Dean's Newsletter
November 5, 2007

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NIH Funding and Peer Review

One of the most significant challenges affecting academic medical centers is the continued decrease in research funding through the National Institutes of Health (NIH). Following the completion of the NIH doubling in 2003, the annual budget for the NIH has been below inflation, placing an enormous strain on new and established investigators and institutions. Just this week the Oregon University for the Health Sciences reported the serious financial challenges it is facing, in part related to the growth of its research enterprise in recent years. Research is obviously an important mission that has many important dividends, but it requires significant institutional support since research *per se* is not a revenue generating operation.

We know this to be true at Stanford, where, despite the enormous success of our faculty in receiving peer-reviewed NIH funding (in fact the highest amount per faculty member of any medical school in the nation), every dollar brought in through research requires nearly 30 cents of institutional support. One can say that, viewed simplistically, the larger and more extensive the research enterprise, the more institutional support required. Even so, in anticipation of and certainly during the NIH doubling, many academic medical centers throughout the USA significantly expanded their research facilities and faculty with the expectation that the research support from NIH would be sustained at least on par with biomedical inflation. Unfortunately that has not happened – and in fact the NIH budget has been below inflation for four years and gives evidence of continuing this unfortunate trend for the immediate future.

I have shared my thoughts about this challenge – as well as our actions to increase NIH funding – in prior issues of the Dean's Newsletter. While I do believe that the current negative trend will eventually reverse, I fear that it is likely to continue for the next year(s), especially given the current strains on the federal budget with the continuing war in Iraq, etc. There is no doubt that our faculty are feeling the strain as well and are writing more grants or revising others just to keep up. And many of our junior faculty note the decreased availability of their more senior mentors to review and advise them about their grants, due to the burden of time more senior faculty are spending on securing their own grant support.

Thankfully we were not part of the building boom that is now impacting other centers. This was purposeful, although we are woefully short on both wet and dry research space at this time. Hopefully this will be addressed by our staged Master Plan development that will unfold during the next 10-15 years. Ultimately this plan will provide the necessary high quality research space that our faculty need and deserve – but it will take time to get there. On the other hand, the fact that our building plans are staged temporally also means that we can adjust our future growth and recruitments to the funding environment that exists at the time – allowing us to be more proactive and not simply reactive, which is the situation in which many institutions now find themselves.

Status of NIH Funding for FY 2008

On Thursday, November 1st the House-Senate conferees on the FY08 Labor-HHS-Education Appropriations Bill approved a conference agreement. As it currently stands this includes a $30 billion budget for NIH. This is an increase of $1.1 billion – or 3.8% over FY07. But this includes a $300 million transfer to the Global HIV/AIDS initiative, so the actual NIH budget is $29.7 billion or a 3.1 percent increase. As it currently stands, the conference report will be filed today, Monday, November 5th and then sent to the House floor – perhaps on Wednesday, November 7th. Senate action is expected shortly after the House vote.

Not surprisingly, but unfortunately, incremental funding for stem cell research was removed from the bill in the Senate – except for work on cell lines generated prior to August 2001. Thankfully, with the California Institute for Regenerative Medicine (CIRM) now moving forward, we will be able to carry out stem cell research in California and at Stanford – but our national investment in this important area of investigation will continue to lose out to other nations around the world where stem research is proceeding forward.

There is still a lot of volatility in the budget process, so that the actual FY08 allocation for NIH may go up (unlikely) or down. And while the approximately 3.5% increment over FY07 is better than the President's budget – and better than what we recently expected - it is still lower than what we and our peer academic medical centers and professional advocacy groups around the country had advocated and hoped for. So, this difficult funding climate for NIH will certainly continue for another year. Of course, we will continue our work in Washington, both as an institution and in conjunction with

other national and local organizations and agencies, to make the case that increased funding of NIH is a critical national investment in innovation.

NIH Peer Review

In part related to limitations in NIH funding, many investigators have questioned whether modifications in the peer review system – including grant application size and scope, scientific review by study sections, etc – should undergo revision. In response to these concerns, the NIH recently hosted a series of Regional Consultation Meetings on Peer Review. I attended one of these sessions, which was held in San Francisco on October 25th. It was moderated by Dr. Lawrence Tabak from the NIH along with Dr. Keith Yamamoto, Executive Vice Dean at UCSF; Dr. Bruce Alberts, Professor of Biochemistry and Biophysics at UCSF and prior President of the National Academy of Sciences; and Dr. Mary Beckerle, Senior Director of Laboratory Research at the University of Utah.

