Reflections From the Community on the Future of Medical Education: Sustaining a Human Connection.

During the past several months we have been holding a number of evening discussion groups with interested members of our community on the future of medical education. Thanks to the hospitality of Dr. Ralph and Marilyn Spiegel, two dinners were recently held in their home that offered the opportunity to discuss, in a small group setting, what interested members of our community believe is important in the education of outstanding physicians. At these events I had the opportunity to reflect on the goals and objectives we have set for medical education at Stanford. Importantly, these events have also afforded an opportunity to listen and learn from individuals who share a concern and commitment about the future of medicine.

It has been remarkable to me that at each of these sessions a common theme has emerged. While it is obvious to all that great strides have been made in science and that research has improved significantly, innovations in health care, nearly everyone with whom I have spoken has virtually independently identified something that they believe is lacking in modern medicine and its practitioners. Namely, the human touch, the connection of the physician to his or her patient, the time available for doctors to listen to what their patient is saying and spend the requisite time responding to their concerns. It is the perception that modern medicine has been disrupted by the economics that surround health care, its rising costs, the problems with accessibility and the opportunities for choice. In important ways, our community has recognized and articulated the unfortunate dichotomy that now exists in American medicine: the unparalleled opportunity for continued scientific discovery and innovation that will reshape how we approach the diagnosis, management and prevention of human disease cast against the chaos and uncertainty of health care access and delivery in the current fiscal environment in which
premiums are rising, access is challenged and the time that a physician can spend with his or her patient – listening to their concerns and making that human connection – is increasingly challenged.

The dilemma is exceptional and the solutions are not easy. Clearly we can react to some of the challenges at hand – but others will need a wider solution, likely both political and legislative. We can and must, of course, not lose sight of educating our students and trainees to learn, to listen, to reach out and to connect to their patients. Some have called this the “art-of-medicine” others the “bedside manner”. From my perspective it is the fundamental underpinning of what makes a great physician. Exceptional scientific knowledge, along with a critical and analytic approach to clinical care that is evidence based and data-driven is essential. But unless these skills are coupled with a caring and compassionate manner, the value of the patient encounter is diminished. Importantly the patient feels less well served and perception of the physician as a “healer” is altered.

We are now engaged in the New Curriculum that impacts our First Year Students, as well as the continued training and education of outstanding students and residents who have joined the Stanford community during the past several years. Assuring that each develops the knowledge and skills of the compassionate and caring physician is essential. It is incumbent on us to make this part of every patient encounter and also to formalize it in our clinical training and evaluations. I believe this is an area that we can and must do better than we have in the past. It is also one where we need to hold each other mutually accountable and responsible in assuring that patients and our community are well served. That is what they are seeking –and that is what they should receive.

As to the broader agenda regarding the future of health care, I strongly feel that academic medical centers, including Stanford, need to be much more proactive in the process. To date, most centers have been reactive and, as a consequence, our centers and the public have both suffered. We have not done a very good job of communicating the issues or championing potential solutions – including in a public forum. Whether one believes that the way to control costs and improve quality of service and care resides in stronger market competition, with increased responsibility by the consumer, or in a more fundamental change toward a single payer system, it seems clear and increasingly inevitable that major change will come. The current scenario of double-digit increases in health care premiums, the challenges of access, the limits on quality and service, are not sustainable.

As these changes unfold it is imperative that we not lose sight of the future. It is all too easy to believe that the solution resides in “managed competition” and access to the low cost provider. But that loses sight of the importance of supporting research and innovation to improve health care – something that low cost providers and insurance companies do not invest in – but rather expect to receive. Our academic medical centers are critical to our future health care system – but they require support from our communities. While the public has been generous in the past, it is also clear that their future investments in supporting academic medical centers are also likely to be
influenced by their perception of the quality of our physician work force and community. The message I have received and reflected above is that we need to do more to educate and train our physicians to be better listeners and more compassionate healers. However, finding time for them to serve patients is squandered by a health care system that makes medicine a commodity and treats patients as economic units or “market share”. Clearly coupling our education of physicians with a much stronger voice in changing the health care environment is essential – to American Medicine and to Stanford. We all need to work on this if we are to succeed in the future.

