Chairman’s Message

Lance Dworkin, MD

The past several months have been a time of transition but also one of progress and accomplishment for our Department. On the clinical front, we have successfully met and continue to meet the challenge of providing high quality medical care to a large number of inpatients on the medical service that exceeded the capacities of our residency training and hospitalist programs. Across the department and in every division, faculty have stepped forward to assume responsibility for the care of sick patients with whom they often had no prior relationship and for which they often received no financial compensation. In my view, these actions by our faculty are not routine but rather are exceptional, and consistent with the highest ideals of our profession. Due to significant support on the part of Lifespan administration, the ongoing staffing shortfall in the hospitalist programs will end in July at both at Rhode Island and the Miriam Hospitals. Approximately 20 new hospital physicians, including some of our own graduating housestaff, will be joining the division. Fully incorporating these new physicians into our clinical and educational programs will be challenging, but will undoubtedly enrich our department.

On the education front, the recruiting season for our residency programs recently concluded and the results of the matches are known. All four programs in medicine; primary care, the categorical program, med-peds, and the preliminary year did exceeding well and, by all accounts, the incoming class of residents is among the best that we have ever attracted. This undoubtedly reflects the tremendous energy and enthusiasm that our training program directors devote, not only to the recruitment process, but to the training program itself, which continues to improve and to receive high marks from our trainees. It also results from the commitment of the faculty to education and the efforts we make every day in our offices and in our hospitals on behalf of our students, residents and fellows. Finally, I believe the success of the match reflects the understanding and gratitude of our current housestaff for the sacrifices that the faculty made to decompress the teaching service and improve their educational experience. At least in this case time it seems that a good deed not only went unpunished, but was actually rewarded.
Research Awards

Suzanne De la Monte, MD, from the Division of Gastroenterology, has received a five-year competing renewal R01 from the National Institute on Alcohol Abuse and Alcoholism for her project titled ‘Effects of Ethanol on Insulin Signaling in the Brain.’ Approximately $202,500 in direct cost funding per year will be used towards characterizing the long-term consequences of chronic gestational exposure to ethanol, focusing on early and late adolescence. Furthermore, experiments will determine the degrees and mechanisms in which PPAR (insulin sensitizers) agonist treatments prevent or reduce long-term CNS abnormalities caused by chronic in utero exposure to ethanol. Eventually, this translational research could develop into therapeutic strategies for FASD (Fetal Alcohol Spectrum Disorder), the most common preventable cause of mental retardation in the USA.

Rujun Gong, PhD, from the Nephrology Division, has received funding from Questcor Pharmaceuticals, Inc for his project ‘ACTH: a novel therapy to slow or prevent progressive kidney disease.’ Approximately $135,000 in direct costs per year has been awarded for this two–year project. Adrenocorticotropic hormone (ACTH) is a polypeptide hormone produced in response to biological stress and secreted by the pituitary gland and whose principal effect is the production of cortisol. In depth studies demonstrated that ACTH improves urinary albumin excretion in the nephrotic syndrome in patients with a variety of diagnoses suggesting that ACTH has potent anti-proteinuric and renoprotective effects. The exact mechanism underlying this action remains unknown so the proposed studies will attempt to understand that mechanism.

Ping Jiao, PhD, from the Endocrinology Division has received $15,000 in direct costs for the first year for her 2-year Bray Fellowship award. Under the mentorship of Haiyan Xu, MD, Dr. Jiao will use the funding on the project titled ‘Obesity and Adipose Inflammation.’ The proposal focuses on understanding the mechanism and consequence of obesity-related macrophage infiltration in adipose tissue and whether elimination of macrophages in adipose tissue can improve systemic insulin sensitivity. The results will provide novel information for potential new therapeutic direction for treating obesity-related metabolic syndrome.

Ulrike Mende, PhD, from the Cardiology Division has received funds for her involvement in Dr. James Padbury’s Women and Infants funded ‘COBRE for Perinatal Biology.’ Dr. Mende will serve as a faculty mentor for one of the funded projects at Women and Infants. The $15,000 average in funding for five years will provide salary and fringe benefit support for Dr. Mende’s role on this grant.

