

Dean's Newsletter

January 23, 2006

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The NIH Now and in the Future

On January 17th I attended a rather sobering invitational meeting sponsored by the AAMC (Association of American Medical Colleges). Its purpose was to review and discuss current and future funding scenarios by the National Institutes of Health Deans and university leaders from the more research-intensive schools of medicine attended the meeting along with the AAMC policy staff and leadership. Background information was provided by Sue Quantias, House Labor-HHS-Education Appropriations Subcommittee; Bill Hoagland, Director of Budget and Appropriations, Office of the Senate Majority Leader; and Morton Kondracke, Executive Editor, *Roll Call*, along with the AAMC policy group. The news we heard is challenging at best and, while we would all prefer not to be in this situation, the goal of the meeting was to plan actions we might take to change or at least modify the course of currently unfolding events. I want to share my own perspective and analysis to make you aware of what the current perceptions in DC appear to be and to suggest what we need to do to impact the current situation. Importantly, I am also interested in soliciting suggestions or recommendations from you about this enormously important issue.

I am well aware that many of you are quite concerned about NIH funding and that some of you have already begun to experience challenges and problems. It is ironic that it was just several years ago that we were riding the crest of the NIH doubling, and many individuals and institutions expected those halcyon days to continue for many years to come. Indeed, many of our peer institutions went through a building boom to create significant new laboratory space with the expectation that faculty size and institutional success would grow along with NIH funding. And, of course, I would be remiss if I didn't acknowledge the fact that the NIH budget did double from \$13.7B in 1998 to \$27B in 2003 and that this remarkable increase occurred at a time when many other federal programs were flat-to-reduced in funding. The doubling represented the significant and sustained efforts by a number of congressional champions, along with disease advocacy groups, professional societies and others. However, it also created a number of expectations, some quite unrealistic. Looked at from a different perspective, except for a very small number of years, the NIH budget has actually increased by an average of

about 8% per year since 1960. And, of course, it is because we have had a relatively robust NIH that the United States has been the world leader in biomedical research.

That said, the NIH budget in FY06 (the current fiscal year) is down 0.1% from last year and, when adjusted for inflation, is down 3.1%. It was also down compared to constant dollars by 1.2% in FY05 and by 0.7% in FY04. Moreover, it is widely expected that the President's budget proposal that will come out in February will show the NIH budget to be flat for FY07. While there have been downturns previously (albeit only three times) in the NIH budget, this has not previously occurred for two or more consecutive years – making the current scenario even more concerning. Based on what we heard from the congressional pundits and budget directors, it seems unlikely that relief is in sight. The reasons are multi-factorial and include the federal deficit, which is likely to be in the \$400B range and which is made more difficult by the current tax policy, and the war in Iraq (which appears likely to require an additional supplement of \$50-100B in the months ahead), along with other major calls on discretionary funding.

Although we still have some champions for the NIH, the general perception is that their voices are not being heard and the more general sentiment is that the NIH has had its day in the sun - at a time when other agencies did not – and that the funding should not increase. Some apparently even argue for decreases! It also appears that many of the disease advocacy groups have been quieter in the past 2-3 years than earlier, perhaps becoming a bit more complacent after the efforts to achieve the aforementioned doubling. But more concerning is the view – which we were told was quite prevalent – that the NIH has not fulfilled its promise in delivering breakthroughs or cures as a consequence of the budget doubling. As is obvious to those of us in biomedical science, it is unrealistic to expect that kind of success after such a short time. It is more relevant to examine what has been achieved in improving health outcomes by the NIH funding that occurred for basic research during the past 10-30 or so years. Through that lens the impact on health and wellbeing has been startling –a consequence of both fundamental and applied research. Clearly, in addition to the fiscal constraints we now face, there is also a significant information gap between biomedical scientists and the public and policymakers.

In fact, while it is true that most Americans, when queried, have a positive view toward biomedical research *per se*, most have never heard of the NIH. When congressional staffers were questioned about where NIH funded research was being conducted, nearly 20% thought it was all going on in Bethesda, 40% indicated that the research took place in medical schools and academic medical centers and the remaining 40% said they had no clue! Add to this the fact that over 40% of Americans believe in creationism and the rising tide of anti-science in the nation, as I have discussed in previous Dean's Newsletters and it is obvious that education of the public as well as the congressional staffers and leaders has to be one of our highest priorities – although this must be viewed as a long-term effort.

