

## CHAIR OF MEDICINE'S NEW YEAR'S LETTER: 2011

Within the span of a single year, 2010 reflected all the lability of academic medicine's external environment we have become accustomed to coping with in recent years. The dismal economy in general started to recover and then slid back into a slump – only to flash some reason for renewed hope in the final weeks. Healthcare reform passed in March, but its integrity now faces political and even legal challenges. In the meantime, throughout 2010 healthcare costs continued to rise faster than inflation and the number of uninsured continued to grow. With a more than \$10 billion infusion from the American Recovery and Reinvestment Act of 2009, last year's NIH budget was a virtual windfall. But the research community will be seeing a sharp drop off in NIH money beginning in 2011 as the one-time stimulus package comes to an end. Only time will tell how the dramatic shift in the composition of Congress created by the midterm elections will ultimately play out on overall federal support for biomedical research: while the GOP "Pledge to America" agenda calls for draconian cuts in federal spending that would revert back to 2008 levels, Republicans have in fact historically supported health research funding.

Despite these uncertainties, as I said in last year's New Year's Letter I am confident that we are better prepared at this institution for the often unpredictable challenges that lie ahead than most other major academic medical centers. We are blessed with a fundamentally strong partnership between the medical college and the hospital, visionary leadership at the highest levels of New York-Presbyterian Hospital, Weill Cornell Medical College and Cornell University, and the extraordinary talent and dedication of our faculty that attracted me here three-and-a-half years ago. So, I again wish to take this opportunity to highlight some of the Department of Medicine's (DoM's) accomplishments of 2010 and to look ahead to directions I believe the New Year will bring.

### ***Strategic Plan***

The cornerstone of the DoM's activities during the past year was the development of a comprehensive Strategic Plan which is at this moment working through its final drafts with our faculty, key stakeholders and partners. This is the culmination of an intensive 6-month effort that began last summer at the level of the individual Divisions of the DoM and then converged during the fall with a series of four summit retreats (on patient care, education, research and organization, respectively) and involved wide and energetic participation by faculty from all sectors and selected representatives of our home institutions outside the DoM. The emerging dominant themes involved the need for (1) measuring and delivering *value* in our clinical practices, expanding primary care capacity, and working with the hospital and the PO to improve the sometimes precarious transitions of care for our patients with complex medical conditions amongst their disparate sites of care; (2) laser focusing on high-quality, high-impact, generally investigator-initiated research throughout the entire continuum of biomedical inquiry (which research-intensive Departments of Medicine are traditionally so effective in doing), greatly increasing federally funded grant dollars by stimulating effective competition for large, multi-investigator, multi-project grants, and growing the research enterprise by adjusting to the realities of space availability; (3)

focusing our educational efforts at all levels on innovation and being the incubator for future leaders of American medicine; and (4) becoming a much more *cohesive* DoM. The importance of all this to the hospital and the medical college is that this department, like other major Departments of Medicine, is very much a microcosm of the entire academic medical center, generally representing at least one-third each of all clinical care, research and education.

### *Clinical Services*

Over the past two years, the DoM has led a dramatic overhaul of inpatient services at NYPH-Weill Cornell. Much of this has been necessitated by new and ongoing regulatory changes in graduate medical education, increased demand for high turnover of evermore acutely ill inpatients, and the resulting need for round-the-clock, hands-on involvement and supervision of trainees by well trained attending physicians. We created a new Division of Hospital Medicine less than two years ago, under the outstanding and visionary leadership of Dr. Art Evans, and have been able to recruit a large cadre (21 at the time of this writing, and growing) of hospitalists who are capable of being not only excellent clinicians and educators but also innovators in hospital medicine. Much of the medical inpatient service has been completely reorganized, with expanding “non-resident” services staffed by Physicians’ Assistants, Nurse Practitioners, Hospitalist Attendings and, in some cases, by private physicians who wish to and are willing to provide supervision round-the-clock. While these rapid changes have been an understandably dislocating experience for our full-time and voluntary faculty physicians, the reorganization has occurred (and continues to occur) with strong, ongoing communication with them and meaningful input from them.