First Teaching Dialysis Center in the State to Open this Spring

The Division of Kidney Diseases and Hypertension will, in the late spring of 2009, open and direct an outpatient dialysis center near the Rhode Island Hospital campus, on Allens Avenue. The new center will be associated with, but administratively separate, from the current Rhode Island Hospital inpatient dialysis center, which primarily serves hospitalized inpatients. According to Dr. Douglas Shemin, the interim director of the Division, the new center, which will have 18 stations and a capacity for at least 90 patients, will feature state of the art equipment and will offer a number of options for individuals with end stage kidney disease, including, home hemodialysis (regular dialysis treatments delivered at the patient’s home), extended hemodialysis treatments, peritoneal dialysis, and conventional hemodialysis; the anticipation is that the center will also offer daily, short hemodialysis treatments as well.

The center will be the first “teaching” dialysis center in the state, and will be a site for medical student, resident and nephrology fellow education. The center also hopes to compete for federal and private research grant funding. According to Dr. Shemin, end stage kidney disease requiring regular dialysis treatment affects close to 400,000 men, women, and children in the United States per year, with over 130,000 new patients per year. For reasons that are unclear, it is much more prevalent in individuals of color, especially African Americans. Despite over 35 years of experience, and the expenditure of over 30 billion dollars per year, by Medicare, Medicaid, and private insurance on dialysis treatment, the mortality rate in patients treated with regular dialysis remains quite high—over 20 % per year, similar to some types of cancer, and there are many unanswered questions about the optimal methods for measuring adequacy of dialysis, delivering dialysis, and treating cardiovascular disease in dialysis patients. The three part goal of the center is to deliver state of the art dialysis care, teach medical trainees and others about this important disease and treatment, and to participate in investigative work aimed at improving the lives of and the care given to patients with end stage kidney disease.
Only Rhode Island representatives in inaugural class of hospital medicine fellows

- Hospitalists from Rhode Island Hospital and The Miriam Hospital recognized for their commitment to hospital medicine, system change and quality improvement principles.
- Among 500 hospitalists from across the county being inducted as fellows in hospital medicine.
- Hospital medicine is the fastest-growing medical specialty in the U.S., with a projected 30,000 hospitalists by 2010.

PROVIDENCE, RI – Sajeev Handa, MD, director of the division of hospital medicine at Rhode Island Hospital, and Kwame Dapaah-Afriyie, MD, director of the division of hospital medicine at The Miriam Hospital, have each earned the fellow in hospital medicine designation from the Society for Hospital Medicine (SHM).

Handa and Dapaah-Afriyie are the only hospitalists in Rhode Island to be recognized by SHM for their commitment to hospital medicine, system change and quality improvement principles. They will join approximately 500 other hospitalists from across the county who are being inducted in the inaugural class of fellows next month at the SHM annual meeting in Chicago.

“Until now, hospitalists have not had a way to distinguish themselves from their colleagues,” said Larry Wellikson, MD, CEO of SHM. “The fellow in hospital medicine designation gives hospitalists a chance to set themselves apart and be recognized for all of their work that continues to make hospital medicine the fastest growing medical specialty in history.”

SHM fellows must meet a number of criteria and qualifications, including five years as a practicing hospitalist, three years as a member of SHM, demonstrated dedication to quality and process improvement, and commitment to organizational teamwork and leadership, as well as lifelong learning and education.

“The hospitalist program is a vital component of Rhode Island Hospital’s pursuit of excellence, and we are fortunate to have someone as talented and committed as Dr. Handa on our team. His dedication and commitment to quality care are evident in the way he treats patients and colleagues each day,” said John B. Murphy, MD, chief medical officer for Rhode Island Hospital.

R. William Corwin, MD, chief medical officer for The Miriam Hospital, offered similar praise for Dapaah-Afriyie. “We congratulate Dr. Dapaah-Afriyie and on this well-deserved honor. The hospitalist program at The Miriam Hospital is essential to our overall goal of providing high quality, efficient and comfortable care to our patients, and its success is largely due to Dr. Dapaah-Afriyie’s leadership.”