In addition to the expressed viewpoints that NIH has received its “fair share” of the HHS/Labor budget and that it hasn't met the expectations of major disease

breakthroughs or cures, we heard the sentiment that many in the Congress believe that NIH should not be emphasizing science but rather health. Clearly this misses the point that improvements in health are a dividend of scientific research – often following decades of research investment.

Perhaps ironically, the message that is resonating – in part because of the advocacy of University leaders - is that funding needs to be placed in the physical and engineering sciences if the US is to remain competitive in the global science and technology arenas. Certainly this is true, and there is no doubt that these important areas have been underserved and that without increased support the US will lose its lead – or may already have done so. This message seems to have struck a cord (which is encouraging), and there is an expectation that not insignificant funding (perhaps in the order of \$10B over the next several years) could find its way to the National Science Foundation to help address this important need. And while this deserves our support, an unintended consequence is that biomedical research could be compromised, given the overall fiscal crisis facing the federal government.

Along with these changes in expectation and funding, a prevailing view appears to be that the NIH should be engaged in more translational research, although the definition and indeed understanding of what that means is highly variegated. In addition to the NIH Roadmap efforts, there has been a proposal by Senator Lieberman (D-CT) to set up an organization that would focus specifically on translational medicine and cures – likely funded by money taken from NIH. Hopefully this will not come to pass. But it does seem probable that some facet of the NIH reauthorization could occur during the next congressional session, at least on the House-side, given the strong position and leadership of Congressman Barton. This could also have the effect of moving more dollars into a “common fund” (potentially up to 5%) to support translational research and director initiatives – which could further limit the funds available for investigator-initiated research. And while a number of advisory groups, including the National Academy of Science (NAS) and the Institute of Medicine (IOM), have recognized the importance of strengthening the NIH Director’s authority and creating more interdisciplinary research, these recommendations occurred at a time when a growing NIH budget was envisioned. Given the current situation such tradeoffs would certainly be undesirable.

As distressing as these scenarios are, they also need to be set in a broader context. Looming in the not too distant future is the impact of entitlement programs, especially Medicare, on the federal budget and the impact they could have on overall financial solvency. Coupled with this is the aging population along with the fact that healthcare in the USA is in such disarray. The problems of access, rising costs and the impact on employers are rapidly shifting health care costs to consumers. At the same time many large companies (most recently, General Motors) are facing serious problems leading to significant changes in employee benefits – which will place additional strains on the health care system. And while Americans have not yet accepted the need for fundamental change in health care expectations, this will almost certainly change as they bear additional costs during the years ahead. As you likely know from prior comments I have

made on this topic, I believe radical change is needed to reform (or even develop) a functional and credible health care system in the United States.

Certainly the situation I am describing is sobering and distressing. But it is important to note that even while the forces in play are somewhat different at this point than in the past – and while they are potentially more refractory to facile remedies – it is incumbent on us to find solutions. I noted at the January 17th meeting that when faced with issues like these we often seem to develop a reactionary response rather than crafting a plan that extends over time. When this occurs, it is easy to lose sight of the issues and to run the risk of not developing more enduring solutions.

Clearly our efforts need to be directed to issues within our own institution as well as to addressing them in a context that is regional, national and global. At Stanford it is particularly important that we think creatively about how we can support our students, trainees and faculty to weather the NIH funding storm – especially since the current budgetary downturn could represent the beginning of a multi-year cycle. We need to program resources to create some bridge funding that we can use for critical interventions. The Dean's Office will work with the Executive Committee to come up with plans about how to do this. Clearly we also need to be sure that the investments we make are wise and to seize the funding opportunities that are available.

I believe that because of the work we have done to implement *Translating Discoveries*, we should be competitive for NIH funds that will emphasize interdisciplinary or translational research through the NIH Roadmap and its further evolution. But we need to address finding new funding opportunities as they develop. For example, while funds for the physical and engineering sciences will impact discrete areas in those disciplines, there are many connections between the physical and life sciences that have been well established by Stanford faculty – and that should be further developed as these opportunities emerge. In addition, it seems likely that funding will be available for addressing the prospect of influenza pandemic, and we should be thinking about how to be competitive for those funds as well. And, of course, in California we have the prospect of considerable state-supported funding for stem cell research through the California Institute for Regenerative Medicine – once the litigation is resolved – and that will surely help compensate for limitations in federal funding for biomedical research, at least in selected areas.

