# Dean's Newsletter July 5, 2004

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#### Welcome to New Housestaff and Fellows

It was just three weeks ago that we bid farewell to our medical and graduate student graduates. Many have gone across the nation to commence additional training as residents or postdoctoral fellows. Some are continuing their work and study at Stanford. During the past week a large influx of new graduates or trainees have arrived to begin their further training in clinical medicine and/or research at Stanford Hospital & Clinics, the Lucile Packard Children's Hospital and the School of Medicine. I want to welcome each of them to our Stanford community.

Increasingly, we are addressing ways to better align the Medical School with the postgraduate programs at our teaching hospitals. One way to accomplish this will be to extend our scholarly concentrations to residents and fellows – which we hope to achieve over the next couple of years. We also want to better align residents and fellows to the academic programs and offerings that are supported through the School and thus provide a more contiguous and connected educational opportunities that continue to link science and medicine and which foster our overarching goal of *Translating Discoveries* (http://medstrategicplan.stanford.edu/).

# Professionalism at Stanford University Medical Center

In tandem with the School of Medicine's commitment to the Respectful Workplace, the Medical School Faculty Senate established a Professionalism Subcommittee earlier this year that is chaired by Dr. Clarence Braddock, III, Associate Chief of General Internal Medicine, that was charged to develop a framework and operational definition of professionalism that encompasses the medical school, hospital and clinics and that a strategy for implementation of professionalism along with methods to evaluate its impact on students, faculty and staff throughout the medical center.

The development of the common definition of Professionalism commenced with the adoption of the "Professionalism Charter", a document that embraces the core principles of professionalism and that has been ratified by over two dozen medical specialty organizations. Among its core responsibilities are a commitment to professional competence, honesty with patients, patient confidentiality, commitment to maintaining appropriate relations with patients, improving quality of care, improving access to care, just distribution of finite resources, commitment to scientific knowledge, maintaining trust by managing conflicts of interest, and commitment to professional responsibilities. During the past months the Professionalism Subcommittee has been working to make the principles of professionalism more concrete and that there was a need to develop a compendium of examples of acceptable and unacceptable professional behavior. With this the committee will be recommending a series of actions throughout the medical center. Indeed, the medical school curriculum has already been modified to include sessions on professional conduct specifically focusing on the type of behavior to which our students will strive.

In addition to thanking Dr. Braddock and his committee for their progress to date, I want to underscore how important I feel these initiatives are for our community. Achieving and maintaining a respectful workplace that fosters professionalism must be among the highest priorities for every one of us. Indeed, we can only be successful when we each subscribe to professional codes of behavior – and when we are intolerant of those who are disrespectful or unprofessional. During the past three years we have tried hard to ensure a high standard of expectations for having our School of Medicine be a respectful workplace. The code of professionalism extends that expectation to all members of our community throughout the medical center. For the sake of our missions, those we serve – and each other – we should expect nothing less than a respectful workplace and highly professional behavior by all. I certainly will continue to do everything possible to assure that we achieve those goals.

# **US News and World Reports Hospital Rankings**

Today's issue of *US News and World Report* released its annual ranking of hospitals based on surveys of board-certified physicians across the country. Both Stanford Hospital & Clinics (SHC) and the Lucile Packard Children's Hospital (LPCH) have received "Honor Roll" ratings, with SHC ranked 14<sup>th</sup> (up from 15 in 2003) and LPCH ranked 12<sup>th</sup> (up from 18<sup>th</sup> in 2003). In the latest survey Neurology and Neurosurgery improved most dramatically (to 12<sup>th</sup> in 2004 from 25<sup>th</sup> in 2003) and improved standing was also noted for the SHC ranking in Cancer, Orthopedics, Psychiatry, Respiratory Disorders, Rheumatology and Urology. At the same time there were slight declines in SHC's ranking in Cardiac, Kidney Disease, ENT, Gynecology and Rehabilitation.

