

# Dean's Newsletter

## April 19, 2010

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### **Council of Deans Considers Some of the Major Issues Facing Medical Schools**

At the Spring Council of Deans (COD) Meeting on April 10-12<sup>th</sup>, we focused on some of the major challenges facing medical schools and academic medical centers now and into the future. At last year's meeting the COD developed a number of action steps that have been worked on during the past year and that we are in the process of refining and updating. They include the following areas:

- ***The public has high expectations for academic medicine and we need to better articulate and demonstrate our "value proposition."*** More specifically we have work to do to fully demonstrate our value to and impact on our communities.
- ***The strengths and attributes that allowed academic medicine to succeed in the past are not likely to be sufficient in the future.***
- ***Medical education is a continuum in which the medical school plays a central role in the development of the physician.*** Here we need to better define the continuum of medical education (from pre-college through medical school, residency and beyond).
- ***The research enterprise as we know it must change at the local and national levels.*** I have led this workgroup and will offer some additional comments below.
- ***Academic medicine needs to be at the table in addressing healthcare reform.***

- ***Our current business model is no longer sustainable.*** This topic was also addressed by our plenary speaker, Professor Clay Christensen, the Jane Cizik Professor of Business Administration at the Harvard Business School and author of *The Innovator's Dilemma* and *The Innovator's Prescription* (which focuses on healthcare). His views shatter many of our current beliefs and constructs, and he offered some provocative insights that I will comment on below.
- ***We need better alignment with our partners at both the local and national levels.*** This includes alignment between the medical school, teaching hospital and practice plan. Parenthetically, even with our challenges I think we have succeeded at Stanford in this area better than many (even most) of our peers.

### ***The Research Enterprise***

As I mentioned above, I chaired the workgroup that focused on supporting the research enterprise. In doing so I emphasized that research is a defining mission for academic medical centers. During the past several decades the basic and clinical science research programs have grown considerably at most medical schools and academic medical centers, fueled primarily by competitive sponsored federal funding, especially from the National Institutes of Health (NIH). Faculty size (especially clinical faculty) has also grown significantly - nearly 11-fold since Medicare was established in 1965 – making many academic medical centers significantly larger, more complex and more expensive entities. Their funding is highly leveraged and includes sponsored research funding (largely from the NIH), clinical income (which in many centers subsidizes the missions in research and education), tuition (which doesn't cover the cost of education), state or public support, endowment income, patent and royalty payments and gifts. Further, as important and fundamental as research is to our core mission, it is also a cost center and requires an approximately 25% subsidy from institutional sources to break even.

Until 1998 NIH funding increased at a reasonably steady rate that was at or above inflation. Between 1998 and 2003 the budget of the NIH doubled, and most academic centers responded by increasing the size of their faculty and the resources and infrastructure to support research. However, following 2003 the NIH budget was flat and below inflation until 2009, when the American Recovery and Reinvestment Act (ARRA) provided a significant, albeit two-year time limited, increase in NIH funding. Looking beyond 2011-2012, it seems likely that the NIH budget will be challenged. Indeed institutions that have grown in size or built research space based on the assumption of continued NIH support now face serious financial challenges. Possible scenarios include a continuation of a flat NIH budget (thus a loss of purchasing power) or increases below, at or slightly above inflation (see additional comments below based on the presentation from Francis Collins, Director of the NIH).

No matter how one looks at the equation, it seems inevitable that competitive research funding will be more limited, posing a serious threat to the US biomedical research enterprise. How academic medical centers respond to research funding

challenges will impact their future excellence and value to the future of biomedicine. This scenario is further influenced by our nation's economic climate, which has put major limits on the availability of state support to medical schools and institutions. The economic downturn has significantly and negatively affected university and medical school endowments as well as the resources available to foundations that support biomedical research. Gifts from individual or institutional donors have also been impacted by the economic downturn. And with healthcare reform now moving forward it is also inevitable that revenues to hospitals and medical centers will decline in the years ahead. Thus it is clear that business as usual – and certainly one based on growth – is not sustainable.