NIH is seeking broad input on the peer review process from investigators, professional societies and other interested parties. Reviews are taking place within the NIH as well as in the extramural community. Issues such as shortening the cycle of grant reviews, the assignment of applications once a grant proposal arrives at NIH, the composition and alignment of study sections, and electronic submissions are among the topics being studied. The goal is to fund the best science by the best scientists with the least administrative burden. With that in mind, the stated purpose of this ongoing process is to identify possible pilot projects that might be implemented in the winter or spring of FY08. The NIH is interested in comments from the broad community, and you can send yours to PeerReviewRFI@mail.nih.gov .You can also gather additional information at the NIH homepage or at http://enhancing-peer-review.nih.gov/.

Dr. Yamamoto, in his presentation, identified a number of issues with the current peer review system. Among these are the intrinsic conflicts that exist due to the fact that as reviewers we tend to reward "like mindedness." We also know that top scientists tend to defend the prevailing paradigm (especially their own), which can make it sometimes difficult for new or transformative ideas to emerge. Moreover, reviewers and applicants are often both competing for the same pool of funding (which is shrinking), thus creating another kind of potential conflicts or bias.

In addition to these inherent conflicts, it needs to be acknowledged that the nature of research has changed – proposals are often broader in scope and greater in complexity, requiring a wider spectrum of expertise. Also, research projects are now, to an increasing degree, being performed by teams rather than by individual scientists in the traditional principle investigator model that has existed during the past decades. Added to this is a panoply of reactions and changes consequent to the flattening of the NIH budget. For example, there has been an explosion of grant applications (over 80,000 last year) as investigators seek ways to restore or sustain the funding of their research programs. This is made worse by the 13% decline in the budget's spending power. The numbers of applications and their greater complexity have required an expansion of NIH reviewers (now 18,000), but there are fewer senior faculty reviewers among them compared to a

decade ago. Sadly, the current pressures have also led a number of study sections and reviewers to adopt a more adversarial tone.

These changes clearly further heighten the problems created by decreases in NIH funding and require some new and bold thinking about how to move forward. Among the questions that need to be considered are whether the review process should be more *people* than *project* focused, whether it should follow more of an editorial board model, whether the face-to-face study sections should continue to be held, and whether the scoring system should be changed to a scoring system.

According to Dr. Tabak, a number of recommendations have been forthcoming from the regional consultation meetings – many of which also arose at the San Francisco meeting I attended. These include potential changes in review criteria (e.g., project vs. person, blinding reviewers to the applicant's names and institution, minimizing the requirement for preliminary data) as well as in review mechanisms (e.g., use of a two-staged review process, development of an applicant-reviewer dialogue during the review process to address and resolve reviewer questions). In addition, questions have arisen about modifying the review process according to the type of science (basic, clinical, clinical trials, interdisciplinary) or the applicant (new vs. established). And of course there has been discussion about the actual grant proposal– whether to decrease the required page count, modify the budget process, require preliminary data – and also whether to apportion the research investments according to perceived value or importance. An additional area of comment has been the current scoring system and whether that should be changed to a ranking model or a matrix scoring system.

It seems inevitable that some changes will be made in the peer review system at NIH – although hopefully any changes will be done carefully and incrementally so as to not inadvertently worsen an already compromised situation. Again, if you have thoughts or recommendations about how to improve the peer review process, send them to PeerReviewRFI@mail.nih.gov or alternatively send them to me, and I will get them to the appropriate individuals.

Clinical Research in Children

SPCTRM (Stanford-Packard Center for Translational Research in Medicine) joined with the CHRP (Children's Health Research Program) and the Department of Health Research & Policy to lead a week long intensive course in clinical research, study design and performance from October 22-26th. This is the second year of this offering and I want to thank Drs. Steve Alexander, Phil Lavori and Christy Sandborg along with their faculty and staff for making this program so successful. The clinical fellows and junior faculty who attended the course spent considerable time in didactic and practicum sessions that sharpened their skills in study design, data gathering and management, analysis, and reporting, as well as the ethics of pediatric research. While this program had a pediatric focus, I hope that future efforts address faculty and fellows from other medical and surgical disciplines.

I had the opportunity to address the attendees and to reflect on the history and

current status of clinical research in children. In doing so I reviewed the recent and past accomplishments – as well as some of the problems and challenges that have had an impact on pediatric research. For example, we all recognize the enormous benefits that have resulted from pediatric immunizations, the development of surfactant for RDS (respiratory distress syndrome), advances in childhood cancer, pediatric AIDS, and surgical and technical innovations. But we also need to remember well-intentioned research with negative, even if unintended outcomes (e.g., thymic irradiation and consequent thyroid cancer, studies on the transmission of infectious agents like hepatitis B, early forays into gene therapy leading to leukemia) that have impacted public as well as medical perception of pediatric research.

