A Major and Well-Deserved Honor for Dr. Len Herzenberg

Professor Len Herzenberg is truly one of the 20th century’s leading innovators in human biology. In the mid 1960’s he recognized that an optics and laser device being developed at Los Alamos might be used to individually identify and then separate and sort closely related live cell populations. Working collaboratively with physicists at Stanford, Professor Herzenberg developed a prototype of what would eventually be known as the Fluorescence Activated Cell Sorter (FACS). By 1975 the FACS had become more broadly available through Becton-Dickenson. Since then it has transformed the diagnosis and monitoring of a wide array of diseases - particularly cancer, infectious disease and immunological disorders - and has shed fundamental light on a number of biological processes. The FACS was also instrumental in permitting the isolation of the first human hematopoietic stem cells and is critically important to stem cell biology today. Indeed the FACS has been one of the most important medical instruments ever developed. As just one example, in the early 1980s, the FACS was used in the work that led to fundamental insights about the impact of the Human Immunodeficiency Virus (HIV) on the immune system, and it was a valuable tool for the diagnosis, monitoring and, ultimately, the treatment of AIDS. For his seminal work on FACS, Len Herzenberg was named the recipient of the 2006 Kyoto Prize. He first learned about this distinguished award in a phone call at 11:30 pm on Thursday June 8th. I should also add that Len’s life-long partner Professor Lenore Herzenberg has played a critical role in these important discoveries.

The Kyoto Prize is awarded annually to persons who have made significant contributions in the three categories of Advanced Technology, Basic Sciences, and Arts and Philosophy. Through this Prize, the Inamori Foundation seeks not only to recognize outstanding achievements but to promote academic and cultural development as well contribute to mutual international understanding.

We had an opportunity to celebrate Len’s latest award at a late morning reception in the Dean’s Courtyard on Friday June 9th. Mr. Jay Scovie, North American Liaison for
the Inamori Foundation attended the reception and helped us to acknowledge Professor Herzenberg’s remarkable contributions.

Please join me in congratulating Dr. Herzenberg and the Herzenberg family and Lab.

**Getting Ready for Commencement 2006**

Stanford University’s 2006 Commencement will be held on Saturday June 17th and Sunday June 18th. Because of the renovations being done at Stanford Stadium, this year’s commencement will occur in two phases. On Saturday June 17th the graduate and professional school commencement activities will take place on Elliott Field beginning at 9:30 am. This year’s commencement speaker is Vartan Gregorian, President of the Carnegie Corporation and former president of the New York Public Library and Brown University.

Following the official University Commencement, the School of Medicine will hold its Certificate Ceremony on the Dean’s Lawn. The festivities will begin at 11:30 am with a luncheon on Alumni Green. Graduates and their families are all welcome to attend.

At 1:30 pm the faculty processional will commence and the School of Medicine Ceremony will be held in the tent on the Dean’s Lawn. Family and friends are invited. We are anticipating that 92 students receiving their MD degree will attend the ceremony along with 35 graduates receiving their PhD degree and six their MS degree. The graduate and medical students have selected two students to speak on their behalf: Iwei Yeh will represent the PhD students and Jason Karamchandani will represent the medical students.

A special Dean’s Newsletter on June 19th will list the awards bestowed upon School of Medicine faculty along with the commencement remarks by our two graduating students.

**Thinking About Career Development**

During my career in academic medicine I have had considerable involvement in career development, particularly for clinical science faculty. Although much of this has focused on training pediatric physician-scientists, a number of the principles and issues are applicable to other career tracks. I had the opportunity to visit some of these issues at a recent seminar with Pediatric Fellows that also included Drs. Harvey Cohen, Arline and Pete Harman Professor for the Chair of the Department of Pediatrics, and Charles Prober, Professor of Pediatrics and of Microbiology and Immunology.

I view this as more of a conversation about academic career development than as a set of prescriptive rules or guidelines, and I offer some of these reflections in this Newsletter with the hope that they might be of value to our Stanford community. I recognize that this discussion is more relevant to clinical trainees but hope that it will
have some value to basic science trainees as well – if only to share the scope of challenges and experiences that are involved with different career paths. I will focus my comments around ten key questions:

**Why consider a career in academic medicine?**

I have been a participant in academic medicine and biomedical research for three decades. The reasons that motivated my initial engagement still apply today and are likely relevant to those who choose this career path. Perhaps greater than any other motivating factor is the strong desire to contribute to discovery and innovation along with an equally strong motivation to push the boundaries of knowledge. These are often coupled with the excitement of being part of a “learning environment” where knowledge continues to flow and to shape one’s own personal repertoire.

For clinical trainees, the paths toward academic medicine could range from an investigative one involving laboratory research to one that engages advanced clinical medicine and addresses the constantly changing landscape of clinical care – which, in academic settings, almost always includes a much greater focus on tertiary and quaternary care. In addition, there is the opportunity to intersect with exceptional colleagues across multiple disciplines and to participate in teams that include basic and clinical colleagues.