Based on these scenarios, a number of conclusions are evident. First, it is important that medical schools and medical centers critically examine their size and scope. Too much emphasis has been placed on the amount of NIH funding an institution receives as a metric of excellence, instead of focusing on quality. It is much more important to concentrate on quality instead of numbers since that is a much better way to remain competitive and adaptable. Thankfully this is the model we have largely followed at Stanford. This approach affects how institutions support their research mission related to people (faculty recruitment, retention, career guidance as well as support for students and postdoctoral fellows and trainees); the infrastructure required to support a research mission (including facilities, size of labs and space charges, shared equipment, animal costs and the function of cores). Unfortunately it is clear that our institutions each play a role in increasing the price for recruitment and retention by our shared competition for faculty and students.

Developing metrics to define individual and institutional success is important. Individuals and institutions also need to define the mix and blend of research funding, including state and federal sources, foundation and gift support as well as revenue from the clinical mission of academic centers. How these funding sources will change as a function of the current economic climate and the changes emanating from healthcare reform will require careful monitoring and thoughtful planning.

It is also important for institutions to address ways of sharing resources within their own walls (cores, shared equipment, expectations and funding for space, etc) as well as to look toward regional interaction and shared resources. Examples such as the New York City Structural Biology Consortium or the Massachusetts Computation Collaborative or the San Diego Stem Cell Consortia deserve attention and broader replication.

In tandem with the interactions of academic medical centers with the public and private sector, it is important to find ways to rebase academic-industry relations in ways that conform to new conflict of interest policies but which also promote the translation of basic research to clinical application. Finally, it is important that academic medical centers and the AAMC be better advocates for research to the broad public and private sectors they serve and that they demonstrate the value proposition of academic medicine and biomedical research.

### ***Is the Current Model Sustainable?***

Over the years Professor Clayton Christensen has offered provocative insights on disruptive technologies and how once successful business enterprises were transformed or became extinct with innovations that are simpler and more decentralized. The history of computing is a notable example in its evolution from the central main frame to the increasingly decentralized mini-computer to personal computer to laptop, PDA and beyond. Christensen posits that the current tertiary hospital is not sustainable, because it is organized around the principle of having the capability of doing everything for everyone. This results in a costly infrastructure that is beyond the needs of most patients and that requires spreading costs (and thus increasing the overall cost for care).

Christensen further argues that the complexity of most hospitals fosters both inefficiency and the lack of coordination that impacts the patient experience and related outcomes. In specialties or services where the care model can operate more autonomously (e.g., orthopedics, ophthalmology and certain surgical procedures like hernia repair), a focused facility is likely to be more successful. In contrast, when multiple consulting services are needed to provide high-quality care (e.g., cardiac care), a specialty facility is likely to be less successful. While Christensen would argue that an integrated delivery system might be the most effective model, he also acknowledged that such systems (e.g., Kaiser, Geisinger) are less successful in fostering innovation. Christensen also believes that the overall complexity of an academic medical center is problematic specifically in the overlap of its research and education missions – which might be done more effectively if they were permitted more discrete execution.

### ***Relevance to Stanford Medicine***

In my view, Christensen poses a number of important and provocative challenges but not really a solution that optimizes care delivery and that still fosters innovation and discovery. I continue to believe that these challenges are an opportunity for a small and integrated institution like Stanford to excel – but it is also clear that we have considerable work to do to optimize patient care, quality, service, cost and innovation – and also to excel at education and research. But striving toward excellence rather than being reduced to the mean must be our aspiration and goal.