Another challenge is that therapeutic research in children is frequently limited or truncated by industry concerns over potential adverse reactions that might affect overall drug sales – or by the fact that children are such a small component of the marketing portfolio, so that drug companies are simply not motivated to invest in pediatric research. This has resulted in the fact that nearly 80% of drugs approved for adults have never been tested in children and that their dose and schedule has not been appropriately determined. While pediatricians use these drugs "off-label" and pharmacies formulate them for children, the assumed dosages may turn out to be different in children, resulting in significant negative consequences – as was observed when cyclosporine was first introduced, when antidepressants were given to teenagers, or most recently, when even commonly used agents, like cold remedies, were found to be unsafe in children, leading to pronouncements from advisory bodies (e.g., the FDA) with consequent confusion and concern by parents and families (see: NYT Editorial "Children and Cold Medicines").

To help address the lack of development of drugs for children, a significant advocacy effort (which I contributed to) resulted in the *Best Pharmaceuticals for Children Act of 2002*, which mandated that drug companies develop a plan to test new agents in children as part of their overall clinical trial portfolio. I should add that our Congresswoman, Anna Eshoo, played a critical role in moving this bill to approval, for which we are all grateful.

While there has been more focus recently on pediatric clinical research, there have also been some new challenges. A consequence of the Best Pharmaceuticals for Children Act was a charge to the Institutes of Medicine to review and make recommendations about the broad dimensions of pediatric clinical trials, which it did in a publication entitled *Ethical Conduct of Clinical Research Involving Children* (2004). The 14-member panel that was chaired by Dr. Richard Berhman (formerly Director of the Children's Health Initiative for LPCH and Stanford) addressed three broad themes:

1. "*Well-designed and well executed clinical research involving children is essential to improve the health of future children – and future adults – in the United States and worldwide.* Children should not be routinely excluded from clinical studies. No subgroups of children should be either unduly burdened as research participants or unduly excluded from involvement.
2. *A robust system for protecting research participation in general is a necessary foundation for protecting child research participants in particular.* An efficiently administered, effectively performing system with adequate resources must,

however, commit additional resources and attention to meet ethical and legal standards for protecting infants, children, and adolescents who participate in research.

3. *Effective implementation of policies to protect child participants in research requires appropriate expertise in child health at all stages in design, review, and conduct of such research*. This expertise includes knowledge of infant, child and adolescent physiology and development as well as awareness of the unique scientific, psychosocial, and ethical requirements and challenges of pediatric clinical care and research."

An important aspect of therapeutic clinical research involving children is the definition and balance of "minimal risk." The definition of minimal risk determines whether an Institutional Review Board (IRB) will consider and approve a pediatric clinical trial. This determination is also influenced by whether the minimal risk is offset by or justified by anticipated benefit to the child. This does not mean that research that does not convey benefit cannot be done – but it does set the bar higher and on occasion takes the decision outside of the institution – even up to the Secretary of Health and Human Services.

While I agree with most of the arguments and points made in the IOM document I do have one major objection to the their interpretation of "minimal risk." More specifically, the document is explicit in defining this a "the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations." While this may be appropriate for research involving normal children (e.g., for a new immunization) it is, I believe, a serious problem for developing new therapies for children with serious or life-threatening disease.

Having spent decades in conducting research involving children and adults with cancer and various infectious diseases, including HIV/AIDS, I would argue that these populations are already at risk for outcomes that are quite different than normal populations, and the determination of "minimal risk" should be informed by the context of the disease and potential outcome affecting these specific populations of children with disease. That is, minimal risk should not be defined in relation to the "normal experiences of average, healthy, normal children…in their daily lives" but rather to children facing a life threatening illness whereby minimal risk is defined in relation to their life situation. While I certainly recognize the principle of protecting children from harm, I also am a strong advocate for advancing knowledge to improve the lives of children facing serious and life-threatening illness. Had the interpretation of the IOM committee been strictly enforced over the past two decades or so, I fear that many of the advances in treating children with cancer, AIDS or other disorders may not have occurred – which is clearly unacceptable.

I also focused on the pathways for career development and the skills and achievements necessary to facilitate academic advancement as well as to promote the highest quality pediatric research possible. While Stanford has had only a relatively modest effort in clinical research heretofore, this is changing, and it is incumbent on all of us to assure that over time, the excellence of our clinical and translational research

efforts and investment approximate that of our outstanding accomplishments in basic science research.