At the same time, the DoM has undertaken major invigoration of our quality improvement program. A new DoM Quality Improvement/Patient Safety (QIPS) Initiative was started in 2010. This is intended to complement – not replace – the established Quality and Professional Review Committee co-chaired by Drs. Rich Cohen and Hank Murray, which continues to do an excellent job of reviewing problems and providing recommendations for corrective action. The focus of the new Initiative is Division-specific and Department-wide efforts to both *measure* and *improve* the quality of both inpatient and outpatient care (as well as the critical transitions between them). Drs. Jennifer Lee (Hospital Medicine) and Bob Kim (Cardiology) have taken on the responsibility of co-chairing the Initiative with great vigor, heading a committee of energetic representatives from all Divisions and major practices, and with Dr. Brendan Reilly, Executive Vice Chair for Clinical Affairs, as the liaison between this new group and the established group as well as the DoM leadership. The committee will include trainees because we believe quality initiatives should be an integral part of medical education at all levels. The purpose of the new QIPS Initiative and Committee is to assess and learn from routine practice, and to develop and implement novel strategies. Until now, clinical activity and research funding at academic medical centers have focused on understanding mechanisms of disease and developing new diagnostic tools and therapies; there has been much less attention paid to improving the processes involved in delivering that patient care more safely, effectively and efficiently. The premise of our new DoM QIPS Initiative is that learning how to deliver existing effective therapies will be at least as important to improving outcomes for patients as is the continued discovery of new treatments.

One of the major accomplishments in clinical services during the past year has been the development, build-out and opening of a state-of-the-art, multidisciplinary program for sleep disorders. The new Weill Cornell Center for Sleep Medicine is a joint effort of the DoM with the Department of Neurology (and involves other disciplines like Pediatrics, Otorhinolaryngology and Psychiatry). The beautiful new facility takes up the 5<sup>th</sup> floor of the medical office building on 61<sup>st</sup> Street at York Avenue. Dr. Ana Krieger (Pulmonary/Critical Care), an emerging national leader in Sleep Medicine, provides dynamic leadership for the DoM. The 8,000 sq. ft., 12 hotel-quality bed facility for both overnight and daytime studies became oversubscribed shortly after opening. It provides not only outstanding physician and technical expertise but also strong communication with referring physicians, and has already attracted local and even national recognition.

### ***Medical Education***

The DoM's Residency program, although outstanding in quality, received multiple citations by the Internal Medicine Residency Review Committee (RRC) of the Accreditation Committee for Graduate Medical Education (ACGME) for violations in duty hours and work load of residents, beginning with its site visit in 2007. In 2009 the program was placed on probation. Within a matter of a few months, the violations were corrected and a repeat site visit later in 2009 reported no citations and accredited the program with commendation. Fortunately, during this period of some turmoil the program retained its excellence and actually further improved its ability to attract the best medical school graduates. Following a national search, we were able to recruit our top choice for program director, Dr. Lia Logio, who held the same position at Indiana University. Dr. Logio was appointed in 2010 Vice Chair for Education in the DoM and was named the first Herbert J. and Ann L. Siegel Distinguished Professor of Medicine. The residency program is particularly proud of its ability to place its graduates in the most competitive and prestigious subspecialty fellowship programs in the country. The track record has been nothing less than remarkable and, most encouragingly, our own fellowship programs have been able to retain many of our best residents.