As I assess the status of Stanford Medicine against the challenges posed by Clay Christensen and the issues posed at the Council of Deans, I believe that many of the decisions we have made over the past almost ten years have positioned us well – whereas as in other areas we still have work to do. For example, the fact that Stanford remains one of the smallest schools among its peers has its limitations (especially when rankings based on total NIH funding are published). However, the fact that we have emphasized quality over quantity continues to serve us well and increasingly is a model that other schools are seeking to emulate. That said, it is imperative that we continue to assess the way we are organized and how we conduct and integrate our missions in education, research and patient care. For example, we have made strides in our education programs, including better coordinating the path from medical student to resident and fellow – a goal that still needs considerable effort. We will address this further as we launch

three new planning efforts in education that we hope to complete over the course of this year – one aimed at medical education, the second at graduate education and the third at postdoctoral training. At the end of this process we will certainly want to assess their interrelations – but some focused planning is important initially.

We also need to further assess our patient care activities and carry out important forward-looking strategic planning in areas that link our research and clinical missions to foster innovation: cancer, cardiovascular, neuroscience, regenerative medicine, immunology-transplantation. These planning efforts will help shape our opportunities and needs in faculty size and scope and the resources needed to support them. Overall, we need to continue to ask the core question of how we bring value to our community through the innovations we discover, the services we provide, the quality we deliver and the affordability of our programs and services.

### **Updates on the NIH from Dr. Francis Collins**

Dr. Francis Collins, Director of the NIH, addressed the Council of Deans meeting on April 12<sup>th</sup>. He reviewed the major themes he has been forecasting for biomedical research and also highlighted some initiatives that follow the recent healthcare reform legislation. He acknowledged that, at the completion of the ARRA (American Recovery and Reinvestment Act) funding that concludes in FY11, the biomedical research community faces a “cliff” that will have a significant impact on research funding. Even though the President is highly supportive of science and technology, the nation’s economy has seriously eroded the ability to fund the NIH at a level that would return success rates to the 30% level. In fact to do that would require an NIH budget of \$37.5 billion compared to the \$32 billion that is now approved. Accordingly, Collins projected success rates of 20% - which are certainly higher than a number of Institutes predict given the current funding levels.

While Dr. Collins emphasized his continued support for basic science research, the themes he presented fall into more of a big science theme. He has discussed these previously (see the January 1<sup>st</sup> issue of *Science* 2010; 328:35-36 (<http://www.sciencemag.org/cgi/content/full/327/5961/36?ijkey=RFCOTgo29UiRY&keytype=ref&siteid=sci>), as well as in the interview he did with Paul Costello, Executive Director of Communications and Public Affairs, which can be found on 1:2:1 (see: <http://med.stanford.edu/121/2009/collins.html>). They include:

- ***Applying the opportunities emerging from genomics and other high throughput technologies that will impact human disease.*** This is one of the “big science” agenda items he has referred to previously. It includes the application of next generations of DNA sequencing, nanotechnology, small molecule screening, the use of “comprehensive approaches” that combine “all” genes, proteins, common variants, etc. for exploratory rather than hypothesis driven research on such challenges as cancer, autism, the microbiome. In these instances a strong effort on computational biology is critical.

- ***Translating basic science into clinical medicine*** using technologies like small molecules and stem cells, among others. An example Collins cites is the program for Therapeutics for Rare and Neglected Diseases (TRND), which will allow promising compounds to be taken through preclinical testing by NIH to promote translational research.
- ***Putting science to work in healthcare reform*** by focusing on comparative effectiveness, prevention and personalized medicine, pharmacogenomics, health disparities, regulatory science (in collaboration with the FDA), health information technology and health economics.
- ***Promoting global health*** in collaboration with organizations like the Bill and Melinda Gates Foundation to promote the discovery of novel targets in pathogens and facilitate advances in diagnostics, treatment and prevention strategies. He also cites a role for the NIH in helping to build capacity and training opportunities in the developing world.
- ***Reinvigorating and empowering the biomedical research community*** by thinking more creatively about training and career development awards. Specifically he cited the prospect of a Whitehead-like model to support early independence for selected graduate students as a way of shortening the time to achieving peer-reviewed RO1 funding. He also emphasized the importance of not allowing funding constraints to diminish innovation – which is evidenced by programs like the NIH Pioneer Awards, New Innovator Awards and Transformational RO1 awards.