First Summit on Clinical Excellence

On Saturday, October 27th more than 70 leaders from the Stanford University Medical Center gathered at Arrillaga Alumni Center for the first Summit devoted to improving the quality of patient care. The Summit resulted from the efforts of the SHC Medical Staff, led by its President, Dr. Bryan Bohman, to give voice to the importance of assuring and improving the quality of patient care across the medical center. I should add that there are ongoing and important activities in quality and outcomes research at Lucile Packard Children's Hospital, but the focus of this Summit was the adult hospital. Future meeting will surely be more inclusive of the full spectrum of clinical challenges.

The importance of clinical excellence was underscored by the attendance and participation of the chair of the Board of Directors, Mariann Byerwalter, who is also the chair of the Medical Center Committee of the University Board of Trustees. In addition, Dr. Woody Myers, former University Trustee and current SHC Board member and chair of the Quality Committee, also attended and actively participated – giving evidence of how serious the hospital and University Board members believe our efforts are in this area. As you know from prior communications, the current focus on quality of patient care services at both the institutional and the individual physician provider levels has become a focus of national concern and discussion. Hospitals – as well as individual doctors – are being compared by various outcome metrics, and, increasingly, the results are being published to make them available to patients and consumers as well as to the payers of health care.

Without question, perceived and actual performance will guide payments to hospitals and providers – as well as the referral of patients to medical care systems. As such, we are in competition with regional and national peers, including community hospitals as well as large medical centers. While the Stanford name carries brand value, that will surely be affected by how we fare on future evaluations and ratings. Moreover, our work in the area is not a point in time effort but one that will require constant improvement and oversight. It is something we all must take seriously, since in the end we will only be as good (or excellent) as is each member of the medical and related professional staff. And while we are focusing on quality at this juncture, equal attention has to be paid to the "service" we provide – which many would argue is also in need of continuing improvement.

To guide the discussion at the Summit for Clinical Excellence, the attendees heard from Dr. Paul Gluck, Associate Clinical Professor Obstetrics & Gynecology at the University of Miami School of Medicine and Chair of the Board of the National Patient Safety Foundation, and from Dr. Gerald Hickson, Associate Dean for Clinical Affairs and Director of the Center for Patient and Professional Activity at Vanderbilt University Medical Center. Dr. Gluck reminded the group that there are 44,000-90,000 deaths per year in the United States due to medical errors – which if put in the context of a disease, would make it the #3 cause of death. The cost of these errors ranges from $17-29 billion.

There are many reasons for these numbers, including the fact that as treatments have gotten better the risk for an adverse outcome has increased. In addition to problems with human fallibility, the very complexity of modern medicine-with emerging technologies, a broad array of powerful drugs, various professional backgrounds and, not infrequently, unclear lines of authority-contribute to making our medical system error prone.

One of the more insightful questions asked by Dr. Gluck was whether simply more rules could or would make our health care system safer. He argued that a focus just on rules has not had a major impact and that a culture of safety (and quality), as well as a focus on principles to assure patient safety, would have a greater impact than simply developing more rules. He underscored that such a shift would require leadership – beginning with Board members and institutional leaders and extending to all who are engaged in the health care system. Patient safety must be viewed as everyone's responsibility. Of course there must be clear delineations of responsibility and accountability. But safety can also be improved by designing systems to promote safe choices, by standardizing processes, supplies etc., and by putting less reliance on individual memory (e.g., of drug doses) and more on system prompts (e.g., information technology). This also requires team function and helpful interactions that are mutually responsible and accountable. Further, the systems put in place should anticipate the unanticipated and foster a culture that is non-punitive, transparent and focused on safety. An on-line resource that Dr. Gluck recommended is from the National Patient Safety Organization.

The Summit also included updates on the current status and progress at SHC (which I have commented on in a recent Newsletter) and the experiential efforts made at Vanderbilt that were described by Dr. Hickson. The attendees then heard brief presentations about the quality improvement plans of three clinical departments (Orthopedics, General Surgery and Medicine) as examples of current efforts, along with some observations and critiques of these and related efforts that are underway at the Medical Center, a number of which were further refined in small group discussions.

Overall, I felt that the first Summit on Clinical Excellence was a success in highlighting the importance of the problems and challenges we face and in bringing together the communities of faculty and community physicians with hospital staff and leaders. There were some importance lessons learned and experiences delineated – but it is also clear that we are at the beginning of what will be a continuing journey and that we still have a lot to learn and much to do. But the good news is that there is an ever-widening commitment to make quality a true medical center priority. In reality we have no choice – but we can only succeed with the work and commitment of each member of our community.