Update on SMILE: A Local and National Perspective

During the past year, the Stanford Medicine Information and Learning Environment (SMILE) planning group has made considerable progress in defining the scope of the programs for our future education and library facilities. We now envision a 120,000 gasf building that will be housed on the site currently occupied by the Fairchild Auditorium that will serve as the hub for our immersive learning programs (with additional programs at the VA Hospital, Stanford Hospital & Clinics, Lucile Packard Children’s Hospital, SUMMIT) and other areas of the School and University. We are also planning for much more flexible conference facilities that will include large and small classroom settings enabled by innovative technology. Central to SMILE will be the Knowledge Management Center that will provide distributed digital information (journals, books, etc) throughout the Medical Center as well as a facility in SMILE for interaction, education, resource development and research. As we craft and refine the plans for SMILE, we are also engaged in – and hopefully also leading – a national debate on the future of libraries.

Along with Parvati Dev, Associate Dean, Learning Technologies and Director, SUMMIT Lab and Debbie Ketchell, Associate Dean for Knowledge Management and Director, Lane Medical Library, I attended and spoke at a national symposium sponsored by the National Library of Medicine on November 5-6th. Whether medical centers of the future will still have a traditional library or have an entirely digitalized distributive model was at the heart of the debate at this conference. We had the opportunity to present the approach we are developing at Stanford, thanks to the very able program leadership of Ms. Maggie Saunders. It is our view that SMILE will be more than a place – it will truly be a distributed environment for learning and education. It will also serve as the hub for our knowledge center, providing a crossroad for communication between and among faculty, students, staff and the community. But it will also provide a locus from which knowledge will be disseminated to desktop computers throughout the medical center, at home or anywhere where access to the Stanford Medical Information Technology System is possible.

Debbie Ketchell summarized the discussions that took place about the library of the future as follows:

“Libraries are becoming locally divergent, integrated into multi-functional buildings and managers of learning spaces. Space should be highly flexible for an
indeterminate future…. The library is a shared, collaborative space for scholarship and learning. Innovation happens where disciplines collide. The library is a place of refuge for quiet study and thinking.

“The library is a human space. The essence of good space remains the same: good location; natural, filtered light; transparency; bring the outdoors in; comfort and social ambience; and inspiration with modern functionality…. Plan for library as place and virtual service.

“The library is a knowledge hub: a site for both knowledge management and curriculum development. The library supports communication: staff-staff, user-user, and user-staff. …. Wireless, mobile, anywhere access will be the norm…. Content is moving rapidly to digital and print materials are moving into compact and high-density storage. …”

It is encouraging to know that we have anticipated and planned for these important considerations in our SMILE project.

Science and the Public: Challenges to the Integrity of Investigation

Peer-reviewed publicly supported research takes many forms but rarely does it become the target of religious groups or political oversight. Behavioral research can be more vulnerable to attack because it can touch on sensitive issues that may raise concerns among special interest groups. At the same time, behavioral research is essential to how we address major public health problems and disease – whether they are access to care or high-risk behaviors (including sexual activities) that result in vulnerability to disease. One might argue that had the behavioral research agenda been more robust and engaged during the early days of the AIDS pandemic, it might have been possible to have limited the current global impact of this disease.

It is thus with serious concern that one must view the recent news that religious groups and members of congress have become directly involved in scrutinizing some 200 NIH funded grants addressing sexual behavior. While one does not deny that some of this research is likely to be controversial, it is essential to affirm that that peer-reviewed scientific research should not be singled out for targeting – potentially adversely impacting its ability to better inform the way we approach public health and preventive medicine issues and challenges.

While as best as we can tell, none of these targeted 200 investigators are at Stanford, this is an issue that affects us all – and that we must strongly oppose. I raise my personal opposition to such a policy and call on each member of our community to be attentive and vigilant to the current environment that has disbanded scientific advisory groups, imposed a standard of what might constitute “ethical behavior” and now challenges the integrity of the NIH peer review process. The Association of American Medical Colleges has deplored “all efforts to subject the NIH research portfolio and individual research grants to ideological litmus tests”. The AAMC has gone on to state
that the “American public must demand that the most scientifically rigorous and relevant research addressing vital public health concerns be funded without regard to the sectarian or ideological views of political parties or other special interest groups - regardless of where they reside on the ideological spectrum”.

As members of the scientific community – and one engaged in trying to improve the public health through research – it is imperative that we each stand against such invasions to scientific integrity.

**Health and Public Policy Forum**

We are in the process of formalizing a Health Policy Forum that will address important issues and challenges in health care, medicine and public policy. We anticipate that in the future, speakers at the Health Policy Forum will include members of our Stanford community as well as invited guests.

I am pleased to invite you to a School of Medicine Health and Public Policy Forum on Monday, November 24, 2003. Our guest will be Senator Arlen Specter, who will discuss his vision for the future of NIH and other policy issues including stem cell research. The forum will take place at the Clark Center Auditorium, 318 Campus Drive West, Stanford, California, from 9:30 to 11:00 a.m. I hope you can join me for this event. We expect a lively exchange of ideas.