These potential funding opportunities, coupled with the reality that we have among the most successful faculty in the nation in the competition for NIH funding, mean that the situation at Stanford is not as likely to be as bleak as in a number of other institutions. And while one of our biggest current constraints is the lack of research space we are, ironically, lucky that we have not constructed a lot of space with the expectation of an increasing share of a growing NIH research pie. At least as we bring on new research space it will be planned for areas where we have high confidence of success – and the likelihood that we will attract faculty who will make that success achievable.

In addition to addressing issues within Stanford, we also need to focus on the regional and national challenges. Clearly the continuing education of our community about the important linkage between basic research to translational research and improvements in patient care is essential. We have in fact been actively engaged in this over the past several years, and those efforts must continue. It is incumbent on all of our faculty and students to do what they can to further foster the educational dialogue with our community.

We must also reach out to the business community. As a member of the Board of Directors of the California Healthcare Institute, which is comprised of CEOs from the biotechnology and pharma, as well as academic leaders, I am convinced that it is essential that this community be engaged in making the case for the importance of fundamental research and for the critical linkage between academia and industry in the development of drugs, biologicals and devices. Such messages need to be carried more broadly to our state and federal government leaders and officials by visits to Sacramento or Washington or by hosting congressional visits to Stanford. Thanks to the efforts of Ryan Adesnik, Director of Federal Relations and Paul Costello, Executive Director of Communications and Public Affairs, we have already initiated such programs both at Stanford and in Washington. Obviously, additional efforts are needed.

Ideally we need to work collaboratively with our professional societies to shape as common a message as we can. Work through FASEB (Federation of American Societies for Experimental Biology) is achieving this in part. We were told during the AAMC meeting that asking for additional funding or pleading the damage that will be done to the biomedical research enterprise under the current budget plans will likely fall on deaf ears. While I understand that there may be congressional ears that are indeed deaf to requests for more funding, I don't agree that we should step back from advocacy. In fact, it seems obvious that not engaging the policy makers would be a mistake and could lead to even further erosion of funding. Certainly nothing will be gained by pitting science against itself, so that arguing for biomedical science versus the physical and engineering sciences would be counterproductive for all. But making the linkages clear could help, as would thoughtfully describing how research – even when it takes decades – can produce remarkable changes in human health. This is self-evident to all of us in the biomedical research community, so it is shocking to recognize that many Americans, including our government leaders, don't understand or appreciate this. As I have stated frequently, we have considerable education to do, but we also need to make sure that our message is clear and is spoken in a manner that is understood by our audience.

I fully recognize that many of my comments will prove disturbing to most readers. I have tried to not be hyperbolic, but I have not hesitated to convey what I have heard in a number of settings, most recently the AAMC meeting I just attended. While denial would be easy, this is a time when we all need to take some steps back and reflect on how we can better make our case. Whether we like it or not, the current situation makes it evident that we have missed the mark in changing the minds of our government leaders. I will certainly continue to do my part, but it is clear that we all need to join in. If you have additional suggestions or recommendations I would welcome hearing them.

The Many Faces of Compliance

On January 10th I co-chaired a workshop on compliance sponsored by the Association of Academic Health Centers (AAHC). The stimulus for this meeting was the view emerging from many academic medical centers (AMCs) that the regulations impacting universities, medical schools and teaching hospitals are rapidly increasing and are consuming ever more resources and time— especially at those institutions engaged in research, particularly clinical research. While there are many credible reasons for care, scrutiny and regulation about the work we carry out in AMCs, the increasing time and money spent to support the required regulations and reports are ever more burdensome – and seemingly without end. Accordingly, the goal of this workshop was to review the broad landscape of compliance issues and compare experiences among leaders in the field on how we might better address them. Some of the increased compliance requirements are the consequences of errors or problems that have arisen in various centers, and, to a degree, they reflect a lack of trust or confidence by the public or regulatory agencies.

In anticipation of this meeting I asked Steve Jung, Director of Internal Audit and Institutional Compliance, to share with me the major concerns he faces in assuring that Stanford avoids infractions that could damage its reputation or result in adverse consequences to faculty, schools or the university. His concerns were based on his own assessment as well as shared experiences from peer institutions, and they were far-ranging. Included among the issues creating potential vulnerability are: individual or institutional conflict of interest, problems in faculty effort reporting, failure to abide by NIH salary caps, failure of PIs to properly and timely certify effort, lack of certification or documentation of proper training in human subject research, inadequate security of confidential information within university databases and networks, safety or biohazard laboratory infractions or inability to identify “restricted persons”, lack of compliance with Medicare billing rules or lack of documentation for billing in clinical research, lack of compliance with reporting under the Patriot Act or in export controls, improper treatment of laboratory animals, etc.