It is important to emphasize that these scores are in part reputation as well as based on metrics that are influenced by the size and scope of programs. Because Stanford University Medical Center is small compared to other major academic medical centers,

the relative size of our programs has an impact on the rankings. That said, SHC and LPCH have done quite well and are clearly among the nation's most valued hospitals. Indeed, there is every reason to expect that with our recent recruitments, new programs and accomplishments, these rankings will improve further in the years ahead.

It is also important to retain perspective since these rankings are far from perfect, even though they have a considerable impact on how the public views hospitals and on how hospitals and medical centers promote or market their putative excellence. As you may recall from my comments about the methods used by US News and World Report to rank medical schools (see April 5, 2004 edition of the Dean's Newsletter http://deansnewsletter.stanford.edu/archive/04\_05\_04.html), size plays an important role since a major factor is the overall amount of NIH funding. While Stanford School of Medicine was ranked # 8 among research medical schools its ranking is impacted adversely by the fact that it is among the smallest schools of medicine among its peers. Indeed, while Stanford has the highest amount of peer-reviewed funding per faculty member of any school in the nation, it ranks 12th in the total amount of funding – a factor directly related to its small size. I have been working to address the inaccuracy of this methodology and have communicated and met with the editors of US News & World Reports. I remain hopeful that they will place a higher value on quality over size in the methodology used to rank medical schools in the years ahead.

### **Trying to Understand the True Costs of Research**

Research is one of our most important missions and it defines Stanford as Medical School and Academic Medical Center. As a small research-intensive school of medicine, our faculty competes quite successfully for highly competitive research funding support from the National Institutes of Health and other public and private funding agencies and foundations. While we are successful in having the highest amount of peer-reviewed competitive NIH funding per faculty member of any school in the nation, the research dollars we receive (both direct and indirect support) do not cover the entire cost of supporting the research enterprise of the school. It has been generally assumed that in order to support the research mission of an academic medical center, approximately 15-20% of additional institutional support is needed to subsidize the true cost of the research enterprise. To better understand the true cost of our research mission, Ms. Julia Tussing, Managing Director of Finance and Administration in the School of Medicine, presented the results of her study on the cost of the School's research mission at the June 18<sup>th</sup> Executive Committee.

The reasons for attempting to ascertain the cost of research include the need to understand better the resource allocation decisions we make, to inform fund-raising objectives, to achieve transparency, and to identify the sources and uses of funds associated with the research mission. The methodology used in the study was based on the University's annual Indirect Cost proposal for FY03, which includes all sponsored research and associated indirect costs, "departmental" research and associated indirect costs, and training grants. Using this analysis, a minimum and a maximum cost of research were estimated.

The results indicate that the total cost of the research mission is \$391.5M, plus or minus 5%. Of that total, research sponsors do not pay for \$67M. Therefore, this amount is an investment by the School in the research mission. For every dollar in sponsored funds, the School provides a matching 22 cents from other sources. Another way of expressing this is that every 22 cents on the School's part "buys" \$1.00 in research support.

Ms. Tussing noted that it is important to keep in mind the extent to which the School's missions are entwined. For instance, education occurs in sponsored projects as well as department funded research. In addition, there are many tangible and intangible benefits of research that justify the cost to the School.

Ms. Tussing's presentation generated lively discussion among the chairs and members of the Executive Committee. There was a sense that, although the School could use the different indirect cost reimbursement rates by different sponsors in a strategic way in order to decrease the School's cost of research (i.e., NIH vs. most foundations), this would not be a good idea. For instance, training grants pay a lower indirect cost, yet we want them so that we can support trainees. We also want to have junior faculty accept competitive funding from foundations even though it pays lower indirect costs, because the research it supports helps them gather data that can provide the basis for a subsequent NIH research proposal. Further, we should not allow our research agenda to be driven by the level of support if the nature of the research is compelling and important.