Handa, who resides in Providence, received his medical degree from the Royal College of Surgeons in Dublin, Ireland, completed his residency at Faulkner Hospital in Boston and a fellowship in the division of infectious diseases at Alpert Medical School in Providence. A board-certified internist with a subspecialty in infectious diseases, Handa is also a clinical instructor in medicine and a resident faculty advisor at Alpert Medical School.

Handa, a charter member of the SHM, started the first hospital medicine program in Rhode Island in 1996 at Rhode Island Hospital as the medical director of the Internal Medicine Inpatient Service with just three hospitalists. The program now has 16 physicians and is expected to continue to grow to 23 by the summer.

Dapaah-Afriyie, who resides in Attleboro, received his medical degree from the University of Science & Technology in Kumasi, Ghana, and completed his residency in internal medicine at The Miriam Hospital. A board-certified internist, he will receive his MBA from Bryant University in May 2009. Dapaah-Afriyie is also a clinical assistant professor of medicine at The Warren Alpert Medical School of Brown University.

The Miriam’s Hospital’s hospitalist program began in 1997. In 2005, it won first place in the Blue Cross/Blue Shield –RI Quality Awards. The program, which currently includes 10 hospitalists and four allied health professionals, will nearly double to 18 hospitalists starting in July, due to increasing hospital volume.

SHM is the premier medical society representing hospitalists. Over the past decade, research studies proving that hospitalists decrease patient lengths of stay, hospital costs and patient mortality rates while increasing patient satisfaction, have galvanized the hospital medicine profession and spurred demand for hospitalists nationwide. Currently, hospital medicine is the fastest-growing medical specialty in the U.S., with today’s 20,000 hospitalists projected to grow to about 30,000 by the end of the decade.
Brown-Nanjing Nephrology Collaboration is One of Only Eight Medical Center Pairs Worldwide

The Alpert Medical School of Brown University Division of Kidney Diseases and Hypertension and its sister institution, the Research Institute of Nephrology at Nanjing University School of Medicine in the People’s Republic of China were, in 2008, honored as level A Sister Renal Center Pairs by the International Society of Nephrology (ISN) under the auspices of the ISN Sister Renal Center Program. The Program has, as its aim, the collaboration of two academic nephrology programs, one in Europe, North America, or Japan, and one in the developing world in the areas of clinical practice, education, and research of kidney disease.

The Brown-Nanjing collaboration is one of only eight medical center pairs worldwide and Brown is the only center in the United States to be granted Level A status, reflecting the highest degree of collaboration and effort. In 2008, Drs. Lance Dworkin and Reginald Gohh traveled to Nanjing to lecture and teach. Drs. Zhi-Hong Liu and Lei-Shi Li visited Brown to deliver Medical and Renal Grand Rounds, meet with faculty and fellows and tour the research labs.

In 2009 the Division is beginning a rotation for nephrology fellows to travel to the People’s Republic of China to observe and participate in clinical and research nephrology at Nanjing University.

The Division of Neurology at Memorial Hospital of RI, a part of the greater Department of Medicine, has implemented a number of innovative, exciting clinical programs over the past few years. The two most recent examples are the Spasticity & Tone Management Program and the Sports Concussion Management Program.

New Programs in Neurology at Memorial Hospital of RI

The Division of Neurology at Memorial Hospital of RI, a part of the greater Department of Medicine, has implemented a number of innovative, exciting clinical programs over the past few years. The two most recent examples are the Spasticity & Tone Management Program and the Sports Concussion Management Program.

Our Spasticity and Tone Management Program emphasizes an interdisciplinary, collaborative approach to the management of 1) spasticity, caused by stroke, multiple sclerosis, traumatic brain and spine injury, cerebral palsy, or ALS and 2) dystonia, a condition found in cervical torticollis or writer’s cramp. Physical and occupational therapists are involved as decision makers in the treatment process along with the treating physician. Our goal is to improve the function of patients with central nervous system injuries from various causes. To accomplish this, we combine chemodenervation of overactive, spastic muscles and physiotherapy with newer technologies such as functional electrical stimulation and partial-weight bearing treadmill training. Botulinum toxin, “Botox”, is used in the chemodenervation. For more advanced cases, we also provide intrathecal treatments in which Baclofen, an antispasticity agent, is continuously infused into spinal fluid from a reservoir attached to a pump embedded in the abdomen. Among the primary referral sources to the Program are the inpatient and outpatient rehab departments at MHRI, as well as other rehab facilities across Rhode Island.