Of course one of the wonderful attributes about academic medicine is the opportunity to train (as well as learn from) exceptional students, residents and fellows. There is very much the sense – and indeed it is a reality – that being in an academic setting affords the opportunity to keep one’s knowledge at the “cutting edge” and to become a thought leader and “go to” person for specific areas of expertise. This high level of expertise is almost always coupled with the development of a national and international network of colleagues (and friends), often through travel and participation in research or academic/professional societies. By definition, this permits a career path that has the potential to change and evolve in a manner that would be hard to replicate in almost any other setting. For example, depending on the situation, an academic medicine faculty member could move back and forth from basic to clinical research and/or patient care; could be involved in undergraduate, graduate and/or postgraduate education; could take on limited or more extensive administrative roles; and could work in a variety of settings – including hospitals, medical school and/or biomedical research institutes.

While for most individuals the advantages of an academic career path include its many professional and personal rewards, there are a multiplicity of issues that can diminish the value of such positions as well. These include the pressures to produce academic scholarship, most frequently measured by peer-reviewed publications. Such scholarship, while essential to academic advancement, can create a burden as well – especially for faculty who also carry significant clinical responsibilities. This reality is exacerbated by the fact that,
rare exceptions, faculty in academic medical centers are dependent on “soft money” from sponsored competitive grants and contracts (e.g., from the NIH) or clinical revenue to support personal compensation and program development. Furthermore, most academic salaries are lower than those in private practice and also come with a number of “unfunded mandates.” While practitioners in medicine always work extensive hours, this heavy workload is especially the case in academic medicine since the time to conduct cutting-edge research is not infrequently incremental to patient care and can rarely be accomplished in work weeks less than 60 or more hours.

Certainly the pros and cons must be carefully weighed and balanced, and the decision to enter academic medicine is highly individualized. I can honestly say, however, that being in academic medicine has been one of the greatest privileges of my life and career and that I fully believe the advantages far outweigh the challenges.

**What are the opportunities within an academic medical center or research institute?**

During the past couple of decades a number of academic medical centers have expanded, thus increasing opportunities for individuals interested in academic medicine. This is particularly the case for physician-scientists as well as clinician-investigators and scholars. While some areas are perhaps oversubscribed (e.g., neonatology in pediatrics), many areas have many more opportunities than available workforce. This includes a number of specialties where a dearth of qualified physician-scientists has reached critical proportions (e.g., psychiatry, pediatrics, obstetrics-gynecology, neurology, and surgical specialties, among others). So matching one’s area of interest to opportunities that may exist is clearly important as well.

Equally important is recognizing that there are different roles within academic medical centers that offer quite viable although different pathways. The most defined of these are the Investigator Track, the Clinician/Scholar-Investigator Track and the Clinician-Educator Track. These are defined quite differently depending on the institution and may constitute either completely discrete academic paths or overlapping areas. From my perspective, these tracks serve as guideposts, with the roles of the Investigator and Clinician-Educator perhaps the most stringently defined. More specifically, Investigators (in Stanford nomenclature “University Tenure Line”) require a greater than 80% focus on research whereas the Clinician-Educator is generally assumed to have an 80-90% focus on patient care. The so-called Clinician/Scholar-Investigator (in Stanford parlance “Medical Center Line) offers perhaps the widest berth since faculty may spend anywhere from 20-80% of their time on patient care or research – although on average, those in this line devote about 60% of their time on patient care.

In addition to these academic and clinical paths, clinical faculty may also engage in a gradient of leadership and administrative roles, from section/division
chief to department chair, dean or, in hospital administration, various vice-president or CEO roles. It is really a matter of finding the right match.

Academic positions can be held in traditional academic medical centers, freestanding teaching hospitals, public institutions (e.g. NIH, CDC), private foundations, professional societies, etc.

**How should you select an area of interest?**

The key is to choose an area of interest that appeals at every level – intellectually, emotionally, opportunistically, and that offers a sense of passion and an opportunity for commitment. For clinical trainees it is important to recognize that some specialties are more laboratory research intensive (e.g., hematology/oncology) whereas others are more clinical care or clinical research focused (e.g., emergency medicine). Some clinical paths are more longitudinal in patient demands (e.g., oncology, cardiology), some have specific time-blocks (e.g., critical care) and others occur in shifts (e.g., emergency medicine). Further, some areas require being part of a tertiary center or require more specific geographic requirements. Again, it is important to find a balance between personal goals and comforts and the area of focus. It is also important to plan for short, intermediate and long-term horizons (each measured in approximately 10 year intervals) and to also consider ways to create future options that foster renewal or lead to new paths or opportunities.

