Letter from the Dean

The truth behind the “Dean’s Tax” – where do your dollars go?

Dear colleagues:

Nearly all medical schools have a “Dean’s tax.” The CU School of Medicine is no exception. We have an Academic Enrichment Fund (AEF) which is generated by a tax of 10% on the School of Medicine faculty’s clinical earnings. Created in 1982, the AEF is projected to generate, cumulatively, nearly $150 million by the end of this fiscal year.

So, I am often asked, what are these funds used for?

The answer is that the AEF is reinvested, one hundred percent, back into the School. Each and every member of the faculty benefits from the AEF, and we can directly track the rise in the School’s national rankings in research to the growth and development of the AEF. (See figure on Page 2.)

Research

Twenty years ago, we had a modest research enterprise at the CU School of Medicine. With the infusion of AEF dollars, we were able to make some significant advances. The original and some ongoing funding for the Cancer Center, the Neurosciences Program, the Molecular Biology Program, the

(Continues on page 2)
Letter from the Dean (cont.)

Molecular Structure Program, the Colorado Health Outcomes Program and the Center for Human Nutrition all comes from the AEF.

In 2002 we developed the Strategic Research Initiatives Committee (SIRC). This committee accepts proposals for collaborative research projects that are deemed essential to the overall success of the School. Proposals to SIRC must consist of a solid business strategy and a long-term funding plan, and pass the rigorous standards of peers who review the proposals. This past year, we set aside half of these dollars to support bridge funding for investigators who need it while they reapply for NIH grant funding.

Education

The AEF has not only supported the research enterprise, but also the School’s educational mission. For example, the AEF provides base funding for our Medical Scientist Training Program (MSTP). These students dedicate 6 to 8 years to receiving their medical degrees along with their PhDs. We hope that this pool of students will be part of our future faculty. There has also been AEF support in past years for graduate student stipends; we recently switched this funding source to the School’s Indirect Cost Recovery (F&A) funds.

Vision

Since its inception in 1982, the AEF has been used to provide department chairs with the funds necessary to recruit the best and the brightest faculty for their respective areas. These resources, that would not otherwise exist, have enabled the School to recruit and retain visionary leaders and faculty who have led to the School’s remarkable success despite its underwhelming state support.

What the AEF is not used for

We do not use the AEF for clinical program support. Our arrangement with our affiliated hospitals is that when there are needs for start-up or ongoing support for clinical programs, the chairs and I ask our affiliated hospitals for these resources. Recently, however, the Board of Directors of UPI has overseen a UPI investment fund. One use of this fund is to support clinical program development in areas when the affiliated hospitals declined to participate, such as a Prenatal Genetics program and a Reproductive Medicine and Fertility program in Colorado Springs. Another use of this fund is the joint investment with The Children’s Hospital in a collaborative Ambulatory Surgery Center in the near future. This investment fund can be used as either a grant or a loan. The proposals are reviewed by the Finance and Audit Committee of UPI and sent to the Executive Committee and the Board of UPI for final approval.

As I’ve been out spreading the word about the CU School of Medicine to the business community, I always mention the AEF. And every time I mention this funding source, the business leaders inevitably stop me to know more about the School’s own “venture capital” fund. They are extremely impressed with the vision and commitment of our faculty members who are willing to invest in the School’s future. They are equally impressed by the impact these funds have had on the School. On behalf of the entire School, we are grateful to our faculty clinicians for their significant contributions to the School’s success.

With warm regards,

Richard D. Krugman, MD
Dean, CU School of Medicine

Chair Recruitments 42.2%

Renovations & Facilities 2.2%

Department Programs 29.3%

School-Wide Programs 26.3%

Total AEF Expenditures: $145,474,396

1 Figures for FY 2005-06 are based on expenditures through June 30, 2006.
Faculty FAQs (cont.)

(Continued from page 1)

three different MPAs, based on the type of appointment they hold:

- **Full Members**: A School of Medicine faculty member must sign a Full MPA if he or she is employed full-time (≥ 0.5 FTE) by the University of Colorado and is a member of the SOM Executive Faculty (Professor, Research Professor, Associate Professor, Associate Research Professor, Assistant Professor, Associate Research Professor, Senior Instructor, Instructor, Senior Research Instructor, and Research Instructors). Full members (regardless of percent FTE) are not allowed to have any independent or other health care practice. Full Members have all voting privileges and are eligible to serve as officers of UPI and serve on the Board of Directors of UPI.