In addition to these initiatives, Collins noted two programs that were contained in the healthcare reform legislation and that could have an impact on medical schools and academic health centers – although the details are still somewhat sketchy. These are:

1. ***A Patient-Centered Outcomes Research Institute*** that would be overseen by a Board of Directors, receive direct funding as well as future support from a trust fund, and promote Comparative Effectiveness Research (CER) in conjunction with the Agency for Healthcare Research and Quality (AHRQ). Collins estimated that this program would be likely to achieve funding at the \$500 million level per year. This is in addition to the other funding sources for CER through NIH and AHRQ. Clearly this is an area that we need to pay more attention to, and I am hopeful that we will make progress through programs like our new Center for Clinical Quality and Effectiveness, which I will be announcing formally soon.
2. ***The Cures Acceleration Network***, initially proposed by Senator Arlen Specter (D-PA) to be a freestanding agency, will now be located in the Office of the Director. Its stated goal is to advance the development of new therapies and cures for debilitating and life-threatening diseases by removing barriers between laboratory discoveries and clinical trials. If this program is funded (it is not at this time), it could contain project grants of \$15 million along with partnership grants.

While the details are limited, it sounds somewhat like the Disease Planning Grants funded by the California Institute of Regenerative Medicine, which are designed to promote the translation of basic laboratory research in stem cell biology into clinical trials.

In sum, there is some good news and some obviously concerning news. The good news is that the current Administration clearly supports and values science and biomedical research. There also seems to be a strong commitment to support basic research and also innovative ideas and proposals. A commitment to supporting the trainees and fostering the pipeline for bioscience research is clearly stated. It is also evident that there will be an increased focus on big science, collaborative research efforts (including through the CTSA network) and stronger linkages of basic research to healthcare delivery, regulatory science, and clinical and translational research than has been the case in the past. How the balance will be struck remains to be seen. At the same time, the level of funding available to support the biomedical research mission of the nation is less than optimal, making it ever more critical that at Stanford we focus on quality in our applications and that we anticipate and address the new funding areas being delineated. Some of these play to our current strength, whereas others will require building expertise – but I feel confident we can do that, even though I know this will be a challenging time.

### **Medical Student Applicants Return for Admit Weekend**

On April 9-10 some 72 students admitted to the School of Medicine returned to campus for Admit Weekend 2010. In addition to meeting each other and current students and faculty, this highly talented group of students received updates on the curriculum and scholarly concentrations opportunities as well as advising and support services, including financial aid. They had a chance to tour the medical school (including the new Li Ka Shing Center for Learning and Knowledge) as well as the hospitals and university. Where to attend medical school is a life changing decision and, while our admitted students have a number of choices, I would hope that the distinctive characteristics of Stanford are readily apparent. Our exceptional excellence in research, unique interactions with the other schools at Stanford and close partnerships with our affiliated teaching hospitals and community are complemented by the commitment of our faculty, students and trainees to our tripartite missions in education, research and patient care. I can certainly say that whenever I have the opportunity to view the breadth and depth of excellence at Stanford, I am deeply impressed and very grateful to be a member of our Stanford community.

### **US News & World Report: Relativity, Perceptions, Explanations (and Some Excuses)**

Let's face it - I truly dislike the annual exercise of the US News & World Report (USNWR) ranking of medical schools. My major issue with these annual rankings is that some of the metrics are misguided and can foster perverse incentives. Since coming to my role at Stanford I have regularly expressed my concerns to the editors of USNWR in person and in writing. Among my messages is that they are too focused on the size of the medical school and not enough on quality. Specifically, a number of the more heavily

weighted metrics do not adequately or appropriately measure the true excellence of research and education programs. For example, 20% of the weighted score is based on total NIH grants dollars at the institution, which reflects more the size of the research enterprise than its quality. Indeed, given the small size of the research faculty at Stanford compared to peer “research intensive” intensive medical schools, it is not a surprise that we do not compete in this area compared to medical schools that have twice to ten times the number of faculty. In fact we are 12<sup>th</sup> in total NIH grants. On the other hand, NIH dollars per faculty member is a better measure of the success of faculty, and on this measure we are #1 in the nation.