### ***Cayuga Medical Center***

A major new development for the DoM over the past 18 months, which quickly came to full fruition during 2010, was our new partnership with the *Cayuga Medical Center (CMC)* in Ithaca. This superb community hospital, located a short distance from our parent University, has an excellent medical staff that is eager to teach. Rotations to the CMC provide a dimension to the experience of our students and residents that they obviously cannot receive in New York City: rural medicine. In Ithaca they also have the opportunity to train in adolescent medicine under excellent teaching supervision by the staff of the University's large Student Health Service. Residents from our program now do one-month rotations at the CMC most months of the year, and 4<sup>th</sup> year Weill Cornell medical students (at least two at a time) have now begun to spend one-month experiences throughout the year: this immediately popular rotation is already oversubscribed. We have made apartments and cars available to our residents and students. Future expansion of this partnership is expected to occur in other departments, particularly Pediatrics and Obstetrics-Gynecology, and the opportunity to conduct health services research in rural medicine jointly with CMC physicians and University faculty will be cultivated. DoM faculty now

regularly go to Ithaca for CME presentations, and we hope that tele-consultation, teleconferencing and other forms of joint clinical service will be developed in the near future.

### **Global Health**

The Infectious Diseases Division of Weill Cornell's DoM has been a national pioneer in global healthcare and research, with established sites in developing countries dating back to four decades ago. Our most active sites for education and research are now in Haiti, Brazil and Tanzania. Most notably during the past year, our GHESKIO site in Port au Prince, Haiti, became a major headquarters for disaster relief efforts following the country's devastating earthquake, with repeated visits from former Presidents Bill Clinton and George W. Bush and considerable attention from national media. GHESKIO, the AIDS research and treatment organization, received the 2010 Gates Award for Global Health. Jean W. (Bill) Pape, MD, Professor of Medicine at WCMC and Founding Director of GHESKIO in last month received the Clinton Global Citizen Award to recognize individuals who have championed innovative solutions to pressing global problems. Dr. Pape's unassuming and tireless leadership and his staff's (including other DoM faculty and trainees) extraordinary efforts in disaster relief that continue in response to the emergency to extend well beyond GHESKIO's original mission of AIDS research and treatment, have been an international inspiration. Dr. Pape, Dr. Warren Johnson (Director of the Global Health Program in the Division of Infectious Diseases) and I have already begun preliminary discussions about expanding our global health efforts to medical needs beyond communicable diseases (e.g. nutrition, where the University's expertise will be especially valuable).

### **Research**

Much momentum was achieved during 2010 in implementing plans originating in 2009 to develop a strong departmental infrastructure for the conduct of clinical and patient-oriented research, including clinical trials. This initiative is under the leadership of Dr. John Leonard (Hematology-Oncology), the department's Director of Clinical Research. Assisting Dr. Leonard has been Dr. Jane Salmon (Rheumatology, HSS), who was appointed Associate Director for Translational Research, and Deborah Scher, originally in her consultant role for strategic directions. Among the core resources that have been already developed to support outstanding clinical research include peer review and prioritization of protocols, biostatistical assistance, and research subject recruitment expertise. Efforts are underway to enhance and standardize front-end biobanking potential to enable interdisciplinary patient-oriented research. Further development of this initiative is outlined in our forthcoming Strategic Plan.

Since my State-of-the-Department presentation and report last Spring (posted on the DoM's web site), DoM faculty have continued to make major research contributions in 2010. Ari Melnick, MD (Hematology-Oncology) and his colleagues have reported in *Cancer Cell* a breakthrough in demonstrating how a mutation in the genes that encode for metabolic enzymes can lead directly to the transformation of healthy bone marrow to a malignant one, a finding that is likely to result in new therapeutic approaches for leukemia. The Melnick group also reported (*Journal of Clinical Investigation*) a promising new, rationally targeted combinatorial therapy for one of the most common and most aggressive forms of lymphoma, diffuse large B cell lymphoma. In a landmark study published in July in

the *New England Journal of Medicine*, based on studies conducted at GHESKIO in Haiti, Dan Fitzgerald, MD (Infectious Diseases), senior author, Patrice Severe, MD, a graduate student in the WCMC program in Clinical Epidemiology and Health Services Research, lead author, and several other colleagues in the DoM reported that early initiation of antiretroviral therapy significantly increases survival of patients infected with HIV-1. This study creates a paradigm shift in the approach to treating HIV infection and has already stimulated changes in HIV treatment protocols by the World Health Organization. Ira Jacobson, MD (Chief, Gastroenterology and Hepatology) was the lead investigator of the ADVANCE trial which reported its breakthrough findings last month that 75% of patients with hepatitis C who were treated with the protease inhibitor telaprevir (in addition to standard treatment with peginterferon and ribavirin) achieved a viral cure.