**How to prepare for success: what training is necessary?**

As with most career paths, there is no completely right or wrong way – but some preparations lead to greater possibilities for success. For example, if one anticipates a career in academic medicine that has a strong research component, doing research as an undergraduate or during medical school is excellent (if not prerequisite) preparation. The appropriate training also depends on whether the research path being pursued is basic versus clinical, since the latter requires more clinical training and experience in order to optimize success. In general, an academic career requires more training time. Moreover, since most individuals will not have had sufficient research experience during their degree and residency training to enable them to become a successful Principal Investigator, or PI, an extended period of protected time (generally 3-5 years) beyond the terminal degree or residency training period is almost always necessary to develop research proficiency.

Depending on anticipated career directions, there are several ways to prepare for an academic career as a clinical faculty member. If basic laboratory research is a goal then an MD-PhD program could be the best initial path to choose. At Stanford students can apply for the Medical Scientist Training Program (MSTP) from the outset if they are confident that a combined degree is their goal. However, some students coming to Stanford recognize that they would like to do a PhD in addition to an MD degree only after they have matriculated, and programs are now being put into place to enable joint degree training.
following the first year of medical school. As part of the New Stanford Medical Curriculum, every student is expected to do research as part of her/his Scholarly Concentration, and this experience can also help inform the decision of whether to pursue an academic career. Indeed, it is our hope that a large number of our future graduates will pursue academic career paths.

Because we are committed to fostering career paths in academic medicine for our MD graduates, we are also seeking ways to create linkages between the School’s education programs and those throughout the University. The Commission on Graduate Education launched by President Hennessy is also designed to open additional opportunities for joint degree education in various other disciplines (e.g., business, engineering, law, humanities and sciences). In addition, we are interested in drawing closer associations between undergraduate medical education and postgraduate training (e.g., residency and fellowships). One program we hope to initiate in 2007 is the Advanced Residency Training Program at Stanford (modeled on the STAR program at UCLA), which will allow residents and clinical fellows who have declared an interest and commitment to pursue research to undertake graduate school training and thus further enhance their prospects for success.

Key to success, of course, is appropriate mentoring and advising. For our medical students the Faculty Advising program should provide the opportunity for early counseling. These opportunities need to be continued, however, through residency, fellowship and beyond so that students and trainees are receiving the best guidance on their career opportunities and strategies for future success.

How should you choose the place to work?

In choosing where to begin and then where to continue one’s career there is a panoply of professional and personal choices. Obviously the number of choices or opportunities at one’s disposal plays an important role as well as how accommodating or compromising one feels about the nature of the workplace. For most individuals beginning a career in academic medicine, the overall excellence of the program and the range of opportunities it provides for career development and advancement take priority. Many other modifying factors having to do with personal preference are also involved. For example, depending on the nature of one’s work it may be important to seek a medical center in a university setting that offers broader interdisciplinary research and education opportunities or, conversely, to seek a more specialized research institute setting. For some it may be preferable to be in a hospital-based setting that is either full service or more specialty-oriented (e.g., children’s hospital). A connection to clinical programs will be important to most clinical faculty but may be less essential to those pursuing more basic research. In addition to traditional academic medical centers and universities, biomedical research institutions such as the National Institutes of Health or the Centers for Disease Control and Prevention can have particular appeal. I can certainly opine on the intramural research program at the NIH where I had the privilege to work as a senior investigator for over twenty years.
In addition to the research, education, patient care and related professional opportunities, other factors also influence the choice of the setting. For most individuals having a sense of the underlying culture is important: how supportive or competitive is the environment and, perhaps most importantly, how does the institution treat and foster the career development of senior fellows and junior faculty. There are, of course, extremes that include, on one hand, centers where turnover is expected after a few years and where tenured appointments are the exception, and, on the other hand, institutions that may be more competitive to enter (e.g., initial appointments are done through a search process) but once appointed, every effort is made to support the junior faculty member’s career development. A surrogate for the measure of support is frequently indicated by the “start-up” package that is offered (see below) and the overall commitment provided to supporting junior faculty. Assessing this is often best determined by speaking directly with junior faculty as well as exploring the overall record of success by junior faculty. This is not to say that institutions that have a wider base of junior faculty compared to tenured faculty provide a less optimal training environment. In fact, some of these institutions provide exemplary training and early development opportunities as long as one is prepared for the intrinsic competition often found in this type of institution and the probable need to move to another center for further academic advancement.

Although they are often less important to individuals early in their career, personal choices can play a role. The location of the center, proximity to family and friends, geographic culture and opportunities, large versus small settings, and most importantly, viable career paths for dual career families can each prove important determinants. In my opinion, geographic issues such as weather play a lesser role – but I fully recognize that this is also highly individualized.

Certainly choosing the “right institution” to commence one’s academic career is extremely important. The days when faculty seek to move from center to center every several years have dwindled as dual careers, family issues and balance, cost of living and housing have come to play an increasingly significant role. At the same time it is important to never allow oneself to feel overly bound to any one center or institution since doing so can result in compromises that may be quite damaging to one’s career development. Thus, even if you think you are in the “best place” it is important to be sure it is serving you well and, if it is not, to know that you feel comfortable with moving on. Ultimately it is incumbent on each of us to provide the necessary protections and self-awareness to permit individualized success that is not contingent on any single institution.