Personal Perspective on Clinical Quality

Recently Stanford Hospital & Clinics has launched a number of communication vehicles to highlight and underscore its commitment to improving patient care quality and safety. I was asked to write a brief opinion piece for one of these publications, which is entitled Compass. I am taking the liberty of including my comments in this Newsletter

as well, as they relate to my views about this topic and the efforts currently underway to address it.

Undoubtedly, each of us has had a recent medical encounter – with a family member, friend or ourselves. Many of us have also delivered care to a patient in the hospital or some other setting. We take for granted when we receive or deliver care that it is of the highest quality, the most cutting-edge, the most sophisticated available. But is this really true?

I certainly do not question that it is the intent of physicians and health care providers to deliver the very best care possible. But intentions are not good enough. The reality is that when a bright light is shined on our personal practices, inadequacies and imperfections are likely to be seen. To be sure, delivering medical care in high-volume, high-acuity centers like Stanford is challenging. And while there are opportunities for technical and cognitive *tours de force*, there are also abundant chances for errors and mistakes. This is especially true when we think we are better than we are – beyond error, reproach or the metrics used to measure and report the "outcomes of the merely average". After all, if we are members of the Stanford community, we must be on the top of the quality pyramid. I would argue that once we assume that, we become especially vulnerable to errors and mistakes.

I have practiced medicine in one form or another for well over three decades and during that time have cared for both adults and children with complex disorders like cancer or severe infectious complications. And like many of my Stanford colleagues, I would like to think that I am among the best in the field in my knowledge and clinical acumen. But if subject to critical and rigorous scrutiny, I fear that some of my medical decisions and knowledge would be called into question. Indeed I am always humbled by that prospect. Ironically, I suspect that the most sophisticated of my medical decision-making would be less vulnerable to critique than the decisions or recommendations one takes for granted, or simply fails to question. In fact, if compared to others on some "standardized evaluation scale" I suspect I would come up short on certain metrics and would likely want to offer a variety of reasons to justify my case or explain why the metrics were incorrect and shouldn't be applied to me – especially given the complexity of the patients I am involved with. And that would be a big part of the problem.

Physicians are notoriously individualistic in their styles, experience and self-assurance. Some of this is essential to successful medical practice, especially in technically demanding fields. But it can also color one's ability to accept criticism or to acknowledge that common standards may be equally or sometimes even more important than one's own unique knowledge. Multiplied over and over again throughout an institution like Stanford, one can appreciate how a culture of individuality, self-assurance and presumed excellence – and where attention to "minimal or expected" standards might be ignored, excused or even dismissed -

can actually result in poorer than expected performance when compared to peer institutions that pay attention to such metrics.

None of us want to be judged or compared to others unless we can be viewed as the best – or at least to have our way of doing things acknowledged as the preferred or ideal method or approach. Unfortunately, in the new world order of national quality norms and metrics, that is not likely feasible or even acceptable. We each need to strike a balance between individual excellence and adherence to accepted standards – even when we believe our own way is better. Whether we like it or not, we will be judged on that basis. And while for now those judgments are institutional and not personal, in time they will become increasingly physician and provider specific.

Of course the most important reason to focus on the quality of our performance – which requires a continuous improvement process – is because that is how we best serve our patients – including our friends and families. But unless we are seen in the community as providing the highest quality care when measured by national metrics – not just our own personal or medical center self-evaluation – we run the risk of losing respect and value. In the rapidly emerging era of "pay for performance" that also means we can lose revenue and even referrals. This will necessitate a culture change for each of us individually and for our institution as a whole. We need to be willing to suspend some of personalized standard of care and engage in team-based efforts that "standardize" rather than individualize aspects of our clinical practice. While I know this will be a challenge for some, it is also essential for the sake of our medical center community. While in the future we might be called up to write the book that defines quality performance, right now we have to demonstrate that we can read the book that all institutions are being mandated to follow. Only with that foundation in place will our "individual Stanford excellence" be really accepted and valued.

Thanks to Nancy Tierney

It is impossible to think about facilities planning, laboratory or office renovation in the School of Medicine without also thinking of Nancy Tierney. Nancy has been the mainstay of facilities planning for the School of Medicine for close to 12 years and is recognized as a knowledgeable and respected leader at Stanford and nationwide. Thus it is not surprising that she has been lured to a new and exciting challenge as the Associate Dean for Facilities and Planning with the University of Arizona College of Medicine, Phoenix, where she will help plan and develop a new medical campus. While I can certainly appreciate Nancy's motivation to take on this exciting new challenge, it is to our loss at Stanford, where she will be surely missed. I want to thank Nancy Tierney for all that she has done to improve the institution we work at – our education, research, office and even clinical spaces. She has served us remarkably well, and I know I speak for our entire medical community and in saying we are deeply appreciative.