The understanding of the long-lasting effects of head injury has made world-wide headlines in the last decade (see articles below); including a highly publicized recent study demonstrating the severe and deleterious effects of concussions on brain structure and function in professional football players. But such injuries are not limited to professional athletes; as many as 3.8 million sports- and recreation-related concussions are estimated to occur in the United States each year. The Sports Concussion Management Program at MHRI represents a recently launched, collaborative effort between our highly lauded neuropsychology program at MHRI, directed by Dr. Janet Grace, the Division of Neurology, and the outpatient rehabilitation program at the hospital. The goal of the program is to provide appropriate evaluations of student athletes in Rhode Island, the Blackstone Valley, and southeastern Massachusetts who experience sports-related head injury. An additional mission of the Program is to educate the public on the primary and secondary prevention of such brain injuries. This is done in concert with the CDC “Heads Up” curriculum.

In this Program, patients referred to the neurology department with concussion are seen within 24-hours for a neurological-medical evaluation, followed immediately by neuropsychological testing, and then recommendations are provided regarding a timeline for return to physical and cognitive activity based on evidence-based guidelines in the neuropsychological literature. Additional testing may include vestibular and balance testing of the complex motor movements by vestibular therapists. For impaired patients, cognitive and physical rehabilitation treatments will be offered. Program leaders have already planned a series of meetings with local therapists to discuss needs in R.I. high schools; this will be followed by surveys to athletic directors and coaches in the surrounding area. We hope to begin actively promoting the program in the Spring of 2009 after gaining an alliance with local athletic partners. As the program grows, we hope to explore more advanced techniques in concussion assessment and management, such as computerized baseline assessments, sensitive baseline computerized balance testing, and on-field tele-medical assessments by neurologists and sport-medicine physicians.

Linda G. Griffith, Ph.D. to Deliver Keynote Address at the Department of Medicine Research Forum

The Annual Department of Medicine Research Forum will take place on Monday, June 15, 2009 from 4 P.M. until 7 P.M. at Smith-Buonanno Hall and Andrews Hall on campus at Brown University. Dr. Jack Wands, Professor of Medicine is Chairman of the event.

Linda Griffith, PhD, Professor of Biological Engineering and Mechanical Engineering and Director of the Biotechnology Process Engineering Center at MIT will deliver the keynote address entitled “3D Microscale Tissue Engineering of Liver for Drug Development.”

Members of the Department of Medicine are invited to participate in the poster session that follows the guest speaker presentation. In past years, many students, trainees and faculty from Brown University-affiliated hospitals have participated. Investigators present new posters or material that has been presented at other regional and national meetings in the past year. Beverages and hors d’oeuvres will be provided during the poster session.

Application forms for the submission of poster titles will be circulated throughout the Department and are available by email from Kristine Brown at kbrown10@lifespan.org and phone 444-8409.

Deadline for submissions is Monday, June 1, 2009.

We look forward to your participation at this exciting annual event.
Dr. Rami Kantor  
Division of Infectious Diseases  
Dr. Rami Kantor joined the Department of Medicine and Brown University Infectious Diseases Division in 2005 as an Assistant Professor of Medicine (Research). Prior to coming to Brown, he completed his education at the Sackler Medical School and his internal medicine residency at the Sheba Medical Center in Israel. He subsequently pursued a research fellowship at the Stanford University Infectious Disease Division, where he studied HIV drug resistance, and trained with world leaders Drs. David Katzenstein and Robert Shafer. He soon focused on regions with high HIV prevalence and studied drug resistance among diverse HIV subtypes. Collaborations with investigators in Thailand, Japan, South Africa, Zimbabwe, Brazil, Argentina, Portugal and Israel, among many others, allowed him to examine a large patient population harboring diverse subtypes and determine characteristics of resistance evolution.