What resources do you need to be successful when you begin your career?

The transition from “postdoc” or clinical fellow is important and can have a defining and even enduring impact on career development and future success. I have discussed above some of the institutional characteristics that can determine whether the right soil is present to help grow one’s career. The right soil needs to
be coupled with the optimal nutrients that basically include the resources needed to optimize the chance for success. Of these I think three are essential – and all are necessary in some manner. The first and perhaps foremost are a mentor and a career advisor (ideally these are different individuals) who will help champion one’s nascent career. Mentoring is essential and in the early stages of an academic career can help facilitate everything from successful negotiating and networking skills to grant writing and the ability to interact successfully in one’s institution and beyond. Second, a successful transition from trainee to junior faculty requires financial support along with the protected time to balance the various facets of one’s career portfolio. Third is the availability of the space, equipment and resources to carry out one’s research, whether it is wet or dry lab.

The transition from trainee to junior faculty frequently occurs in the same institution. Unfortunately, when this occurs, it is sometimes not infrequent for the “promotion” to be almost exclusively a change in title but not in resources or a clear development pathway. It is important that the newly appointed junior faculty member know what resources she/he will have to assure success. This is generally referred to as the “start-up package,” and it should include support for salary (generally for three years), laboratory supplies and equipment, defined space and a clearly articulated understanding of responsibilities and the metrics that will be used to assess career advancement. Such a package is more transparently achieved when the appointment of the trainee to be a junior faculty is the result of a national search. The search process necessitates a more clearly defined institutional commitment for the candidate and indicates a plan and role – not just a convenient way of simply expanding a more senior faculty’s workforce. Thus it is important for a newly appointed junior faculty member to fully understand what is being provided, what she/he will need to earn, and what is expected to be delivered. This is not to say that one should never accept a position without a “package” but only that if one does so, it should be with a clear understanding of the reasons why this is being done and, more importantly, how career development will be supported over time.

Having successfully competed for a faculty appointment it is important to understand the institutional rules and culture regarding career advancement, for instance, knowing whether the position is time-limited or tenure track. Some institutions have a very pyramidal configuration with most of the faculty in instructor or assistant professor positions and relatively few at the professorial level. In such a setting it is reasonable to anticipate that career advancement may require relocation. Also in such pyramidal settings, faculty appointments by national search may be less common since subsequent career advancement occurs by a winnowing process over time. As long as these realities are understood, such faculty appointments can be personally successful.

The alternate model, which exists at Stanford, is for the winnowing to occur during the search process, so that when an appointment is made it is with the understanding that the selected individual may be able to advance within the
institution from junior to senior ranks. Of course an initial appointment doesn’t guarantee that academic progress will occur – but it begins with that expectation and accordingly, the initial resources provided to optimize the chances for career success.

I am not suggesting that one approach is better or worse than another – as long as one understands the rules and expectations and operates accordingly.

**How should you support your career and plan for promotion and advancement?**

Career advancement in an academic medical center, teaching hospital or medical school faculty appointments is fundamentally different from traditional university appointments and is based on the combination of performance and financial metrics. Performance is judged according to the track or appointment mechanism and includes, to various degrees, research success, clinical activity, teaching commitments and administrative positions. Schools of Medicine are generally unique in their university settings in that faculty are almost always on “soft money.” That is, a faculty member’s compensation is derived from her/his success in securing public (e.g., NIH) or private (e.g., foundation) grants or contracts, or on clinical revenues or gifts. For individual faculty, some portion of the compensation is paid for teaching (although this is more frequently an unfunded mandate) and, depending on his/her role, faculty may receive compensation for specific administrative roles. Each of these activities forms the basis for faculty “percent effort” and the total effort is used to guide total compensation – portions of which can be put “at risk” in incentive payments based on performance.

There is considerable variation among medical schools in how compensation is constructed and how it is apportioned. Further, the sources may vary depending on whether the school is public or private and whether a teaching hospital is affixed to the medical school. It is clearly incumbent on faculty members to understand the “rules” and to recognize what they must do to assure they are able to support their position. Put simply, once a junior faculty member is beyond the recruitment and initial appointment phase (which may provide up to three years of “start up support”) future success will be guided by the nature of the appointment and the ability to support one’s specific efforts. For example, if the appointment is primarily that of an investigator, faculty members will need to earn most of their compensation from grants. Conversely, if the largest percentage of one’s time is spent on patient care, than one’s individual clinical revenues will guide compensation. There is often a mixture of sources since most faculty are engaged in multiple missions – but the proportion of effort often delineates the academic track and its related financial expectations.