Although this is a work-in-progress, the benefit of this analysis is that it will allow us to make meaningful comparisons to other schools and against our other missions. We can use it to identify trends and make informed decisions on how to fund our investment in research, which is, of course, vital to the success of the school – and indeed is the reason for being the Stanford University School of Medicine.

# The Importance of Human Subject Protection and the IRB

Human subjects protection is among the most important issues that academic medical centers face in the safe and responsible conduct of research. In an effort to monitor compliance with the regulations that govern the protection of human subjects, the Federal Office of Human Research Protections (OHRP) conducts not-for-cause audits of human subjects programs at institutions that receive federal funding. Results of these audits are made public, and failure to implement corrective actions may result in suspension of federal funding. After a recent review of a major academic institution, OHRP published several of their findings and recommendations.

One of the key findings made by OHRP was the observation that human subjects activities had commenced prior to IRB review and approval. This constitutes serious non-compliance and must be reported to OHRP. Because this is so serious and potentially can impact our clinical research mission, I want to remind all investigators that it is of critical importance to submit human research activities to

the IRB for prospective review and approval. This includes new protocols, revised protocols, and renewal of existing protocol activities.

Other findings discussed by OHRP involved matters that are handled through our IRB review process. They included the omission of relevant Federal grant proposals; consent documents lacking complete subject procedures, especially as they relate to possible risks and discomforts; and consent forms that were overly complex and not understandable to all subjects.

It is essential to remember that all IRB submissions must be complete, accurate and timely. I would strongly encourage you to visit the Human Subjects website for more information pertaining to the protection of human research subjects <a href="http://humansubjects.stanford.edu/medical/">http://humansubjects.stanford.edu/medical/</a>. Also please feel free to contact the IRB Education Specialist, <a href="mainsubjects.stanford.edu/medical/">Amanda.Grimes@Stanford.Edu</a>, (724-7141) with all of your IRB questions.

### **Update on the Institute on the Environment**

At the June 4th meeting of the Executive Committee, Dr. Jeff Koseff and his colleagues Drs. Gary Schoolnik, Peter Vitousek, Ron Dunbar, Suki Hoagland, Steve Schneider, and Leigh Johnson discussed the recently established Institute for the Environment. The Institute is a University-wide initiative that involves faculty from the schools of Humanities and Sciences, Medicine, Law, Engineering, and Earth Sciences, as well as the Institute for International Studies and SLAC. It currently has 232 faculty and research scholars on its email distribution list. I briefly described some of the ongoing development of this new Institute in the April 19, 2004 issue of the Dean's Newsletter (http://deansnewsletter.stanford.edu/archive/04\_19\_04.html).

An important emphasis in this discussion was the possible connections between the environmental sciences and the research agendas within the School of Medicine. For instance, connections between environmental science and biomedical research can be envisioned using the hypothesis that disease probabilities are based on combinations of genetic predispositions and environmental stressors. Specific areas of intersection include environmental toxicology, emerging infectious diseases, biodiversity and the search for new drugs, human physical and intellectual development, population growth and crowding, and environmental psychology.

Areas of intersection between the environmental sciences and the clinical sciences include carcinogenic toxins, endocrine disruptors, reactive airway disease/allergy, diagnostics, animal surrogate markers of environmental toxins, and novel (or old) infectious agents. Intervention opportunities exist at the connecting points between the environment, the individual, and the community. In addition, the Institute is looking forward to developing connections with the medical curriculum in the form of environmental health modules and a scholarly concentration.

The Institute on the Environment has also formed an ad hoc committee on Public Health and the Environment, whose mandate includes the following items, among others:

- To prepare a document describing the research, education, and advocacy opportunities in the environmental health sciences
- To create a database of on-going research projects in the SoM that have an environmental science focus
- To initiate an interdisciplinary Environmental Medicine Forum seminar series

The Institute for the Environment is an exciting initiative that has great potential for interdisciplinary connections with our colleagues across the campus. Dr. Schoolnik is the School of Medicine liaison with the Institute. He has informed me that he welcomes suggestions and ideas from our faculty as to how we might strengthen those connections, and I encourage you to be in touch with him (schoolni@cmgm.stanford.edu).