There have also been several major honors and research grant awards since the State-of-the-Department presentation. Kyu Rhee, MD, PhD (Infectious Diseases) received both a Bill and Melinda Gates Foundation Grand Challenges Exploration grant (one of only 9 in the country) and a second major grant from the Gates Foundation "Grand Challenges" Initiative (one of only 7 in the country); remarkably, Dr. Carl Nathan (Chair of the Department of Microbiology with a secondary appointment as Professor of Medicine) also received these two prestigious awards. As existing antibiotics are largely ineffective for the cure of mycobacterial infection, Dr. Rhee has challenged longstanding assumptions about the basic biology of tuberculosis and has targeted the unique metabolic circuitry of the organism. Mary E. Charlson, MD (Chief of the new Division of Clinical Epidemiology and Evaluative Sciences Research) is the Principal Investigator (PI) of a \$6 million grant awarded by the NIH (NHLBI) for the SCALE (Small Changes and Lasting Effects) study as part of an interdisciplinary Center for Behavior Intervention Development to reduce obesity among African-American and Latino New Yorkers. (This is a joint program with the University in Ithaca, Lincoln Hospital in the Bronx, and Renaissance Health Systems.) Monica Guzman, PhD (Assistant Professor, Hematology-Oncology, a faculty member we recruited last year from the University of Rochester) received the NIH Director's New Innovator Award, a 5-year, \$1.5 million grant "to stimulate highly innovative research by promising new investigators". Dr. Guzman is studying the therapeutic targeting of cancer stem cells, specifically leukemia stem cells. The National Institute of Aging (NIA) of the NIH awarded a \$2 million Roybal Center for Research in Applied Gerontology grant, one of 12 nationally, focusing on pain management in the elderly, to PI Cary Reid, MD, PhD (Geriatrics): this is an extension of the Cornell Institute for Translational Research on Aging (CITRA), based in Ithaca.

Barbara L. Hempstead, MD (Co-Chief, Hematology-Oncology) is the Senior Co-PI (with Dr. Harold Craighead, Cornell University Professor of Engineering, PI) of a new \$13 million grant from the National Cancer Institute (NIH) to fund a Center on the Microenvironment and Metastasis, one of 12 such new research centers nationally. These Centers are intended to bring to the study of cancer a new cadre of theoretical physicists, engineers, chemists and mathematicians to work with biomedical researchers. Carla Boutin-Foster, MD (Clinical Epidemiology and Evaluative Sciences Research), received an \$8 million NIH grant (from the National Center for Minority Health and Health Disparities) over 5 years to fund a new Comprehensive Center of Excellence in Disparities Research and Community Engagement (CEDREC). This is a consortium of WCMC with Hunter College School of Nursing, City University of New York,

Lincoln Medical and Mental Health Center, and the Center for Healthful Behavior Change at NYU School of Medicine. CEDREC uniquely targets hard-to-reach populations, utilizes non-traditional venues (e.g. community barber shops), and translates basic science theories to understanding and developing practical solutions to pressing public health issues.

### ***Faculty Development***

Last year we began a concerted initiative to substantively improve career development, guidance and mentoring for all of our faculty in the DoM, our most precious resource. Under the leadership of Dr. Art Evans, Vice Chair for Faculty Development, an extensive survey was initially conducted (with an excellent response rate) to identify current deficiencies, and then a multi-pronged initiative was launched to invigorate this often neglected facet of life in academic medicine.