The specifics of these tracks vary among institutions but there are some common principles. At Stanford, for example, there are four major tracks: University Tenure Line (UTL), which is applicable for faculty who spend 80% or more time as an “Investigator.” The Medical Center Line (MCL) track is for
faculty who are engaged in research, scholarship and clinical care and thus function as “Clinician-Investigators and Clinician-Scholars.” The percentage of time in research/scholarship and patient care is individually determined, and it is important that this be clearly understood by the faculty member. In addition there are “Non-Tenure Line” appointments in Teaching and Research in which the focus is success in either of these two missions. Finally, at Stanford we have recently developed a “Clinician-Educator Line (CEL) for clinical faculty who spend the majority (80-90%) of their time in patient care and the remainder in scholarship, most often teaching.

From my perspective each of these faculty lines or tracks is important, and it is difficult to envision a successful academic medical center without all being present. Of course the proportionality of these tracks, just like the allocation of effort of individual faculty members, defines the nature of the medical center as “research intensive” or, at the other extreme, “primary care” oriented.

Choosing the right academic track and then gathering the resources to help ensure success will guide one’s individual success. One of the most important decisions a junior faculty member can make is confirming that the nature of the appointment matches one’s interests and passions and that the criteria and expectations for success are well understood. If research is one’s primary mission and passion, making sure that one has the research support and tools and also a path to assure they will continue (e.g., successful grant portfolio) is essential. If one loves patient care and teaching and is not attracted to research and written scholarship, it is far better to seek an appointment that matches these passions and to assure that the metrics that will be used to determine success and advancement are well understood. Thoughtful discussion with one’s division chief and department chair is essential at the outset and should occur on at least an annual basis.

It is also worth noting that one’s interests can change such that someone appointed to a clinical track may determine that he or she is better suited for full-time research and may wish to switch to an investigator track or vice versa. There are good reasons for doing this and, although not without difficulty, most academic centers will work to accommodate such career transitions. A less acceptable approach is for individuals to switch from one track to another (most often from a research to more clinical track) when they perceive that they will not be successful with an upcoming review. It is far better to anticipate a desired switch and prepare for that proactively and in coordination with one’s mentors than to seek to do so because perceived “failure” is imminent. All faculty should become familiar with the specific guidelines relevant to their appointment. At Stanford these are delineated the “Faculty Handbook” which is accessible on-line at: http://med.stanford.edu/academicaffairs/letters.html.

Is tenure a myth or reality – what does it really mean in academic medicine?
Tenure is unique to universities and does exist, to varying degrees, at many academic centers. But it means something different in various schools and programs and thus it is important to understand what it conveys at one’s own institution. At its core, tenure means that one’s position is permanent absent highly unusual circumstances such as, for example, the closure of academic departments, severe financial exigency or dismissal for reasons of professional misconduct but it does not mean that one’s compensation or resources are assured over time. In fact in most major centers, if tenure is awarded, it really means that a base level of compensation is assured – although this is usually only a fraction of one’s overall compensation. Further, tenure does not guarantee a certain size laboratory or related resources since these are most often guided by performance and the financial support available for them.

Tenure track positions vary in their overall proportionality at major academic medical centers. At some, very few faculty are tenured even when they achieve full professorial status. At others, tenure is awarded after a specific time period of appointment (often 7-10 years) and at either the associate or full professor level. Because the institutional commitment is significant, tenure decisions are quite rigorous. Again, being knowledgeable about the criteria for tenure and the processes used to evaluate candidates for it is important. But it is also important to recognize that tenure decisions are challenging and that one can only strive to do the best work possible while recognizing that academic success, particularly in research, is not only guided by the nature of the questions being pursued but also by a certain amount of luck in being able to successfully answer them. This underscores the importance of mentoring and career guidance with regular reviews throughout the tenure evaluation process so as to permit the greatest degree of flexibility and highest level for success.

What about finding balance in work and personal life?

I will not mince words. Success in an academic career is demanding and time-consuming. While the levels of rigor and expectation vary among institutions and are highest in the most premier centers, a career path in academic medicine can be stressful. From my point of view the excitement of discovery, the ability to have an impact on a specific problem or to change the course of disease management, and the opportunity to teach students and train future generations of physicians or scientists outweigh the pressures that occur in academic medicine. But I fully recognize that this trade-off is very individually perceived and felt and is also influenced by many other life pressures and demands.

It is difficult to envision that a full-time appointment in academic medicine would require less than 60 hours per week of work. Clearly this degree of commitment has a particularly strong impact during the early phase of one’s career and is made more challenging by the fact that it often occurs during the same phase of life in which personal development, family relations, and financial pressures are also in the forefront. Thus, choosing one’s career path, institution, work scope and support systems carefully is critical. Forging partnerships and
sharing responsibilities – personally and professionally – can be extremely helpful.

Seeking flexibility is also important and certain positions (laboratory research versus patient care) can be more accommodating to different time schedules. Again, being proactive and open about one’s needs and expectations is essential. It is also important to understand what resources are available to faculty to help support family life or work balance, which include child day care, elder care, counseling, and financial management.