- **Associate Members** are individuals who: (1) have a clinical faculty appointment in the SOM or a regular faculty appointment in the SOM through an affiliated institution which is their primary employer; and (2) are employed or paid less than 0.5 FTE by the University of Colorado. Associate Members have no voting privileges and are not eligible to serve on the Board of Directors of UPI.

- **Affiliate Members**: The Affiliate MPA is for Instructor-Fellows, Instructor-Chief Residents, Nurses, Physical Therapists, Occupational Therapists, Nurse Anesthetists and other allied health professionals who have been granted a faculty appointment in the School of Medicine. Affiliate members have no voting privileges and are not eligible to serve as officers on the Board of Directors of UPI.

The Member Practice Agreement states that the Member will provide professional or clinical services only at UPI-designated sites of practice, and that all income will be assigned by the faculty member to UPI. An exception: Members are not required to assign income that is earned while they are employed and paid directly by an affiliated hospital (Veterans Administration Medical Center, Denver Health and Hospital Authority, National Jewish Hospital) or income earned while on an approved leave of absence.

The assignment of income policy applies to all income or other compensation or remuneration earned by a Member (unless an exception is applied for and approved), including:

1. Fees, retainers or other compensation earned for performing patient care, administrative or consultative services.
2. Fees, retainers or other forms of compensation or remuneration earned for services rendered as an expert witness or consultant in a legal matter.
3. Fees and honoraria for teaching, lecturing or training.

Exceptions: The SOM has designated certain honoraria as exempt from the assignment-of-income policy, such as modest, one-time payments for lectures, articles, visiting professorships, NIH study sections and service on certain non-profit boards.

Faculty Development

Behind Every Great Star: A Mentoring Guide for School of Medicine Faculty and Administrators

**Steven R. Lowenstein, M.D., M.P.H., Associate Dean for Faculty Affairs.**

ECOLOGISTS TELL US that a tree planted in a clearing of an old forest will grow more successfully than one planted in an open field. The reason, it seems, is that the roots of the forest are able to follow the intricate pathways created by former trees and thus embed themselves more deeply … Similarly, human beings thrive better when we grow in the presence of those who have gone before.1

Every faculty member at the University of Colorado School of Medicine should have at least one career mentor. The reason is simple: Having a mentor is critical to building a successful academic career.1-9

Strong mentoring relationships are positively associated with career satisfaction, promotion, research grants, publications and other measures of academic productivity.1,6,7,10,11 Faculty who have mentors are more confident, enthusiastic and successful in their jobs.

Mentoring is also mandated by the Rules of the School of Medicine, which state: “All Instructors, Senior Instructors and Assistant Professors will be assigned at least one mentor by the department chair … within three months of the start of the appointment period.” Unfortunately, there are significant gaps in our mentoring programs, despite this rule. In a July, 2005 survey only 52 percent of junior faculty reported that they have a mentor to assist with career development; basic science faculty were more than twice as likely to have a mentor (68%), compared with clinician-educators (31%). Even among junior faculty who did have a career mentor, 24 percent reported they had never met to discuss career progress, and an additional 33 percent had met only once.

This article was written to help SOM faculty members, especially new Instructors and Assistant Professors, understand the goals of mentoring relationships, the characteristics of ideal mentors and the responsibilities that are assigned to mentors and mentees. This article also includes recommendations for department chairs, senior academic leaders and administra-

(Continued on page 4)
Faculty Development (cont.)

Behind Every Great Star: A Mentoring Guide for School of Medicine Faculty and Administrators (cont.)

(Continued from page 3)

Mentoring: Is there really a need?
Arnold Rice Rich, who served as professor of pathology at the Johns Hopkins University School of Medicine from 1919-1958, observed that, in his day, medical school faculty could enjoy “the element of repose, the quite pursuit of knowledge, the friendship of books, the pleasures of conversations and the advantages of solitude.”12 Those times are long gone.