While I was successful in persuading the USNWR editors to blend total funding with funding per faculty member, USNWR still chose to weigh the score 2:1 in favor of total funding, so the impact of size is more powerful than quality. Even more importantly, other important measures of research success and quality are not included at all, many of which would help students to assess the research faculty. For example, it would help to know the number or proportion of faculty at a medical school who were members of the Howard Hughes Medical Institute program or who had been elected to organizations like the Institute of Medicine and National Academy of Sciences or other prestigious organizations. Of course there are other examples of excellence beyond research funding. Further, too much emphasis is placed on the size of the faculty in the faculty/student ratio metric. It would be more useful to provide the success of faculty in mentoring and advising students or the number of students engaged in research with the faculty or who had scientific publications during medical school.

What is really concerning in the USNWR ranking is the emphasis on GPA and MCAT score as a measure of student excellence at the exclusion of any metrics that address other measures of student success along with the diversity of the students, the institutional support for their education or amount of indebtedness on graduation. From my point of view, having schools compete on size and MCAT scores is simply too narrow and poorly focused.

Of course, I had all these same concerns a year ago and have communicated them to USNWR over the years. But despite these concerns and convictions, Stanford was ranked #6 last year – although in reality we were tied with three other schools (Yale, Duke and U. Washington for that slot). So, relatively speaking we were somewhere between number 6 to nine. In the USNWR issue on April 15<sup>th</sup>, Stanford’s rank dropped to 11<sup>th</sup> – which I obviously don’t like. How could that happen in just one year – especially since the ranking of Stanford by our peers place us fourth? In reality, given the impact of total NIH dollars, small changes in other metrics made all the difference. For example, our ranking on MCAT scores went from 7<sup>th</sup> (at 11.6) to 10<sup>th</sup> (at 11.3), and ranking in quality assessment by Residency Program Directors went from 4<sup>th</sup> to 5<sup>th</sup> place. These changes were enough to move us out of the group tied for 6<sup>th</sup> place to 11<sup>th</sup> place. But in reality this was due to only a 2 - point difference in the aggregate score, which makes all these comparisons really insignificant – both statistically and in many other ways.



When all is said and done, I would like to think that thoughtful individuals would see through the ranking and not confuse them with quality. But I also recognize that the simple change from 6<sup>th</sup> to 11<sup>th</sup> elicits an emotional response. At the same time I am proud of the fact that our faculty are among the best in the world on the metrics that really count and that we are ready and willing to select outstanding students who come from diverse backgrounds and with amazing life experiences. And I am pleased that our peers rank us so highly. OK, I have shared my reactions – now it is time to move on.

## **The Stanford Cancer Center Holds its Annual Retreat**

The Stanford Cancer Center (SCC) held its Annual Members Retreat on April 7<sup>th</sup> at Quadrus Conference Center. Dr. Beverly Mitchell, the SCC Director, gave an update on the status of our review by the National Cancer Institute and sought to foster interactions and collaborations among the Stanford cancer community. You may recall that Stanford succeeded in receiving designation by the NCI in 2007 and had its three-year review in October 2009. Over the past several years our cancer programs have grown in size, integration and success. Since 2006, 50 new faculty in cancer-relevant disciplines have been recruited to 13 basic or clinical science departments. At the same time, the membership in the SCC has grown from 260 to 315 members, and the funding from the NCI has grown from \$36 million to \$42 million (with total cancer relevant funding increasing from \$47 to \$65 million). Perhaps even more important is the excellence of the science that is being conducted and the increasing amount of interaction and collaboration that is taking place in research and patient care. While Stanford has a number of truly outstanding programs I continue to believe that our cancer programs will prove to be one of our most important and significant programs in the future because of the important connections and opportunities they afford in patient care, research and education. I was very pleased to spend a little time at the retreat and to witness firsthand the excellence and depth of our Stanford Cancer Center community.