Dr. Kantor arrived with the goal of building a career that encompasses research as well as the practice of clinical HIV medicine and infectious diseases and in 2007 he completed an infectious diseases fellowship at the Brown ID division. Upon arrival to Brown he was the recipient of a developmental grant from the NIH-funded Lifespan/Brown/Tufts Center for AIDS Research (CFAR), to study HIV diversity and drug resistance in western Kenya, being the first to conduct such experiments in that part of the world. This study led to additional research opportunities. He is about to commence an NIH funded study to investigate the effect of the December 2007 political crisis in Kenya on the evolution of drug resistance in patients who are treated with antiretroviral medications.

Dr. Kantor’s research in western Kenya, also supported by the Rhode Island Foundation, further demonstrated that World Health Organization guidelines for identifying HIV treatment failure can be misleading in ~50% of cases. This significant public health finding led to change in patient monitoring guidelines and is the basis for further studies.

Dr. Kantor also conducts research in Chennai, India, where he received an Indo-US CFAR grant to examine drug resistance in blood and the female genital tract. This research will have direct implications on our understanding of horizontal (to partner) and vertical (to child) transmission of drug resistance variants. In order to further explore drug resistance mechanisms in different HIV subtypes, Dr. Kantor, together with his Stanford colleagues, designed an international study in China, Thailand and India, where different HIV variants predominate and was fortunate to receive RO1 funding from the NIH. This 5-year study will allow accumulation of large data from HIV-infected treated patients with multiple subtypes.

Dr. Kantor’s work on HIV drug resistance greatly strengthens the ongoing clinical and research work in the division of infectious diseases under the leadership of Profs. Charles Carpenter, Timothy Flanigan, Kenneth Mayer and Susan Cu-Uvin. In addition to serving as an advisor to several networks such as the WHO HIV Resistance Network and the TREAT Asia Network, he is now also Director of Research of the Brown-Kenya Program. He also brings Brown interdisciplinary collaborators into his research, including departments like statistics, computational biology, economics, physics and engineering.

Together with HIV clinical care Dr. Kantor hopes to continue and expand his research career to unravel the global paradox in HIV medicine. Most knowledge has been derived from resource-rich settings, yet needs to be implemented in resource-poor settings, where the disease is prevalent and multiple HIV subtypes predominate. He hopes that his line of research studies will increase our understanding of global drug resistance evolution, and will allow us to better treat HIV-infected patients around the world.

Dr. David Berz  
Division of Hematology/Oncology  
Dr. David Berz is an accomplished MD, Ph.D. from Humboldt University, Berlin, Germany. He finished a Hematology/Oncology Fellowship here in July 2008 and is a lead proteomics translational investigator with 6 published articles. He will focus on translational research in lung cancer.

Terri Montague, MD  
Division of Kidney Diseases  
Terri Montague, MD, has joined the Department of Medicine in the Division of Kidney Diseases and Hypertension as an Assistant Professor. She graduated from Princeton University and the Washington University School of Medicine, and completed residencies and fellowships in internal medicine, nephrology and transplant nephrology at the Mount Sinai Medical Center in New York. She was a transplant nephrologist at St. Barnabas Medical Center in New Jersey prior to coming to Brown University. Dr. Montague’s clinical and academic interests are in general and transplant nephrology.
Rhode Island Hospital Division of Hospital Medicine

Sajeev Handa, MD, Director

Rhode Island’s first inpatient group inaugurated services on August 7, 1996 with just three full-time physicians. Initially set up with the goal of cultivating relationships with community physicians, providing 24/7 coverage and communication, the program continued to evolve and accommodate the changing needs of the local environment.

The term hospitalist was coined soon after and during the subsequent years the momentum of the movement gained significant ground particularly as outpatient practitioners realized that hospital practice was becoming an increasingly complex endeavor. The result was that the demand for this group, known as the Internal Medicine Inpatient Service (IMIS), increased and, in October 1999, two additional physicians were added to the existing three. During the same year all other non-teaching services at Rhode Island Hospital which had existed as separate entities were merged with the program including the house officer on private service (HOOPs) and nurse practitioner services.