Please join me in thanking Nancy Tierney for many wonderful contributions and in congratulating her and wishing her future success in her new position at the University of Arizona.

The Stanford Wellness Collaborative

Over the past year a University wide effort, initiated by Provost John Etchemendy and led by Mr. Eric Stein, Senior Assistant Athletic Director, Physical Education, Recreation and Wellness, has engaged faculty, students and staff to develop programs and initiatives to promote health and wellness. This is an enormously important program and one where Stanford University can almost certainly serve as a national role model. Numerous health promotion, exercise, diet and other programs are taking place at Stanford, and you can learn more about how they might affect you and your coworkers by visiting the new website http://BeWell.Stanford.edu/ . I encourage you to visit this site and begin incorporate some of its offerings into your own life.

Student Affairs Takes on a New Name

As of November 1, 2007, the Office of Student Affairs (OSA) will be known as ***Educational Programs and Services (EPS***). This name change was prompted by a desire to capture the breadth and depth of activities carried out by this important component of the Dean's Office. More specifically, the old name, "Office of Student Affairs," suggested that its responsibilities were limited to providing services (i.e., admissions, advising, registrar, financial aid, and student life) for students (i.e., medical students and graduate students). While providing student services is a critical part of the responsibilities of this office, the new name more accurately reflects the comprehensive education, training, and service responsibilities of the organization. The new name also reflects the fact that EPS leads programs and services for more groups than medical and graduate students, including postdoctoral scholars, residents and fellows, and Continuing Medical Education learners. A complete list of programs and services can be found on the Educational Programs and Services web page.

Preparing for Pandemic Flu

At the November 2nd Executive Committee meeting, presentations were given regarding the emergency planning to date by the University, for the Stanford campus, and by the hospitals, for providing medical care, in the event of a pandemic influenza.

Lawrence Gibbs, Associate Vice Provost for Environmental Health and Safety, described interventional and mitigation strategies that would be used by the University in such an event. These fall into two categories: pharmaceutical (such as vaccination, if available, and treatment of infected individuals) and the implementation of social distancing and other infection control measures. These latter measures could include the suspension of classes; sending students home; dispersal of faculty/staff not required during emergency; minimization of assembly of people; information and education on infection risks and controls; and mitigations for personnel involved in emergency

response. Mr. Gibbs emphasized that the goal of the plan is to respond in a timely fashion to mitigate the effects of a pandemic flu on the Stanford community. A key decision would be at what point in the onset of a pandemic to initiate the dispersal of students.

Mr. Gibbs also outlined the key elements of the campus plan and reviewed the response areas and levels of action that might be required. The response areas are: communications; academic and research programs; student affairs and housing/dining operations; administrative services (faculty and staff); and facilities, transportation and campus security. He described the critical issues for the response levels, which range from "0" (limited/isolated international cases) through "4" (government declared emergency due to cases spreading in the US) and outlined the next steps in the refinement of the final plan, which is scheduled to be available on line in the near future. He emphasized that the next, critically important, steps involve planning at the school, department, and division level. Tools will be forthcoming from his office to assist in planning in such areas as identifying required staff and dealing with laboratory issues in the event of an extended emergency period.

Dr. Eric Weiss, Associate Professor of Surgery, presented an overview of the Pandemic Influenza Response Plan (PIRP) of Stanford Hospital and Clinics and the Lucile Packard Children's Hospital. The PIRP consists of 14 modules including, among others: surveillance and screening; infection control; inpatient care and clinical guidelines; antivirals/antibiotics/vaccines; triage protocols; surge plan; lab diagnostics; human resources and occupational health; communication and training; security; and influenza care centers. He outlined the phases of a pandemic and the hospital response in each phase and reviewed the recent histories of H5N1 and SARS episodes. Dr. Weiss emphasized the speed with which these infections spread as well as the need to train health care workers in the proper use of protective equipment. He also commented on the collaborative efforts of the hospital and University groups that have been underway to assure the smooth functioning across the institutions of response to a pandemic flu.

Both the University and the hospitals have made enormous progress in their planning efforts. I am very appreciative of these efforts and look forward to the further refinement of the plans, even as I hope that we will not have to implement them.

Earthquake Preparation and Information Links

After being in California for over six years, Monday was my first earthquake experience. This is likely true for many individuals who have joined Stanford since the much more serious Loma Prieta earthquake of 1989. If you are like me, the recent earthquake served as a wake up call. While we have prepared an earthquake emergency kit, etc for our home and while we have rehearsed earthquake preparedness for the university, the actual experience compels one to think through whether one's personal and work preparations are as up-to-date as possible.