## **Call for Nominations: Postdoctoral Mentoring Awards 2010**

The Stanford University Postdoc Association (SUPD) is pleased to announce the third annual SUPD Postdoctoral Mentoring Award. This award aims to recognize faculty and staff scientists who show excellence in supporting the development of postdocs at Stanford into creative independent thinkers, teachers, administrators, managers and professionals. The nominee must have mentored the nominator, but need not have been their primary advisor. The selection committee, composed of postdoctoral scholars will compile a shortlist of nominations, which will then be considered in more detail. Two awards are typically made. To learn more about the award or to submit a nomination, please go to: <http://supd.stanford.edu/award>. The deadline for nominations is Friday, April 23, 2010.

## **Upcoming Event**

**27<sup>th</sup> Annual Stanford Medical Student Research Symposium**

3:00 pm

Thursday, May 13, 2010

Ballroom, Li Ka Shing Center (LKSC), 291 Campus Drive

Thirty-eight MD and MD/PhD students and three MD-student groups will present their original research projects carried out in laboratories, clinics and the community - locally and abroad. Students will be available at their posters for informal discussions from 3:00pm-5:30pm. At 5:45 pm following closing remarks, the Stanford University Medical Center Alumni Association will announce the students with the outstanding research posters. For information about this event, please contact Mara Violanti (marav@stanford.edu).

## Awards and Honors

- **Dr. Ross Bright**, Associate Dean for Alumni Affairs, Emeritus, is the 2010 Recipient of the J.E. Wallace Sterling Lifetime Alumni Achievement Award. During 18 years Dr. Bright served under three deans and championed the importance of alumni relations. Among his many contributions was the broadening of the Alumni Association to include graduate students, residents and postdoctoral fellows. Dr. Bright was instrumental in the development of the Stanford University Medical Center Alumni Association magazine “Bench and Bedside.” I have been honored to work with Dr. Bright for nearly half of his tenure as Associate Dean and have tremendous respect for his dedication and commitment to Stanford and its alumni. Please join me in congratulating Dr. Bright.
- **Dr. Sheri Fink, MD** won the 2010 Pulitzer Prize for her joint project with ProPublica and The New York Times on an investigative reconstruction of what has been described as euthanasia by doctors at the Memorial Medical Center in New Orleans after they had been stranded by Hurricane Katrina (see: [http://www.nytimes.com/2009/08/30/magazine/30doctors.html?\\_r=1&pagewanted=print](http://www.nytimes.com/2009/08/30/magazine/30doctors.html?_r=1&pagewanted=print)).
- **Dr. Lucy Shapiro**, Virginia and DK Ludwig Professor in the Department of Developmental Biology, will be honored at the commencement ceremony of the Albert Einstein College of Medicine, where she will be presented the Distinguished Alumna Award.
- **Dr. Karl Blume**, Professor of Medicine, Emeritus, has been selected by the European Group for Blood and Marrow Transplantation (EBMT) for an award and Honorary Membership for his outstanding activities and contributions to stem cell transplantation and to education.
- **Dr. Tom Raffin**, the Colleen and Robert Haas Professor of Medicine (Pulmonary Medicine), Emeritus, and **Dr. David Magnus**, Professor of Pediatrics (Bioethics), shared an honor on April 15<sup>th</sup> thanks to the generosity of the Haas family. In 1999 Dr. Raffin was named to the Haas Professorship with the recognition that, when he became emeritus, the professorship would be named in his honor. He became

emeritus in 2009, and the Thomas A Raffin Professorship was established in Bioethics. I am pleased to announce that Dr. Magnus is the first incumbent. Drs. Raffin and Magnus, along with their families, friends and colleagues, shared this joint honor with Colleen and Robert Haas at a wonderful event on April 15<sup>th</sup>. Much appreciation and congratulations to all.