In July 2003 further alterations were made on account of the reduced workload mandated for house-staff as well as the management of the chest pain observation unit in the new Emergency Room. In the same year a milestone was reached when the program was recognized by the Department of Medicine as its own Division: Hospital Medicine. That year the Division also received its first designated medical unit on 2 North in the Jane Brown Building. This unit has since transferred to the hospital’s new Bridge Building.

In 2008 further expansion occurred as the Division absorbed the patients belonging to the Coastal Medical group following dissipation of their own hospitalists. In September of that year further adherence to the rules further mandated by the Accreditation Council for Graduate Medical Education the hospitalist program required reorganization to accommodate a greater number of unassigned patients (approximately 150 per month). With these changes the Division will be hiring up to a total of 22 hospitalists by July of 2009. This year will also see a greater liaison between the teaching service at Rhode Island Hospital. Nationally the group will begin to work more closely with the Society of Hospital Medicine to evaluate some further opportunities including establishing a local chapter.

Cardiology Updates

Dr. Arrighi Appointed to ACGME Committee

Dr. James Arrighi has been appointed as member of the Accreditation Council of Graduate Medical Education’s (ACGME) Residency Review Committee for Internal Medicine, for a 6-year term beginning July 1, 2009. This committee is responsible for the evaluation and accreditation of all residency and fellowship programs in internal medicine. In addition, the Review Committee periodically prepares, reviews, and modifies the program requirements for residencies and fellowships under its jurisdiction. The committee is comprised of approximately 20 physicians from various disciplines and backgrounds in internal medicine.

Dr. Arrighi joined the Brown faculty in 2004, and is currently Program Director of the Cardiology Fellowship, Associate Professor of Medicine at Brown, and Director of Nuclear Cardiology at Rhode Island Hospital. Prior to coming to Brown, he was program director in cardiology at Yale, and has been involved in graduate medical education for over 10 years.

Program Merger in Interventional Cardiology

We are happy to announce that the Interventional Cardiology fellowships at Rhode Island Hospital and Miriam Hospital, which have been separate, will be merging on July 1, 2009. The new, Rhode Island Hospital-based program will include 4 fellows who will rotate between both hospitals. Both hospitals will be integral to the new training program.

We are embarking on this change because we believe the modification will enhance the educational aspects of our program in several ways. A unified program will allow more longitudinal and collaborative clinical and research efforts between fellows and faculty at both institutions, expanding research opportunities for all interventional fellows. The combination of two clinical sites will result in more diversity in the clinical experience, and exposure to a broader group faculty. Finally, the proposed new structure will be aligned with other training programs at Brown, including the internal medicine residency, and most of its fellowship programs, including interventional cardiology’s “parent” program in general cardiology.

New Program Director for Interventional Cardiology

Dr. J. Dawn Abbott

has been appointed to the position of Program Director for the Interventional Cardiology Fellowship at Rhode Island Hospital, effective January 1, 2009, taking over for Dr. David Williams after his many years of distinguished service in this role. In July, she will become Program Director for the combined program, and Dr. Paul Gordon will serve as her Associate Director for the Miriam Hospital site.

Dr. Abbott joined the Division of Cardiology in 2004, and is an Assistant Professor of Medicine. Prior to coming to Brown, she completed her postgraduate medical education at Yale-New Haven Hospital, training in general cardiology, interventional cardiology, peripheral endovascular procedures, and basic science research. Since her appointment to Brown, she has received clinical research grants from the American College of Cardiology and the Rhode Island Foundation. She serves as an Associate Editor for Circulation: Cardiovascular Interventions and is on the Editorial Board of the Journal of the American College of Cardiology: Cardiovascular Interventions and the American Journal of Cardiology. Dr. Abbott is on staff at Rhode Island Hospital and practices cardiology at several office locations.