Today, medical school faculty face relentless pressures to generate revenues from direct patient care or grants.2,13,14 Administrative and regulatory burdens are ever-increasing. And, as academic medical centers increasingly emphasize payer mix, managed care, business models and the “bottom line,” it is becoming more difficult to find time to teach, balance family and career, keep up with advances in medicine and science, gather with colleagues or engage in meaningful scholarship.1,6,12,15-21 For medical school faculty, wrote Strasburger, “These are the times than can try one’s soul.”22

Why focus on junior faculty?
The need for skilled mentors is especially great in the first 2-3 years of a faculty appointment. This is because a successful transition from superb trainee to junior faculty member is not easy or automatic. As Bachrach has pointed out, “It is not that faculty members fail completely when embarking on their academic careers, but that some faculty don't thrive early enough in the process.”23 In a 1991 study of college and university faculty, just 15% of new faculty were “quickly successful.”24

If faculty do not thrive early, it is not because they lack education, intelligence, drive, native ability or commitment. Rather, it is because these innate traits are not enough. Novice faculty members should not have to rely on trial and error, bootstrapping or “muddling through.” And “see one, do one, teach one” is ineffective. According to Boice, “Almost all the failures and miseries of new [faculty] hires owe to misunderstandings about effective ways of working and socializing. Never, in my close observations of over a thousand novice professors did I see someone falter for reasons of inexpertise in his or her area of scholarship. Or from lack of desire.”25

What, exactly, do mentors do?
The job of the mentor is straightforward: He or she seeks to provide the faculty protégé with the ancillary knowledge, skills and resources necessary to build a successful and rewarding academic career. These skills include self-promotion (and preparation for promotion), getting started in research, identifying writing and funding opportunities, establishing colleague networks (within and external to the School), learning presentation skills, identifying appropriate university and community service opportunities, time management, laboratory management, negotiation for resources and the tricks of successful navigation through the political workings of the modern medilal school.

According to Waugh, Hitchcock, Berk and a large body of research about medical faculty development, a new faculty member needs mentoring in at least three critical areas: 1) development of career management skills; 2) understanding and adapting to the values and norms of the discipline and the institution; and 3) establishing a productive network of colleagues. Having productive colleagues is a particularly strong predictor of academic career success. According to Hitchcock et al., “the evidence of their importance is so compelling that if one were allowed only one line of inquiry to predict a faculty member’s future success in the field, it might well be, ‘Tell me about your colleagues.’”26 Carr et al observed that “the greatest danger for junior faculty in academic medicine is isolation.”27

Table 1, which can be found in the complete article at (http://www.uchsc.edu/som/faculty/MentoringGuide.doc), lists some of the specific ways that a successful mentor assists and instructs the protégé. In a word, mentors help their protégés “get off to a quick start” in their academic work. I would argue that a mentor is at least as important to a new Assistant Professor as library access, close-in parking, a high-speed internet connection or the other resources that we take for granted.

What makes a good mentor?
In the literature describing mentors, several words and phrases are often repeated: trusted advisor; career coach; sponsor; teacher; advisor; tutor; cheerful critic; strategist; confidant; and guide. More interesting, perhaps, are the general descriptions of mentors offered by experts in the field:

A mentor is a person “of greater rank or expertise, who teaches, guides and develops a novice in the organization and in a profession…The mentor possesses both professional expertise and political know-how and makes these available to the student. Mentors teach what textbooks cannot.”28

“Mentors are senior persons within their fields. They are chosen, specifically, for their ability to use the power of their positions and experience to (Continued on page 5)
Faculty Development (cont.)

Behind Every Great Star: A Mentoring Guide for School of Medicine Faculty and Administrators (cont.)

(Continued from page 4)

develop the careers of those less pow-
erful and experienced. A mentor has
moved beyond preoccupation with
self to foster the growth of a develop-
ing professional.”

A mentor “helps a more junior per-
son develop professionally through a com-
bination of advising on projects, skills
development, creation of opportu-

The most successful mentoring occurs when the mentor guides the mentored in such a way as to become competitive for the mentor’s position … A confident and competent mentor is able to ask, “You want my job? I’ll teach you how to get it.”

Several functions are considered integral in the mentoring relationship: teaching, sponsoring, guidance, socialization into a profession, provision of counsel and moral support. Of all of these, the most important function of a mentor is assisting in the realization of a dream.

The benefits of mentoring may be greatest if mentors and mentees are engaged in collaborative academic projects. But in all cases, the mentor invests time, energy, experiential learning, Socratic dialogue, sharing of practical tips, introductions to influential colleagues and active engage-

Rules and Regulations

Are Departments Conducting Mid-Course Faculty Reviews?

It is accepted throughout academia that faculty members are more likely to succeed if there is a well-defined, consistently-applied performance evaluation process. The need for performance feedback is especially acute for junior faculty, who often struggle to meet their demanding clinical, research, teaching and service responsibilities, and who worry about achieving promotion and tenure. Junior faculty are more likely to fail early in their careers, and are more likely to leave, if they do not know where they stand.