I think it is also incredibly important to make careful lifestyle choices – not only to promote one’s career but also to foster one’s personal well-being. Being balanced is key – in nutrition, work schedule, sleep and exercise. The latter is particularly important, in my opinion, since a regular exercise program also fosters better lifestyle choices and further improves energy, stress relief and overall health.

One of the important changes now occurring in academic medicine is an increasing willingness of faculty at all levels to acknowledge the importance of work/family balance and to seek ways of achieving it. While words alone will not accomplish this task, a willingness to address this matter honestly – and without some of the judgmental attitudes of the past – is a very important source for future progress.

**How to stay excited about one’s career over time – what are the options?**

I think one of the greatest attributes of a career in academic medicine is that it offers the opportunity for continued growth and development along multiple dimensions and time-lines. It also offers the prospect of changing one’s focus depending on opportunity and interest – as long as one has acquired the requisite skills. Clearly the best way to stay excited about one’s career is to choose a focus that fulfills one’s passions – and that also allows for those passions to change over time.

Early in one’s career it is more likely that focus on one mission (e.g., research or patient care) will dominate. But over time, with increased skill acquisition and experience, it becomes possible to take on new challenges. This keeps the fires of excitement burning and is one of the great things about academic medicine. You can often recreate yourself- often multiple times over.

It is also important to pace one’s career. The rush to make a certain grade or achieve a certain position rapidly (say become a professor by 40) not only can create undue pressure but also tends to truncate the longevity of one’s career and the significance of the questions being pursued. It is important to remember that an academic career is measured over decades and that moving through the pathways too quickly is a route to burnout and dissatisfaction. Of course I understand that this response is highly individualized – which only underscores to
me that each individual should follow a course and pace that is comfortable and meaningful and that is not driven by someone else’s agenda.

As I have noted elsewhere in this discussion, it is also important to never become too bound to any one institution. There are always choices, but if you come to believe that you can only be successful or happy in one setting or location, you have likely traded your flexibility and options to become captive to someone else’s plans for you.

A good measure of success is whether you feel satisfied and happy most of the time. Certainly a long view is needed because there are lots of ups and downs and sometimes the cycles can be measured in days or even hours. But if over the months to years you relish your progress and love the work you are doing, then you have clearly made the right choice. Perhaps most important is to reflect often and deeply on why you choose medicine and science—and how you can continue to grow and love that choice.

I recognize that the comments offered here are subjective and largely oriented to individuals pursuing clinical academic careers. But I hope everyone will find something useful in them. If you have questions or concerns about anything I have said, please let me know. Also please feel free to offer your suggestions or observations as well.

Training Future Physician Leaders to be Agents of Change

In the last issue of the Dean’s Newsletter I commented on the Scholarly Concentrations in our New Stanford Curriculum for Medical Education. A primary goal of the New Curriculum is to develop future leaders in medicine and biomedical research. Of course, physicians can be leaders in many ways, through important discoveries and innovations, the delivery of cutting-edge patient care or by advocating improvements in health systems or in the health of communities. To meet this latter goal, Drs. Clarence Braddock, Associate Professor of Medicine, and Lisa Chamberlain, Clinical Instructor in Pediatrics, have created a year long Practice of Medicine Project, which is part of the Practice of Medicine course. Dr. Braddock serves as the Director of the Practice of Medicine course and Dr. Chamberlain is the Director of the Office of Community Health. At its core, this course and especially the Practice of Medicine Project provide first-year medical students with the opportunity to select a contemporary topic in health care that enables them to form a partnership with a relevant community to address ways of better understanding or improving health care.

The Practice of Medicine course provides training in basic clinical skills and education about the broad dimensions of medical practice. A core philosophy of this course is that a number of disciplines (e.g., ethics, public health, epidemiology, nutrition, behavioral medicine) are to be included, each of which has an impact on the contemporary practice of clinical medicine. A goal of the Practice of Medicine Project is to provide all Stanford medical students with a concrete experience in being leaders and agents of change in health care.
The *Practice of Medicine* is taught over three consecutive quarters. In the fall quarter, students form small groups and select an area of interest to pursue for their project. Next, the groups conduct background research on the topic of interest and explore its public health, policy, and ethical dimensions. Once they’ve arrived at this informed position, the course directors connect the students with key leaders in the health care community, and through this collaboration each group develops a written proposal and an action plan in support of the proposal. In the spring, groups carry out their project plan and present a summary of their work in a poster session. Of these, two exceptional groups are selected to give an oral presentation of their project during the Department of Medicine Grand Rounds.

The specific projects completed in the first three years of this innovative program have ranged across a broad continuum of local, state, and national issues. For example, one student group developed a piece of legislation that was ultimately sponsored by California State Senator Simitian as part of his, “There Ought to be a Law” program. This legislation created a system for recycling unused prescription drugs from pharmacies and making them available to needy patients. In fact, based on this project, Senator Simitian introduced this program into legislation that was passed and signed into law by the governor. Another group of students is now working with local counties on writing regulations and policies to implement this program.

