMONARY, CRITICAL CARE, ALLERGY AND IMMUNOLOGIC DISEASES**

Wendy C. Moore, MD  
From Assistant to Associate Professor

Department of Internal Medicine Faculty Named to Wake Forest University’s Core Faculty

The Wake Forest Associate Dean for Education has selected five members of the Department’s faculty to the university’s inaugural group of Core Teaching Faculty. The Department plans to recognize this core as the model of excellence in our overall educational program. The chosen are:

Hal H. Atkinson, MD  
Kenneth S. O’Rourke, MD  
James E. Peacock, Jr, MD  
Walter M. Roufail, MD  
Robert J. Sherertz, MD
Editorships and Editorial Boards

CARDIOLOGY

Robert J. Applegate, MD
Editorial Board, Journal of the American College of Cardiology
Editorial Board, Current Cardiology Reviews

David Herrington
Editorial Advisory Board, Core Evidence
Editorial Advisory Board, Future Cardiology

W. Gregory Hundley, MD
Editorial Board, Journal of the American College of Cardiology
Editorial Board, American Journal of Cardiology
Editorial Board, Editorial Consultant, Journal for Cardiovascular Magnetic Resonance
Editorial Board, Current Cardiology Reviews

Dalane Kitzman
Editorial Board, Journal of the American Geriatrics Society
Editorial Board, The American Journal of Geriatric Cardiology
Editorial Board, Journal of Geriatric Cardiology
Editorial Board, Congestive Heart Failure
Editorial Board, Current Cardiology Reviews

William C. Little, MD
Editorial Board, Circulation
Editorial Board, Cardiology Review
Editorial Board, Heart & Vessels
Editorial Board, Journal of Heart Failure

William Ntim, MD
Editorial Board, Journal of Echocardiography

Earl Watts, MD
Editorial Board, Journal of the American Society of Echocardiography

GASTROENTEROLOGY

John Baillie, MB, ChB, FRCP, FACC
Editorial Board, Gastroenterology and Hepatology
Associate Editor, Endoscopy
Associate Editor, American Journal of Gastroenterology

Paul A. Dawson, PhD
Editorial Board, Gastroenterology
Page Editor, Nature/Alliance for Cellular Signaling (AfCS) Molecule

Kenneth L. Koch, MD
Editorial Board, Folia Gastroenterologica et Hepatologica

Girish Mishra, MD, MS
Senior Editor, Practical Gastroenterology on Pancreatic Cancer

GENERAL INTERNAL MEDICINE

Sonal Singh, MD
Joint Editor-in-Chief, Conflict and Health

GERONTOLOGY AND GERIATRIC MEDICINE

Stephen B. Kritchevsky, PhD
Editorial Board, Journals of Gerontology: Medical Sciences

HEMATOLOGY AND ONCOLOGY

Glenn J. Lesser, MD
Section Editor, Central Nervous System Malignancies, Current Treatment Options in Oncology

Julia M. Cruz, MD
Editorial Board, Oncology Compendium ASCO
MOLECULAR MEDICINE

Richard Loeser, MD
   Associate Editor, Osteoarthritis and Cartilage

Charles E. McCall, MD
   Editorial Board, Infection and Immunity

NEPHROLOGY

Vardaman M. Buckalew, Jr., MD
   Editorial Board, American Journal of Hypertension

John M. Burkart, MD
   Associate Editor, NephSAP
   Editorial Board, Peritoneal Dialysis International

Thomas D. DuBose, Jr., MD
   Editorial Board, Seminars in Nephrology
   Editorial Board, American Journal of Medical Sciences

Barry I. Freedman, MD
   Editorial Board, Clinical Journal of the American Society of Nephrology
   Editorial Board, American Journal of Nephrology

Michael V. Rocco, MD
   Editorial Board, Journal of Renal Nutrition

PULMONARY, CRITICAL CARE, ALLERGY AND IMMUNOLOGIC DISEASES

John Conforti, DO
   Editorial Board, Journal of Bronchology
   Editorial Board, Clinical Pulmonary Medicine

Stephen Peters, MD, PhD
   Associate Editor, American Journal of Respiratory and Critical Care Medicine
   Associate Editor, Respiratory Medicine
   Associate Editor, Respiratory Research
   Editorial Board, Respiratory Digest

Prestigious Academic Society Memberships

American Society of Clinical Investigation
   Thomas D. DuBose, Jr., MD
   William C. Little, MD
   Charles McCall, MD

Association of American Physicians
   Thomas D. DuBose, Jr., MD
   Charles McCall, MD
We have all heard the saying "a little learning is a dangerous thing." But in academic medicine, the pursuit of knowledge is what fuels the fire, be it teaching, research or patient care. Although we strive for major breakthroughs, incremental gains—a better understanding of the genetic markers for disease for example—are cause for celebration and further exploration. Speaking as a researcher, teacher and clinician, the discovery of knowledge is addicting.

And yet, the true power of knowledge is in its translation. From teacher to student. From bench to bedside. From physician to patient. This is truly where scholarship improves the quality of care and life.

I hope that you have gained a good perspective of the accomplishments of our Department from this report. Suffice to say, this is just the beginning. We look forward to sharing more about our efforts in the future.

Thomas D. DuBose, Jr., MD
Tinsley R. Harrison Professor and Chair of Internal Medicine
Professor of Physiology and Pharmacology