One critical component of faculty evaluation is the mid-course comprehensive review. The Laws of the Regents and the Rules of the School of Medicine state clearly that “Each faculty member at the rank of Assistant Profes-
sor shall be evaluated in a comprehensive manner during the 3rd or 4th year in rank.”

This performance review should be as de-
tailed and comprehensive as the true promo-
tion review that will follow in 3-4 years. All aspects of academic performance should be evaluated. The mid-course review should conclude with a clear assessment of whether the faculty member’s progress to-
ward promotion is satisfactory, or whether mid-course corrections are needed.

The mid-course comprehensive review is good for faculty and good for the depart-
ments. But it appears that we are not meet-
ing this faculty need. During the 2005-
2006 academic year, 53 Assistant Profes-
sors were evaluated for promotion to
Associate Professor. In 25 cases (47%) there was no record of a mid-course re-
view.

Department chairs, faculty and administra-
tors are busy; it is often reported that faculty and administrators are close to their “mentoring and faculty review capacity.”

But, like mentoring, meaningful perform-
ance feedback is a strong predictor of fac-
ulty success. As Bachrach observed, “If we don’t have the time or resources to nurture our current valued faculty members, how will we ever have the time and resources to recruit their replacement?” (Acad Physic Sci. March, 2005:2).

For more information about the School’s mandatory mid-course comprehensive re-
views, see the Office of Faculty Affairs web site (www.uchsc.edu/som/faculty).
IN MARCH, 2005 the Regents authorized a comprehensive study of tenure at the University of Colorado. On April 24, 2006 the Independent Report on Tenure-Related Processes at the University of Colorado was released. The Independent Report concluded that “Tenure is fundamental to academic freedom and the free exchange of ideas, which in turn are essential to the intellectual health of the University.” The report found that having a strong tenure system helps to ensure recruitment of the most qualified faculty and is a “best practice” in higher education.

According to the report, faculty tenure reviews are, generally, “rigorous, transparent and self-correcting.” At the same time, members of the internal and external working groups who prepared the report found that many people involved in the tenure process, including department chairs, do not fully understand or execute their roles. In addition, the committees found that mentoring of tenure-track faculty is often weak and inconsistent.

The report also concluded that post-tenure review “exists mostly on paper.” Post-tenure review, according to the Report, is performed in an inconsistent manner; in addition, post-tenure review is devoid of the resources necessary to improve faculty performance, where required, and it lacks the “carrots and sticks” needed to make it effective. The Report recommends that the University clarify the specific actions that would justify discipline against a tenured faculty member, including removal from the classroom or dismissal.

The report included 40 major recommendations, including: making the University’s tenure-related laws and policies easily accessible to the public; conducting random audits of tenure case files at least every 5 years; training for department chairs and senior administrators; greater oversight of tenure reviews at the level of the campus chancellors; and a requirement that all faculty sign a statement of “professional responsibility,” based upon language currently in Regental laws. There were also several recommendations regarding post-tenure review and dismissal for cause.

The tenure review included a literature review, benchmarking studies of policies from 16 similar universities (including 10 medical schools), 158 interviews with faculty and administrators and an in-depth audit of 95 tenure cases during the 2003-04 and 2004-05 academic years. Only 4 cases showed significant deviations from University policies (and in two of those cases, the existing rules were vague). In June, 2006 members of the Advisory Committee on Tenure-Related Processes presented these and other findings to the Board of Regents. At least 30 of the 40 recommendations have already been drafted as changes to Regental laws or policy statements. For further information, or to review the Independent Report on Tenure-Related Processes at the University of Colorado and the major recommendations, go to http://www.cu.edu/tenurereview/.

THREE MEMBERS OF the University community received 2006 Thomas Jefferson awards. One of these was Mark Earnest, M.D., Ph.D., Associate Professor of Medicine in the School of Medicine. Dr. Earnest was recognized by the Board of Regents on June 29.

Thomas Jefferson Awards are presented each spring to members of the University of Colorado community who advance the ideals of Thomas Jefferson, including: a broad interest in literature, arts, sciences and public affairs; a strong concern for the advancement of higher education; a deeply seated sense of individual civic responsibility; and a profound commitment to the welfare and rights of the individual. The prestigious significance of the award lies in its integration of excellence and achievements that is reflected in daily work, scholarship and notable participation in humanitarian activities.

A committee of CU system faculty, staff, students and alumni, who represent the sciences and humanities, selects the winners. Teaching faculty, students and classified and professional-exempt staff are all eligible to receive the award. Each recipient receives a plaque and a $1,000 prize.