### **Update on the Department of Pathology**

At the June 18<sup>th</sup> Executive Committee meeting, Dr. Stephen Galli, Loveless Professor in the School of Medicine and Chair of the Department of Pathology, presented an overview of his department's mission and activities. The mission of the department is to improve the diagnosis, treatment, and basic understanding of human disease by clinical service, education and research. Structurally, the department consists of a leadership group, the Pathology Service, the Stanford Blood Center, PAVAHCS Pathology, Research, and Cores.

The spectrum of research done in the department ranges from basic science research to translational research to clinical investigation. Among the basic science research areas are stem cells, cell cycle regulation, oncogenes, leukocyte homing, protein evolution, and RNAi. Translational topics currently under investigation include immunotyping of lymphomas, cyclosporine mechanisms, microarrays and cancer, mouse models, and fly models. In the clinical arena, department faculty are studying such issues as diagnostic support for transplants, AIDS/CMV screening of blood supply, flow cytometry for HIV and other viral nucleic acids, molecular/genetic pathology, and dendritic cell trials.

The department's clinical pathology work consists of anatomic pathology and clinical pathology. Both are ranked very highly nationally. The anatomic pathology section has highly regarded ACGME-accredited clinical fellowships and outstanding translational/clinical research activities. The clinical pathology section has seen large increases in the number and complexity of tests offered in recent years, as well as significant increases in productivity and net revenues. The Blood Center has 190 employees and provided 134,000 transfusable blood products in 2003 (about a 40% increase from the year 2000). The Center has also made significant clinical advances, including the first AIDS screening in the world, the first CMV screening, and the first dendritic cell clinical trial.

The educational activities in the department include medical students, graduate students, post-sophomore fellows, housestaff (residents and clinical fellows), and postdoctoral fellows, as well as medical technologists and clinical colleagues.

Dr. Galli noted some of the challenges facing the department at this time, especially in the clinical service areas. He emphasized in his presentation that pathology is interdisciplinary by definition and "interdepartmental" by choice. The department "creates the future" in research and clinical practice, and provides SUMC as well as regional, national and international clients with clinical services of high quality.

I want to thank Dr. Galli for bringing us up to date on the many activities and accomplishments of this multi-faceted department and I also want to thank the faculty, staff, and students in Pathology for their many contributions.

### **Bioengineering Department Recruits First Faculty Members**

The new joint Department of Bioengineering has completed the recruitment of its first three new faculty members. By every measure this is a spectacular start to an exciting new department. The three new faculty include:

- *Dr. Jennifer Cochran* comes to Stanford from MIT's program in biological engineering with a strong track record in immunobiology and state-of the-art training in protein engineering. Jennifer is poised to build a research program in biomolecular engineering of new materials and therapeutics.
- **Dr. Karl Deisseroth's** work with controlled neurogenesis and neuroengineering offers fantastic potential to treat a wide variety of neurological disorders. Karl completed his M.D. and Ph.D. degrees at Stanford and is jointly appointed with the Department of Psychiatry. Karl will be an active participant in the Neurosciences Institute.
- **Dr. Steve Quake**, a former Stanford undergraduate and now the Thomas E. and Dorie Everhart Professor of Applied Physics and Physics at Caltech, will be moving to Stanford this fall. Steve's research on single molecule biophysics, microfluidics, and DNA sequencing has made him one of the top bioengineering scientists in the country.

Drs. Cochran, Deisseroth and Quake will be based in the Clark Center. I want to commend Dr. Scott Delp, Chair and Paul Yock, Co-Chair, for the tremendous job they have done in launching the department and for bringing these outstanding new faculty members to Stanford. While the department is still at its earliest stage of development, the recruitment of incredibly talented faculty, as well as students, offers clear evidence of tremendous future success.