## **Appointments and Promotions**

**Marilyn West Butler** has been promoted to Clinical Professor of Surgery, effective 9/01/10.

**Lisa Chamberlain** has been reappointed to Assistant Professor of Pediatrics at the Lucile Salter Packard Children's Hospital, effective 6/01/10.

**Angela E. Chen** has been appointed to Clinical Assistant Professor (Affiliated) of Surgery, effective 4/01/10.

**Mark L. Cohen** has been reappointed to Clinical Assistant Professor (Affiliated) of Pediatrics, effective 9/01/09.

**Alejandro Dorenbaum** has been reappointed to Clinical Associate Professor of Pediatrics, effective 12/01/09.

**Jerome Jay Gabriel** has been appointed to Clinical Assistant Professor (Affiliated) of Obstetrics and Gynecology, effective 5/01/10.

**Brenda Golianu** has been promoted to Associate Professor of Anesthesia at the Stanford University Medical Center, effective 4/01/10.

**Peter W. Gregor** has been reappointed to Clinical Assistant Professor (Affiliated) of Medicine, effective 9/01/09.

**Odette Harris** has been appointed to Associate Professor of Neurosurgery at the Stanford University Medical Center, effective 4/01/10.

**Stefan Heller** has been promoted to Professor of Otolaryngology – Head and Neck Surgery, effective 4/01/10.

**Jeanette Hsu** has been appointed to Clinical Assistant Professor (Affiliated) of Psychiatry and Behavioral Sciences, effective 4/01/10.

**Nishita Kothary** has been reappointed to Assistant Professor of Radiology at the Stanford University Medical Center, effective 4/01/10.

**William T. Kuo** has been reappointed to Assistant Professor of Radiology at the Stanford University Medical Center, effective 5/01/10.

**Gary Lee** has been reappointed to Clinical Associate Professor (Affiliated) of Medicine, effective 9/01/09.

**Gordon K. Lee** has been reappointed to Assistant Professor of Surgery at the Stanford University Medical Center, effective 5/01/10.

**Billy W. Loo** has been appointed to Assistant Professor of Radiation Oncology at the Stanford University Medical Center effective 4/1/10.

**John D. Louie** has been promoted to Clinical Assistant Professor of Radiology, effective 7/01/10.

**Arnold Milstein** has been appointed to Professor of Medicine, effective 4/01/10.

**Kristen Nord** has been reappointed to Clinical Assistant Professor (Affiliated) of Dermatology, effective 9/01/09.

**Jean-Marc Olivot** has been promoted to Clinical Assistant Professor of Neurology and Neurological Sciences, effective 5/01/10.

**Ronald A. Schuchard** has been appointed to Clinical Associate Professor (Affiliated) of Neurosurgery, effective 4/01/10.

**Neil Schwartz** has been reappointed to Clinical Assistant Professor of Neurology and Neurological Sciences and of Neurosurgery, effective 5/01/10.

**Akshat Shah** has been appointed to Clinical Assistant Professor (Affiliated) of Orthopaedic Surgery, effective 4/01/10.

**Frederick J. Van Rheenen** has been reappointed to Clinical Professor of Medicine, effective 3/01/10.

**Anthony J. Ricci** has been promoted to Professor of Otolaryngology – Head and Neck Surgery, effective 4/01/10.

**Cornelia M. Weyand** has been appointed to Professor of Medicine, effective 4/01/10.

**Ira G. Wong** has been reappointed to Clinical Professor of Ophthalmology, effective 1/01/10.