At the workshop we spent a considerable effort delineating the issues surrounding these and other compliance challenges and then focused on how we could better address them going forward. A strong sentiment was expressed about the need to build better bridges to the groups imposing the increased rules and regulations, in order to better understand their perspective (if possible) and to engage in a proactive dialogue that brings the parties together before the rules are formulated and imposed. Naturally attention also turned to seeking ways to make the demands more harmonized and less counterproductive, given the manner in which they impact our missions in education, research and patient care. There was also the recognition that a likely factor promulgating increased regulation is the heightened distrust of the AMC or university that has been spawned by noteworthy (and often newsworthy) scandals. Hence, a greater focus on professionalism as a core value in our medical centers, for students and faculty, is an imperative.

Needless to say, the coupling of decreased federal support for research (see above) with increased regulation constitutes a serious impediment to our success – and morale. Since both of these challenges can be related, at least in part, to failure to educate our constituencies or better secure the public trust, it is evident that we have considerable work ahead of us.

Institutes, Strategic Centers, Departments and the School of Medicine

In previous issues of the Dean's Newsletter I have written about the ongoing progress that is taking place to further develop our Stanford Institutes of Medicine and Strategic Centers. In doing so I am cognizant of the changes that these new programs will bring and mindful of how they will interact and interface with important existing programs in departments and throughout the School. A major reason for championing the Institutes as a key facet of our overarching plan of *Translating Discoveries* is my belief that big bold ideas that link faculty and students/trainees across the School and University to address important issues in bioscience and human health will capture the attention of our community and help us to raise the funds needed to carry out our important work throughout the School. To help further link and connect these efforts I chaired another in our series of mini-retreats with Institute and Strategic Center Directors on Saturday, January 14th.

While I have stated the following in numerous other settings, I still feel compelled to underscore that the Institutes, Strategic Centers and other broad initiatives could not take place without the remarkable foundation in basic science that exists at Stanford. Without that we would be building on sand. But given our strong foundation – and its continuing organic strengths – I am confident that we can create new organizational alignments that we can all be proud of.

Among our five Institutes (I count the Cancer Center among these) continued progress is being made, although some are ahead of others at this juncture. Indeed, I would say that the Comprehensive Cancer Center is now the leading edge and is surely being further catalyzed by the rapidly approaching February 1st deadline for submission of our grant proposal to the National Cancer Institute. I am pleased with the progress that has been made to date and deeply appreciative of the leadership of Drs. Irv Weissman, Bev Mitchell and Steve Leibel, who together encompass the spectrum of basic research, translational medicine and patient care. They are also building on the seminal efforts of Dr. Karl Blume during the past three years. The very positive reviews we have received from external advisory boards and scientific consultants over this time are gratifying and, while our success in securing the grant is by no means guaranteed, I know that we will make a good showing. It may have taken 35 years for Stanford to finally make a submission to the NCI to become a designated comprehensive cancer center, but I am pleased that we will now do so.

Perhaps the next most established Institutes are Stem Cell Biology and Regenerative Medicine and the Neurosciences Institute at Stanford. Of course they are

also among the oldest of our Stanford Institutes of Medicine. While the goal of each institute is to engage faculty from across the University, the broad mandate for these two Institutes is actualized in many constituencies. Of course, assuring that faculty and students from different disciplines feel fully engaged valued and responsible is not an easy task but is an essential one to fulfill. The fact that executive steering committees have leadership from different schools is one way of accomplishing that goal.

It is notable that the Cancer Center and the Stem Cell Biology and Regenerative Medicine Institute have already begun to fulfill one of the key factors for their success – namely, competing for and garnering significant financial resources. And at this point I believe that the NIS is at the cusp of similar success. During the next year we anticipate continued progress, particularly thanks to the very positive changes that continue to unfold in our Office of Medical Development.

Both the Cardiovascular Institute and the Institute for Immunology, Transplantation and Infection are also making continued progress, but they are still evolving in their leadership and planning. Nonetheless, I am pleased with the directions they have taken to date.