Athena Poppas, MD

Chaired a Committee of the American College of Cardiology investigating relations between career decisions, and professional and personal satisfaction, in order to assess workforce needs. The committee report appeared in the Journal of the American College of Cardiology in December (J Amer Coll Cardiol 2008;52:2215). Dr. Poppas is Associate Professor of Medicine at the Alpert Medical School. She directs the echocardiography laboratory at Rhode Island Hospital.

Peter Tilkemeier, MD

served on 2 multispecialty committees involving Cardiovascular imaging, whose reports were presented in the Journal of the American College of Cardiology in January. He was a member of the committee that formulated a Health Policy Statement on Structured Reporting in Cardiovascular Imaging (J Amer Coll Cardiol 2009:53:76). In addition, Dr. Tilkemeier was a member of the committee that formulated uniform data standards for cardiovascular imaging (J Amer Coll Cardiol 2009:53:91). Dr. Tilkemeier is Director of the Nuclear Cardiology Laboratory at The Miriam Hospital, and Associate Professor of Medicine at the Alpert Medical School.
Dr. Haiyan Xu from the Division of Endocrinology recently obtained a R01 grant from NIDDK (DK 80746) with approximately $200,000 in direct cost per year. Her research mainly focuses on understanding the molecular mechanism of obesity-related insulin resistance and type 2 diabetes. Dr. Xu obtained her PhD degree from Harvard University and worked for 5 years in industry searching for novel therapeutic targets for treating obesity and related metabolic disorders, particularly insulin resistance and type 2 diabetes. She was the first one to identify macrophage infiltration in adipose tissue in obesity, which greatly stimulated the interest in the field to explore adipose inflammation as a causal factor for the development of obesity-related insulin resistance and type 2 diabetes.

Inspired by several interesting and novel findings identified during the course of drug discovery, Dr. Xu decided to return to academia to pursue in depth mechanistic studies and joined the Rhode Island Hospital Division of Endocrinology as an Assistant Professor of Medicine at Brown University in August, 2005.

Dr. Xu’s R01 grant will study the role that MAP kinase phosphatase 3 plays in regulation of liver glucose metabolism in obese state. Obesity-related type 2 diabetes is featured with decreased body response to insulin, which leads to increased liver glucose production and decreased glucose utilization by muscle and fat. Increased hepatic glucose output contributes significantly to the development of hyperglycemia. Dr. Xu identified MKP-3 as a novel insulin resistance gene since it elevates in the liver of obese rodents, antagonizes the action of insulin in liver cells and promotes liver glucose production in mice. Results generated from research outlined in her new R01 proposal will provide key information to understand the mechanism of action of this protein and evaluate its candidacy as a new therapeutic target for treating obesity-related type 2 diabetes.
May 5, 2009: The Beckwith Visiting Professorship Lecture
“Consequences (Expected and Otherwise) of the Quality and IT Revolutions”

Robert M. Wachter, M.D., Professor of Medicine, Associate Chairman, and Chief of the Division of Hospital Medicine, Lynne and Marc Benioff Endowed Chair in Hospital Medicine, Department of Medicine, University of California, San Francisco, Chief of the Medical Service, UCSF Medical Center

Presentation of the 8th Annual Warren Alpert Medical School of Brown University, Department of Medicine Beckwith Family Awards for Outstanding Teaching

May 12, 2009: Rheumatology Update

Bernard Zimmermann, M.D., The Warren Alpert Medical School of Brown University

Kerri Batra, M.D., The Warren Alpert Medical School of Brown University

May 19, 2009: Seventeenth Annual Senior Residents’ Research Day

Three oral presentations made by Senior Residents with names to be announced at a later date, poster session to follow.

May 26, 2009: Canceled

June 2, 2009: Morbidity & Mortality Conference

June 9, 2009: The Grace Lecture

David Gary Smith, M.D., Director of Graduate Medical Education, Abington Memorial Hospital, Abington, PA

June 16, 2009: Pulmonary Update

Mitchell Levy, M.D., Attending Physician, Division of Pulmonary and Critical Care Medicine, Professor of Medicine, The Warren Alpert Medical School of Brown University

James Klinger, M.D., Attending Physician, Division of Pulmonary and Critical Care Medicine, Associate Professor of Medicine, The Warren Alpert Medical School of Brown University

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