First, we recognized that the traditional method of mentoring – which has depended almost entirely on the single senior mentor-junior mentee relationship – was no longer working in most cases (here or anywhere else in academic medicine) for a variety of contemporary reasons. Furthermore, even historically it was limited largely to the mentoring of researchers, and probably never really worked well for most clinician-educators. Therefore, rather than relying solely on this traditional dyadic relationship – not to replace it but to complement it – an innovative peer group mentoring model has been developed based on adult learning theory. The first intensive, collaborative peer mentoring group (consisting of 12 junior faculty members on different faculty tracks) was successfully started last Fall under close supervision by Dr. Evans and Dr. Linda Pololi of Brandeis University, a nationally known pioneer in faculty career development who is assisting us with this project. Based on lessons learned from this first pilot group, the intent is to launch several such collaborative peer mentoring groups, not only for junior faculty but also for mid-career faculty. (The latter represent another often neglected sector of faculty members who we believe need mentoring just as much as junior faculty, albeit focusing on other issues.)

At the same time, in July, 2010 we launched a new intensive but *longitudinal* orientation program for new faculty (all ranks, tracks and disciplines meeting together). This and future years' cohorts of new faculty will be meeting at least monthly for a full year. During each of the monthly breakfast meetings a different institutional orientation topic is discussed in depth (with participation by the appropriate administrative leaders) in this small-group, informal, and highly interactive setting: e.g. institutional organization, human resources, the system of promotions and tenure, access to core research resources, etc. Preliminary feedback from the pilot groups of both of these faculty development initiatives has been most encouraging.

### ***Administration***

Mary K. (Peggy) Crow, MD, was named Chief of the Division of Rheumatology in the DoM (and concurrently Physician-in-Chief at the Hospital for Special Surgery). Dr. Crow is an internationally recognized leader in research in the field of autoimmunity, and specifically systemic lupus erythematosus, as well as a widely respected clinical rheumatologist. She has been President of the American College of Rheumatology and is President of the Henry Kunkel Society. Dr. Crow succeeds Dr.

Stephen Paget, who was named Physician-in-Chief Emeritus at HSS following a long and distinguished term as Chief of Rheumatology.

David Calfee, MD (Infectious Diseases) and Stephen J. Wilson, MD (Infectious Diseases), both national authorities in hospital-acquired infections, were recruited simultaneously to create a formidable team of hospital epidemiologists at NYPH-Weill Cornell. Dr. Calfee was named Chief Hospital Epidemiologist, having previously served as the Hospital Epidemiologist and Infection Control Officer at Mount Sinai; Wilson was named Hospital Epidemiologist, having previously led infection control programs at Indiana University's teaching hospitals. Charles R. Steinberg, MD, was named to the first Howard and Carol Holtzmann Professorship in Clinical Medicine, recognizing his outstanding service to the clinical and educational missions of WCMC. Lia S. Logio, MD, as indicated above, was named to the first Herbert J. and Ann L. Siegel Distinguished Professorship of Medicine. Dr. Mark Pecker's former Chief Residents created a new Visiting Professorship to honor his enormously influential contributions to the DoM's educational mission: the Mark Pecker Clinical Master will spend a week participating in and leading educational activities for residents and students in the DoM.

A word about the financial state of the DoM. We completed the last fiscal year (ending June 30, 2010) with a modest operating loss for the first time since my starting in this position. There were several reasons for this, some of which are beyond our control. Preliminary analysis of the first 6 months of the current fiscal year shows an encouraging turnaround due to continued operational improvements but largely due to a major increase in revenue-generating clinical activity. But we must remain intensely vigilant about our financial health because our continued academic and clinical growth depends on it.

Finally, I want to thank each of you for your invaluable contributions. I am extremely proud of your dedication to innovation and your commitment to delivering the highest quality of patient care. You represent the very best of American academic medicine and I believe we are well prepared to meet the challenges of our turbulent external environment. I would like to take this opportunity to wish you and your loved ones a healthy and very happy New Year!



Andy Schafer