Senator Specter currently serves as the Chairman of the Labor, HHS and Education Appropriations Subcommittee, the congressional committee that makes yearly federal funding decisions for the National Institutes of Health. It is with Senator Specter’s consistent support that the NIH budget has doubled in recent years. Most recently Senator Specter joined forces with California Senator Dianne Feinstein to offer an amendment in favor of an additional $1.8 billion over President Bush’s fiscal year 2004 budget request for NIH.

If you are interested in attending please send your RSVP to janab@stanford.edu by November 17th to confirm your attendance. I look forward to seeing you there.

**Planning for the NIH Roadmap**

As noted in the October 27th issue of the Dean’s Newsletter I commented that we have put together a Task Force to help assess our response to the Road Map and the various RFAs that will emerge from it. The group has begun meeting and I will update you on their progress as it unfolds. I also had a very helpful meeting with Dr. Elias Zerhouni, Director of the NIH, while I was in Bethesda earlier in the week. He has already affirmed how closely our Stanford School of Medicine Translating Discoveries aligns to the NIH Road Map. Moreover, he indicated that he views Stanford as one of the few medical schools clearly committed to innovation and translational medicine and proffered that this commitment should help our efforts in further aligning with the NIH’s future directions. Clearly that is very much our goal.
Association for the Assessment and Accreditation of Laboratory Animal Care to Visit Stanford

Dr. Linda Cork, Chair of the Department of Comparative Medicine has asked that I share the following message with you.

“On November 18-20 the Association for the Assessment and Accreditation of Laboratory Animal Care (AAALAC) will conduct an accreditation site visit of Stanford. AAALAC is an independent organization of basic scientists, veterinarians, and animal care specialists that reviews and certifies animal care programs. AAALAC is concerned with whether the appropriate mechanisms and processes are in place to ensure quality animal care. They want to be certain that the institution has the means to oversee the welfare and safety of animals and the people who work with animals in research settings. AAALAC accreditation, like accreditation by other accrediting organizations, is extremely important for Stanford. It is the “Good Housekeeping seal of approval” for animal care, and being AAALAC accredited greatly simplifies the grant process where animals are used.

“If you work with animals, you can anticipate that AAALAC site visitors will come to your laboratory during the site visit. The AAALAC site visitors are your colleagues and experienced scientists; they are very knowledgeable about laboratory animal research in academic research institutions and industry. Site visitors will be interested in your animal research, and how you perform it. It is highly likely that they will ask questions of you, your students, or staff in a low key, conversational manner. The sorts of questions that AAALAC site visitors have asked during site visits include:

- Have you read your animal care protocol and its amendments? Where is it?
- If you have signed off on Guidelines for a particular procedure, have you read the Guidelines?
- Do you know where your Materials Safety Data Sheets (MSDSs) are? Have you had occasion to use them? Were they helpful?
- If you use radioactivity in animal experiments, what precautions do you use?
- Where is your Standard Operating Procedure for this procedure?
- Could you show me how you keep records for animal surgery?
- What sort of training did you have in using animals? Who trained you?
- What kind of safety equipment do you use (e.g. face mask)? What sort of protection does it provide?
- What do you know about the Occupational Health Program? Are you enrolled?
- Do you have allergies to animals?
- Do you know any zoonoses that are associated with the species you use?
- If you do field studies, what kinds of diseases/parasites might be present in these wild animals?

Please discuss the importance of the AAALAC site visit during your lab and department meetings. If you have any questions, please contact the Department of Comparative Medicine and the Veterinary Service Center (VSC) (http://www.med.stanford.edu/school/CompMed/)."
Celebrating America’s Women Physicians

The National Library of Medicine has created an exhibit to celebrate the accomplishments of women in medicine since they first gained entrance to medical school some 150 years ago. As is noted in the curator’s statement “Whether shaping public health policy for whole populations, or providing health care to patients within a small community, women have changed the face of medicine at every level. They have also expanded its scope, often focusing on the needs of underserved populations or the ways in which race and gender affect health and illness. In scientific research, medical practice, and the education of future physicians, women have made important contributions to the health and well-being of us all, around the world. The Exhibition Program at the National Library of Medicine is acknowledging these achievements as well as the struggle to attain them, by commemorating the lives and the work of more than three hundred women physicians from the 19th century to the present day”.