A recent group developed a proposal for the US Department of Health and Human Services to create a national registry for volunteer health care workers for natural disasters. Motivated by what they’d seen first hand as volunteers after Hurricane Katrina, this group created a framework to allow physicians, nurses, pharmacists, and other health care workers to volunteer and have their state licensure cross-referenced quickly, thereby drastically shortening the delay in getting these volunteers in positions where they could help. Their program is now being implemented by the DHHS with our students serving as consultants.

Other groups have worked with school districts to develop sounder nutrition policies, and other groups have developed organ donor education campaigns or organized fitness programs for elementary school children. These are but a few examples of the many projects that our students are doing, in which they are simultaneously having an impact on the health of communities now and gaining experience and skill that will enable them to continue to be effective agents of change over the course of their careers.

I applaud the efforts of our students and offer thanks to Drs. Braddock and Chamberlain along with other faculty and community mentors and advisors.

**A Perspective on Evolution from Stanford Medicine**

Much has appeared in the press this past year on evolution and intelligent design. In an effort to get the facts straight and to cast them in an historical and scientifically grounded context, the latest issue of *Stanford Medicine* has focused its Summer 2006 issue on this important topic. Many of you will receive the hard copy but if you wish to
read the articles on line please to: http://mednews.stanford.edu/stanmed/2006summer/. This is another great edition of Stanford Medicine and I encourage you to read it carefully.

A Reminder About Bike Safety

In past Dean’s Newsletters I have expressed my concern about bicycle safety on campus and beyond. I remain quite distressed to see the numbers of students and others riding bikes with no lights or reflectors and darting across on-coming traffic - even at night. I also continue to be concerned by the fact that so many individuals do not wear helmets – including some of our own students. It is easy to forget how quickly and significantly one’s life can be changed by a bicycle injury. For example, I recently spoke at a national conference on a panel with a colleague who had a serious biking injury shortly thereafter and who recently told me that she “hopes to be able to ambulate on crutches by September.” About ten days ago I learned that the University Chief Financial Officer, Randy Livingston, had been admitted to Stanford Hospital with a broken femur and fractured hand following a recreational bike injury. Fortunately he was wearing a helmet (which of course I asked him about when I went to visit him). As a reminder of how serious his injury could have been (beyond what I have already described), Randy sent the following note: “I finally got the nerve to look at my bike helmet this afternoon and found it was cracked in 7 different places. I think it truly saved me from a very serious head injury and possibly death. For anyone who occasionally rides without a helmet, I suggest you reread this message and think otherwise.”

I know his recent accident certainly made a lasting impression on Randy. I hope his observation will also give everyone who is cycling (especially those foolishly doing so without a helmet – or night light) a pause and reality check.

Admitting a Serious Mistake

In the last issue of the Dean’s Newsletter I referred to the seriously flawed and highly misleading and erroneous report in the Stanford Daily about discrimination at the medical school. It was journalism at its worst, and it prompted Drs. Hannah Valantine, David Stevenson and me to write a strong letter of protest to the Daily that I also printed in the last edition of the Dean’s Newsletter (see: http://deansnewsletter.stanford.edu/#4). An equally distressed letter from Provost Etchemendy also appeared in the same issue of the Stanford Daily. Thanks to those communications and other discussions, the editor of the Stanford Daily elected to print a retraction. Although I found this episode highly objectionable, I do want to compliment editor Camille Ricketts and writer Ben Eppler for having the courage and wisdom to admit their error. Facile comments and unproved allegations can create enormous damage, and I believe damage was done by the original Stanford Daily article. That damage is partially ameliorated by the retraction that follows. Equally important, I hope this unfortunate experience provides a source of education for all involved about how important it is to assure accuracy and scholarship in reporting news as facts – and not opinion. While the standard for journalism should always be high, one could credibly argue that it should be at its acme at an institution of Stanford
University’s caliber. Sadly that was not the case in this instance – but maybe there is hope for the future.

Here is the retraction – which did appear on the front page of the June 8th issue of the *Stanford Daily*.

Editor’s Note: Med School story misleading
By Camille Ricketts & Ben Eppler
Editor-in-Chief,
Thursday, June 8, 2006

Dear Readers,

On May 25, The Daily ran an article titled “Med School faculty claim systematic discrimination.” Since its publication, the story has drawn fire from administrators and faculty members. As those responsible for the article, we are taking this opportunity to clarify the issues it raised and to apologize for any misleading information it contained. We do this first and foremost for the benefit of our readers, and secondly, to give the University credit where credit is due.

When a newspaper runs such a high-profile story, it has the responsibility to carry the burden of proof. We were not able to present enough solid evidence to justify several of the stated allegations. While The Daily was shown documents sufficiently demonstrating discrimination and unfair hiring practices in a few isolated cases, this evidence is not necessarily enough to indicate a “systematic” problem.