Since the last interaction of the Institutes and Strategic Centers a lot has transpired behind the scenes. Imaging continues to be particularly strong thanks to the vision of Dr Gary Glazer and the significant efforts of Dr. Sam Gambhir in the increasingly exciting domain of molecular imaging. This is also a field that engages very broad faculty interest and commitment. Also noteworthy is the continued development of a broader mandate for Genomics and Human Genetics under the leadership of Dr. Rick Myers. Together these areas touch a broad community and, while they are both unique disciplines in their own rights, they are also important enablers for the Stanford Institutes of Medicine and various school-wide activities. Underpinning these efforts are the ever-increasing interactions among the physical and life sciences at Stanford, codified some years ago as BioX and now embraced in our new Department of Bioengineering. And to further facilitate handling large databases are fields in which there is considerable expertise at Stanford, including biostatistics, bioinformatics and clinical informatics.

Given the reality that significant components of NIH funding are now being closely tied to interdisciplinary research and education, our Stanford Institutes of Medicine and emerging Strategic Centers represent an important resource for our broad faculty community. The alignments they create should make us even more competitive and thus provide a resource to our basic and clinical department throughout the School.

Women's Health – Emerging Initiatives

Thanks to the vision of Dr. Robert Robbins, Director, Stanford Cardiovascular Institute and Chair, Department of Cardiothoracic Surgery, and with the help of the Office of Medical Development, a wonderful gathering and presentation highlighting women's health was held on Friday, January 13th. The guest speaker was Dr. Nanette K.

Wegner, Professor Medicine at Emory University School of Medicine and Chair, Department of Cardiology at Grady Memorial Hospital.

Heart disease has emerged as the number one killer of women in the United States. In response to this, the Women's Heart Health at Stanford program has been developed to carry out risk assessment, diagnostic evaluation, risk management, education and coordinated care. For additional information about this program contact Ms. Mary Sweeney (msweeney@stanford.edu).

In her lecture, Dr. Wenger reviewed the recommendations that have emerged from the American Heart Association (AHA) "*Evidence-Based Guidelines for Cardiovascular Disease Prevention in Women*" that were published in *Circulation* 2004;109:672-293. The evidence-based guidelines for women continue to evolve as data is accrued and analyzed, and Dr. Wenger updated some findings that have emerged since the publication of the aforementioned guidelines. Because readers of the Dean's Newsletter include individuals with medical backgrounds as well as many who have other areas of expertise I thought it would be helpful to briefly outline some of the key factors.

While a number of the AHA recommendations are generic, those published in the aforementioned article have been determined from specific studies in women. The recommendations are stratified on the basis of risk for cardiovascular heart disease (CHD) over a 10-year period as optimal or lower risk (<10% risk), intermediate risk (10-20% risk) and high risk (>20% risk). Modifying risk factors include a prior history of CHD, diabetes, metabolic syndrome, first degree relatives with early-onset (age: <55 years in men and <65 years in women) of atherosclerotic CHD. Among the important recommendations are:

1. Lifestyle Interventions

- *Smoking cessation*
- *Physical activity* (a minimum of 30 minutes of moderate-intensity physical activity on most and preferably all days of the week).
- *Heart healthy diet* in which fat comprises <10% of calories, cholesterol <300mg/day and trans fatty acids are limited.
- *Weight maintenance* through balance of physical activity, caloric intake and where necessary formal behavioral programs to achieve a BMI between 18.5-24.9 kg/m² and a waist circumference of <35 inches.

2. Major risk factor intervention

- *Blood pressure* – should ideally be <120/80 mm Hg.
- *Lipid profile* should have LDL <100 mg/dL, HDL >50mg/dL and triglycerides <150mg/dl.

Modification of risk factors may be achieved non-pharmacologically but may require drug therapy. Of note, one of the myths that Dr. Wenger emphasized is that hormones do not protect women from getting CHD and that estrogen replacement may actually cause complications.

I have presented a fairly superficial and high-level overview of some of the most significant factors that are relevant for women. You can learn more about this by attending a special event on February 2nd from 5:30-7:30pm in the Clark Center Auditorium as part of the Stanford Go Red for Women Events sponsored by The Stanford Prevention Research Center, Women's Health @Stanford and the Stanford Cardiovascular Institute. For additional information about this important event call 650 723 7717 or email essmith@stanfordmed.org.