I am pleased to report that two Stanford faculty members are included in the Changing the Face of Medicine exhibit at the NLM. They are:

- **Frances Conley** – who was “the first women ever granted tenure in neurosurgery at a medical school in the United States. At Stanford University she faced great opposition from male colleagues in 1998 and risked her career by publishing an account of sexism at the medical school. Conley had an illustrious and influential career as well as an accomplished life outside of medicine. In 1971, she and her husband were the first husband-and-wife team to run the San Francisco Bay to Breakers 7.8 mile race. Dr. Conley was also the first woman to win”. Dr. Conley is currently retired.

- **Linda Shortliffe**, currently Professor and Chair of the Department of Urology. “Linda Shortliffe’s parents, who as Japanese–Americans had endured discrimination and internment during World War II, encouraged her to pursue a career in medicine so that she would have a financially secure future and a useful, portable career. She followed their advice but took an even more ambitious approach to her work, training in the male-dominated field of urological surgery where, by the time she qualified in 1983, she was one of only fifteen women board certified in the specialty”.

**Honors and Awards**

- **Dr. Samuel LeBaron**, has received the AAMC Humanism in Medicine Award. Dr. LeBaron, who is trained both as a psychologist and a family practice physician, has been recognized as a compassionate teacher and mentor, a tireless advocate for the underserved, and a role model to his peers. Recruited to develop Stanford medical school's required core clerkship in family and community medicine, he is now the director for the Center of Education in Family and Community Medicine. Under his leadership, the center has made the study of
family practice a vital part of both the medical school's curriculum and of the university's academic culture as a whole.

- **Dr. David Spiegel** has been named the 2004 recipient of the Marmor Award and the Marmor Award Lectureship by the American Psychiatric Association. The award honors an individual who has made research contributions that significantly further our understanding of the multifactorial biopsychosocial elements involved in mental health and illness. The award has been given only four times.

- **Dr. Harry B. Greenberg**, the Joseph D. Grant Professor in the School of Medicine, has been elected as a fellow of the American Association for the Advancement of Science for his fundamental studies of the biology of human viruses, particularly for studies of immunity to and pathogenesis of rotaviruses.

**Announcement:**

**SPIRIT Award to be Presented at December 13th Recognition Dinner:** The Third Annual School of Medicine SPIRIT Award will be presented to two School of Medicine employees at this week's Dean's Annual Staff Recognition Banquet, Thursday, November 13, 2003. The Award acknowledges two staff members who have been selected for providing outstanding contributions to the mission and vision of the School of Medicine. This year's award winners are: Reese Zasio, Facilities Engineer/Coordinator, Veterinary Service Center, Department of Comparative Medicine, and Valerie Williams, Administrative Associate, Division of Cardiovascular Medicine. The Dean's Annual Staff Recognition Banquet is a wonderful celebration acknowledging the School of Medicine's long-term employees and will be held at the Stanford Faculty Club.

**NIH Loan Repayment Programs increase awards by 66%:** The NIH reported today that it awarded loan repayment contracts totaling $63.3 million to 1,200 researchers across the nation in Fiscal Year 2003. This represents a 66% increase in the number of awards over FY 2002, the first year NIH implemented the loan repayment programs nationwide. Loan repayment contracts are competitively awarded to health professionals who commit to engage in qualifying research.

Of those awarded, over half were researchers who completed their doctoral degree within the past five years. In addition, more than half of the awardees hold M.D. degrees; more than a third, Ph.D. degrees; 8%, M.D./Ph.D. degrees; and 5%, other doctoral degrees.

NIH Loan Repayment Programs (LRPs) can repay up to $35,000 a year of qualified educational debt for health professionals pursuing careers in clinical, pediatric, contraception and infertility, or health disparities research. LRPs also provide coverage for Federal and state tax liabilities. Applicants must have a doctoral-level degree, devote 50% or more of their time to nonprofit- or government-funded research, and have educational debt equaling at least 20% of their institutional base salary. U.S. citizens,
permanent residents, or U.S. nationals may apply.

The NIH Loan Repayment Programs are a vital component of our nation's efforts to attract health professionals to research careers in areas of national need. The programs are the Clinical Research LRP, Pediatric Research LRP, Contraception and Infertility Research LRP, Clinical Research for Individuals from Disadvantaged Backgrounds LRP, and Health Disparities Research LRP.

All applications for 2004 awards must be submitted online by December 31, 2003 at 5PM EST. Additional information and the LRP online application is available at www.lrp.nih.gov.

Appointments and Promotions

- Jennifer Agramonte was appointed to Assistant Professor of Orthopedic Surgery at the Lucile Salter Packard Children's Hospital and at the Stanford University Medical Center, effective 11/1/2003 to 10/31/2006.