As a reminder there are a number of important emergency hotlines at Stanford – and you should be carrying a card with their number with you at all times. To remind

you, in case of an earthquake or emergency, bulletins and updates for the Stanford University community will be available on KZSU (90.1 FM) or KCBS (740 AM). The Stanford University Emergency Web Site is http://emergency.stanford.edu.

You can also call to hear bulletins and updates at:

- **School of Medicine Emergency 723 7233**
- **University Announcements 725 5555**
- **Stanford Hospital & Clinics Bulletins 498 8888**
- **Lucile Packard Children's Hospital 497 8888**
- **Student Information in SoM 725 4600**

You should have these numbers with you at all times.

In addition, Dr Henry Lowe, Senior Associate Dean for Information Resources and Technology alerted me to some useful websites to access should/when another earthquake occurs. The best is http://quake.usgs.gov/recenteqs/Maps/San_Francisco.html since it is updated rapidly and reports location and magnitude in minutes. If the earthquake is of significant magnitude the site will also contain an "aftershock warning" link.

But most important is to familiarize yourself with the disaster planning procedures in your department and also to review and update your disaster preparations at home. This is a good time to do so.

Update on the Department of Medicine

Also at the November 2nd Executive Committee meeting, Dr. Ralph Horwitz, Arthur L. Bloomfield Professor of Medicine and Chair of the Department of Medicine, provided an update on his Department. He has provided this summary of his remarks.

The Department of Medicine comprises 145 full-time faculty distributed across 14 divisions. Among the 125 AAMC Medical Schools, Stanford's department ranks 63rd in size, but is second in NIH research dollars per faculty FTE. Our faculty are notable for their prominence with 41 members of the American Society for Clinical Investigation, 26 of the Association of American Physicians, and 13 members of the Institute of Medicine.

Several years ago, the Department's leadership identified research goals in disease based research, patient-oriented sciences, enabling technologies, and device development. More recently, the Department has established research focus in three major areas: Genomic Medicine, Imunology, and Patient/Population research. In Genomic Medicine, the department has initiated a proposal to establish a Center for Genomic Medicine in collaboration with the Dean's office and several other departments. The goals of the Center are to build

upon and substantially expand Human Genetics research at Stanford and to attract an increasing number of physician investigators to studies of the role that genetics plays both in the risk for developing disease and in determining treatment response. Along with other departments and centers at Stanford, Medicine is also actively engaged in strengthening our capability in the evolving field of "personalized" medicine.

A great Department of Medicine must also have a robust program of patient and population based research. The focus of these programs in the department extends across the full spectrum of research, including prevention, diagnosis, prognosis and therapy. The research methods require both experimental and observational designs and a cutting edge application of statistical methods (we are fortunate to have a superb faculty in Health Research and Policy who are among the nation's leaders in the design and analysis of research). Unlike research in laboratory sciences where creativity is often noted in the development of hypotheses, creativity in patient/population research is often reflected in the methodologic invention that enables valid, reproducible and generalizable results. The Department is actively recruiting both senior and junior faculty to enhance these programs of research.

In education, the Department has plans for a renewed commitment to national leadership. Recent faculty recruitments will enable the department to promote an emphasis on the craft of Medicine and to highlight research education as a core value. Recognizing that many of our students and residents are clamoring for experiences in International Health, we are actively pursuing new and expanded opportunities for clinical rotations in the developing world.

The clinical programs of the department have grown substantially these past several years and the faculty are now focusing greater attention than ever on measures of clinical quality. We do so knowing that we cannot be a great department unless we practice superb clinical medicine. We do so, too, believing that the practice of Medicine is the most ennobling aspect of the Profession of Medicine. The Department of Medicine must always celebrate and reward the achievements of our outstanding physicians whose dedication to clinical care honors our duty to our patients and the broader society.

Some Notable Events

Honoring Past Leaders: On October 25th we hosted a dinner in my home to thank and celebrate some of the past leaders of the School of Medicine and Medical Center. We will be having a number of events during the next two years as well to commemorate, first, in 2008, the centennial of the School of Medicine and, second, in 2009, the 50 year anniversary of the Medical School's move to the Stanford campus. At this recent event we hosted Dr. Lawrence Crowley, who

served as Acting Dean of the School of Medicine from 1979-198 and Vice President of the Medical Center from 1980-85, along with Dr. Robert Glaser, who served as Dean from 1965-1970, Dr. Sidney Raffel who served as Acting Dean from 1964-65. Dr. Paul Berg, who prides himself on never having been dean, also joined us. I found the recounting of the challenges and accomplishments of each of these leaders particularly informative. Their similarity to the issues we face today was notable and underscored how much our current efforts build on efforts and successes of these past leaders.