Thanks to Dr. Javaid Sheikh

I want to thank Dr. Javaid Sheikh for his exceptional five years of leadership and service as the Chief of Staff at the Palo Alto Veteran's Administration Medical Center. It has been a pleasure to work so effectively with Dr. Sheikh on a number of important issues that have impacted faculty, the VA and its interactions with Stanford. Dr. Sheikh, who is also Professor of Psychiatry and Behavioral Sciences, will continue in his role as the leader of the Cooperative Studies Program. Dr. Larry Leung, the Maureen Lyles D'Ambrogio Professor and Chair of the Department of Medicine at the VA, will serve as the acting Chief of Staff pending the outcome of a search for the permanent successor.

Please join me in thanking Dr. Sheikh.

Winter Writers Forum and Workshop Announcement

Dr. Audrey Shafer, Associate Professor of Anesthesia, asked me to share the following announcement with you.

Please join us Thursday, February 16th at 5:00 pm in the Clark Center Auditorium to celebrate the publication of two books by Stanford medical students. Shannon Moffett's book, *The Three Pound Enigma: The Human Brain and the Quest to Unlock Its Mysteries*, and Joshua Spanogle's medical thriller, *Isolation Ward*, will be featured. Both students received Stanford Arts and Humanities Medical Scholars grants. Also featured at the event will be David Watts MD, NPR commentator and author of *Bedside Manners: One Doctor's Reflections on the Oddly Intimate Encounters Between Patient and Healer*. Sharon Bray PhD, professional writer and workshop leader (*A Healing Journey: Writing Together Through Breast Cancer*), will announce the launch of the writers workshop series scheduled to begin Tuesday, February 28 at 7:00 pm in the Stanford Center for Biomedical Ethics conference room.

For further information on the February 16th Forum, contact Dona Tversky dtversky@stanford.edu. For information and to sign up for the workshop series contact Paula Bailey - pbailey@stanford.edu.

These events are supported by a grant from the Drs. Ben and A. Jess Shenson Funds and sponsored by the Arts, Humanities and Medicine Program, Stanford Center for Biomedical Ethics.

The Community Education Series Continues Successfully

On Wednesday evening January 18th, Dr. Mark Davis, Burt and Marion Avery Professor in Immunology and Director of the Stanford Institute for Immunity, Transplantation, Infection, spoke to the packed Clark Center Auditorium on the role of the immune system in fighting or preventing infections, cancer, autoimmune disorders, graft rejection and related topics. The audience was keenly interested in Dr. Davis' comments and many stayed for nearly an hour after his lecture to explore questions with him. This is good evidence of how we can positively impact the community, as noted above in my commentary on the NIH.

The next Community Lecture series lecture will be held 7:00 - 8:30 pm on Wednesday, February 1st in the Clark Center Auditorium. Dr. Irv Weissman, Director of the Stanford Institute for Stem Cell Biology and Regenerative Medicine, will present "Stem Cell Science and the Future of Chemotherapy."

Awards and Honors

Effective January 1, 2006, Richard Olshen, Professor of Health Research & Policy (Biostatistics) and, by courtesy, of Electrical Engineering and Statistics, became an Institute of Electrical and Electronics Engineers, Inc. (IEEE) Fellow, with the accompanying citation:

for contributions to theory and design of decision trees and tree-structured classifiers and codes.

The IEEE Fellow is one of the most prestigious honors of the IEEE, and is bestowed upon a very limited number of Senior Members who have made outstanding contributions to the electrical and information technologies and sciences for the benefit of humanity and the profession. The number of IEEE Fellows elected in a year is no more than one-tenth percent of the total IEEE voting membership. This year 271 new Fellows were elected. Congratulations to Richard Olsen.

Appointments and Promotions

- **Steve Alexander** has been reappointed to Professor of Pediatrics (Nephrology) at the Lucile Salter Packard Children's Hospital, effective 1/01/06.
- **Bruce Buckingham** has been promoted to Professor of Pediatrics (Endocrinology) at the Lucile Salter Packard Children's Hospital, effective 1/01/06.

- ***Joan Frisoli*** has been reappointed to Assistant Professor of Radiology, effective 10/01/06.
- ***Isabella Graef*** has been appointed to Assistant Professor of Pathology, effective 2/01/06.
- ***Daniel Kim*** has been promoted to Professor of Neurosurgery, effective 1/01/06.
- ***James Koch*** has been appointed to Associate Professor of Otolaryngology – Head and Neck Surgery, effective 1/01/06.
- ***Robert Shafer*** has been promoted to Associate Professor (Research) of Medicine, effective 1/01/06.
- ***Heng Zhao*** has been appointed to Assistant Professor (Research) of Neurosurgery, effective 2/01/06.