#### **Stroke Center Seeks JACHO Center of Excellence Status**

Thanks to the leadership of Drs. Greg Albers, Michael Marks and Gary Steinberg, the Stanford Stroke Center is recognized as one of the best in the nation. It provides state-

of-the-art clinical care and is a leader in new innovations that have decreased the morbidity and mortality caused by stroke. To further validate its position as the number one center for stroke management, the Center's leaders and staff are now seeking JCAHO Stroke Center Certification. Accordingly, a site visit was held on June 29<sup>th</sup> to review the Stanford program. I attended the first portion of the review and was enormously impressed by the depth and excellence of the Stanford Stroke Center. Hopefully, JACHO will provide the Certification that will further validate the excellence of this program. Special thanks to Drs. Albers, Marks and Steinberg as well as the very talented faculty and staff throughout the Medical Center who make this program so outstanding.

## **Steve Leibel Arrives to Direct the Clinical Cancer Center**

In the March 8<sup>th</sup> issue of the Dean's Newsletter (http://deansnewsletter.stanford.edu/archive/03\_08\_04.html), I announced the appointment of Dr. Steve Leibel as the new director of the Clinical Cancer Center. As you may recall, Dr. Leibel is an internationally recognized oncologist who served as the Chair of Radiation Oncology at the Memorial Sloan Kettering Cancer Center until he joined Stanford in his role as Clinical Director of the Clinical Cancer Center on July 1<sup>st</sup>. I now want to formally welcome Dr. Leibel to the Stanford community. We all look forward to the important work he will do on behalf of Stanford.

I also want to use this opportunity to let you know that we are continuing to make progress in our application for becoming an NCI-designated Comprehensive Cancer Center. Each of the program areas are proceeding nicely and the only major (but still quite critical) task is the recruitment of the Principal Investigator. We still hope to complete that process in the next few months.

# **LCME Review Process Begins**

The Liaison Committee on Medical Education (LCME) will be conducting a site visit of the Stanford School of Medicine on October 16-19, 2005 as part of its standard accreditation procedures. We have a mandate with this visit to achieve full accreditation in contrast to prior LCME visits in which several areas of non-compliance were identified. Indeed, this visit is critical to the future success of the School of Medicine.

Accordingly, preparations for this very important site visit include completing an institutional self study and developing an extensive database on all aspects of Stanford's medical education program, including facilities, curriculum, learning environment, affiliated hospitals, graduate and post-graduate education, and research. The most recently completed academic year, 2003-2004, will be profiled in the database and the self-study.

Numerous subcommittees will be taking shape in the coming months, and each will hold approximately 2-4 meetings during the fall of 2004 to complete assigned parts of the self- study. We will seek broad based representation from administration, faculty, students, and other constituencies to serve on these committees. The monumental effort

that has and continues to go into the substantive curriculum changes already underway are perfectly complemented by the detailed analysis of our programs required by the LCME self-study process, with the ultimate goal of assuring that the school's goals fulfill the requirements set forth by the LCME.

I have asked Oscar Salvatierra, MD, Professor of Surgery and Pediatrics, to shepherd the LCME accreditation project. He and Rebecca Trumbull of the Office of Institutional Planning may be calling on you for help. I ask that you be ready to participate in this important endeavor if called upon; I realize that most of you are already overburdened with responsibilities, but this enormous undertaking is essential for the well-being of the school, and I appreciate the extra effort it may require from you.

I also appreciate your cooperation throughout this important process at a critical juncture in the history of our school, and thank you in advance for your support.

#### **Honors and Awards**

• Dr. Marlene Rabinovitch, Dwight and Vera Dunlevie Professor of Pediatrics will receive the American Heart Association Prize in Basic Science Research at its Annual Meeting in November 2004. This is a wonderful honor and we offer our congratulations to Dr. Rabinovitch.