Second Annual Oscar Salvatierra Lectureship in Transplantation was delivered by Dr. Thomas E Starzl on Thursday October 25th. Dr. Starzl, Professor of Surgery, University of Pittsburgh, is one of the pioneers of transplantation during the 20th century, whose contributions to research, training and patient care have been nonpareil. In his lecture entitled "The Biological Basis of Transplantation" Dr. Starzl highlighted some of the seminal contributions made by Stanford faculty members during the past several decades to the present and discussed some of the exciting opportunities that lie ahead – and where Stanford leaders will surely continue to make important contributions.

Dr. Harvey Cohen was installed as the Deborah E Addicott- John A Kriewall and Elizabeth A Haehl Family Professor at a celebration on October 24th. Dr. Cohen served as the past chair of Pediatrics and is now pursuing exciting work in proteomics related to the diagnosis and prognosis of a number of childhood diseases. This new professorship was created to acknowledge his enormous contributions to LPCH and Stanford and to help support him in his new role as a professor of pediatrics. I want to thank each of the wonderful individuals whose contributions made this professorship possible.

Pediatric Faculty Begin Strategic Planning: In anticipation of his arrival on January 2, Dr. Hugh O'Brodovich, the next chair of Pediatrics at Stanford and LPCH, held an all day retreat of the pediatric faculty to begin charting the future the department. The focus was on faculty development with a particular emphasis on junior faculty and their important roles in the department and institution. While there is no doubt that pediatrics and LPCH have made considerable strides in prominence during the past decade, it seems clear that another series of major programmatic initiatives will be soon launched by Dr. O'Brodovich – which promises exciting opportunities for Stanford and our community.

Awards and Honors

Thomas Rando, Associate Professor of Neurology and Neurological Sciences and Deputy Director, Stanford Center on Longevity, was honored recently in Halle, Germany for his research on stem cells and aging. He was the Keynote Lecturer and Schober Award recipient at the International Symposium on Tissue Aging held at the Martin Luther University Halle, Germany. The symposium was

organized by the Department of Cardiothoracic Surgery and the Department of Cardiology in cooperation with the German Society of Thoracic and Cardiovascular Surgery and the German Society of Gerontology and Geriatrics. Congratulations, Dr. Rando.

Christina Swanson, PhD student in Dr. William Robinson's laboratory, and **Michael Thomas Wong,** PhD student in Dr. PJ Utz's laboratory, have been selected as the 2007-08 Mason Case Fellows in the Biosciences. Ms. Swanson's research project is on tryosine kinase inhibitors for the treatment of rheumatoid arthritis. Mr. Wong will study the cytokines and soluble factors that drive IL-17 production in human CD4+ T cells.

Jonathan Riboh, a Stanford Medical Student, was awarded the Joseph Boyes Award for Best Scientific Paper at the 2007 Annual Meeting of the American Society for Surgery of the Hand. Congratulations, Jonathan.

Appointments and Promotions

Ingrid Aalami has been reappointed as Clinical Assistant Professor (Affiliated) (Obstetrics and Gynecology), effective 9/01/2007.

Bernard W. Dannenberg has been reappointed as Clinical Assistant Professor (Surgery, Emergency Medicine), effective 9/01/2007.

Jon Fuller has been promoted as Clinical Associate Professor (Affiliated)(Medicine);, effective 9/01/2007.

Gordon S. Kaplan has been reappointed as Clinical Assistant Professor (Surgery, Emergency Medicine), effective 9/01/2007.

Michael Laufer has been reappointed as Clinical Assistant Professor (Surgery, Emergency Medicine), effective 9/01/2007.

Quoc Luu has been appointed to Clinical Assistant Professor (Radiation Oncology; Radiation Therapy), effective 10/29/2007.

Raj Mitra has been reappointed to Clinical Assistant Professor (Orthopedic Surgery), effective 11/01/2007.

Susan Price has been reappointed as Clinical Assistant Professor (Affiliated)(Medicine); effective 9/01/2007.

Elizabeth H. Raphael has bee reappointed as Clinical Assistant Professor (Surgery, Emergency Medicine); effective 9/01/2007.

Joseph Ryan has been reappointed as Clinical Assistant Professor (Surgery, Emergency Medicine), effective 9/01/2007.

Carla Shnier has been reappointed to Clinical Assistant Professor (Anesthesia), effective 11/01/2007.

Martin Wong has been promoted to Clinical Associate Professor (Affiliated) (Obstetrics and Gynecology), effective 9/01/2007.

Ken Zafren has been reappointed as Clinical Assistant Professor (Surgery, Emergency Medicine), effective 9/01/2007.