More importantly, we saw no documented material backing up anonymous sources’ suspicions that Stanford ties within the Bush administration prompted the U.S. Department of Labor to halt its discrimination investigation. The University has categorically denied this claim. In retrospect, we exercised poor news judgment in including this detail.

In addition, the number of documents showing that certain job openings are filled before they are advertised is too limited to support any broad claim. Our sources were constrained due to fear of being identified, but we should have required them to present more specific evidence or refer us to others willing to speak on the record.

Finally, we apologize for leaning so heavily on unnamed sources to an extent that prevented the University from starting a constructive dialogue with its accusers. In the future, The Daily should approach similar situations differently, making sure that information provided by anonymous sources can be verified through other channels, and is not a matter of opinion.
Past lawsuits against the University alleging discrimination — several of which have been settled out of court, blocking plaintiffs from speaking to the press — are well covered in the media. The Department of Labor’s investigation is currently underway, and it has yet to rule whether discrimination has occurred or not. Still, our handful of testimonies from former and present Medical School faculty members in no way proves that these problems are ongoing.

In fact, we have since spoken to other Medical School sources who say strong efforts are being made by the school’s leadership to improve diversity and combat discrimination. Chief among these efforts is the creation of the Office of Diversity and Leadership within the school and the appointment of Hannah Valantine to oversee it as the senior associate dean.

Despite our errors in judgment, the article was based on experiences related to us by high-ranking members of the Medical School faculty. Perhaps our readers would have been better served by an article examining the merits of these few complaints. Regardless, this experience has offered many valuable lessons, and we hope to continue holding both The Daily and the University to a high standard.

Awards and Honors

**Dr. William Dement,** Lowell W. and Josephine Q. Berry Professor in the Department of Psychiatry and Behavioral Sciences and Professor, by courtesy, of Psychology, received an Honorary Doctor of Science degree from the Mount Sinai School of Medicine in recognition of his seminal work on sleep. Congratulations to Dr. Dement.

**Dr. Richard Hoppe,** the Henry S. Kaplan-Harry Lebeson Professor of Cancer Biology, has been named the 2006 recipient of the Gold Medal Award from the American Society of Therapeutic Radiology and Oncology (ASTRO). He will receive the Gold Medal at the annual ASTRO meeting in November 2006. Please join me in congratulating Dr. Hoppe.

**Dr. Harley McAdams,** Associate Professor of Developmental Biology, has just been elected as a Fellow of the American Academy of Microbiology (AAM). Members are elected based on their records of scientific achievement and original contributions that have advanced microbiology. Congratulations, Dr. McAdams.

**Dr. Phil Sunshine,** Emeritus Professor of Pediatrics in the Division of Neonatal and Developmental Medicine, is the recipient of the 2006 Silver and Gold Award given by the University of Colorado Medical Alumni Association. The award is the highest recognition bestowed by the Association for professional achievement and community service. Congratulations, Dr. Sunshine.
Dr. Larry Zaroff, Senior Research Scholar at the Center for Biomedical Ethics has been chosen as the Associated Students of Stanford University (ASSU) Teacher of the Year. Dr. Zaroff teaches the core medical humanities course for the med school's Biomedical Ethics and Medical Humanities scholarly concentration. This award was created to recognize a single faculty member, nominated by students or other faculty members, who has gone above and beyond the duties of classroom instruction. Congratulations, Dr. Zaroff.

On Wednesday evening May 31st we had a celebratory reception to honor five new recipients of endowed chairs. The reception was held in the Cantor Art Museum and included friends and families of the five new chair holders. It was a wonderful acknowledgement of exceptional careers. The five new endowed professors are:

- **Dr. Michael F. Clarke**, the Karel H. and Avice N. Beehuis Professor in Cancer Biology
- **Dr. Lawrence L.K. Leung**, the Maureen Lyles D’Amborogio Professor in Medicine
- **Dr. William Maloney**, the Elsbach-Richards Professor in Surgery
- **Dr. Norman Rizk**, the Berthold and Belle N. Guggenhime Professor in Medicine
- **Dr. Linda M. Shortliffe**, the Stanley McCormick Memorial Professor

Please join me in congratulating our new endowed professors.

Dora Castaneda, graduate student in the Department of Medicine, was selected to receive one of the five 2006 Herbert W. Nickens Medical Student Scholarships from the Association of American Medical Colleges and its Division of Diversity Policy and Programs. The award honors students who have made a significant contribution to diversity and demonstrate leadership. Congratulations, Dora.

**Appointments and Promotions**

- **Lavera Crawley** has been appointed to Assistant Professor (Research) of Pediatrics, effective 6/01/06.
- **Douglas Owens** has been promoted to Professor of Medicine, effective 6/01/06.
- **Eric Sibley** has been promoted to Associate Professor of Pediatrics, effective 6/01/06.