Dr. Earnest, a member of the faculty in the Division of General Internal Medicine, completed a Ph.D. in health and behavioral sciences from the UCDHSC. His dissertation described process of individuals with emphysema adapting to the use of supplemental oxygen. The work was published in 2002 in the Journal of General Internal Medicine. Dr. Earnest also is developer and director of the CU-LEADS program, which is designed to expose students to the economic, cultural and social antecedents of health and illness. He works to provide medical students with the skills and vision to work creatively in their communities to promote health.

(Excerpted with permission from the Silver & Gold Record, July 13, 2006.)
Spero Manson, M.D., receives Herbert W. Nickens Award

Spero Manson, M.D., Professor of Psychiatry, has been selected to receive the prestigious Herbert W. Nickens Award from the Association of American Medical Colleges (AAMC), in recognition of his work to advance the health and welfare of American Indian and Alaska Native communities. Dr. Manson will be the seventh recipient of the award, which is presented to an individual who has made outstanding contributions to promoting justice in medical education and health care. The award will be presented to Dr. Manson on October 28 at the AAMC’s 117th annual meeting in Seattle. He will deliver the Nickens Lecture on Oct. 30.

Dr. Manson, a Pembina Chippewa, founded and now directs the University’s American Indian and Alaska Native Programs (AIANP), which collaborate with more than 100 native communities across the country to provide research, program development, training and health care within rural, reservation, urban and village settings. AIANP draws upon a wide range of disciplines, including psychiatry, internal medicine, nursing, social work, health economics and public health. Two-thirds of the AIANP staff and nine of the faculty members are American Indians or Alaska Natives, more than any other medical school in the country. Despite the availability of traditional healing for American Indian and Alaska Native veterans, Dr. Manson recognized that this population lacked access to basic medical care for post-traumatic stress disorder and other illnesses. He developed a series of telemedicine partnerships among tribes, the University, the Veterans Health Administration and the Indian Health Service. Weekly psychiatric clinics -- via live videoconference -- are now available to veterans living in 12 rural, isolated communities.

In 1999 Dr. Manson was one of just five American Indian researchers who received funding from the National Institutes of Health; he received four of the eight grants awarded to native researchers that year. In 2006 the NIH awarded 24 grants to 18 American Indian and Alaska Native researchers, and several of these grantees credit their success to Dr. Manson’s mentorship.

(Excerpted with permission from the Silver and Gold Record, August 17, 2006.)

CU Researchers Win Grants to Study Down Syndrome

The Anna and John J. Sie Foundation, in conjunction with CU, has awarded a total of $1 million to 13 grant recipients to stimulate new scientific research on Down syndrome, with the bold aim of eliminating the major effects of Trisomy-21. The grants are part of the Down Syndrome Break-Through Research Initiative, created by the foundation through CU in 2005.

The grants will fund different approaches to tackling Down syndrome, including stem cell research, autoimmune disease investigation, genotyping, bioengineering and clinical drug research.

Seven $100,000 grants were awarded. A number of these grants were awarded to School of Medicine faculty members, including: Richard Spritz, director of the Human Medical Genetics Program at the School of Medicine, for a project titled “A chromosome 21 gene responsible for increased susceptibility to autoimmune diseases in Down syndrome;” Kimberly Bjugstad of Psychiatry, for “Neural stem cells as potential for Down syndrome using young and aged Trisomic Ts65Dn mice;” Diego Restrepo of Cell and Developmental Biology, for “A systems neurobiology approach to improved cognitive ability in Ts65Dn Mice;” James Sikela of Pharmacology, for “Gene copy number variation in Down syndrome;” and Irina Grichtchenko of Physiology and Biophysics, for “Role of Down syndrome cell adhesion molecule in cognitive disability.”

Several $50,000 grants were also awarded, including several to School of Medicine faculty, including Mark Dell’Acqua of Pharmacology, for “Molecular mechanisms underlying altered excitatory postsynaptic structure and function in Down syndrome;” Kenneth MacLean of Pediatrics, for “Ts65Dn mice as a preclinical model for investigating cognitive enhancement by the acetylcholinesterase;” and Karl Pfenninger of Pediatrics, for “Molecular mechanisms underlying altered excitatory postsynaptic structure and function in Down syndrome.”

About one in every 733 babies in the United States is born with Down syndrome, making it the most frequently occurring chromosomal condition. More than 5,000 Colorado residents and 350,000 people in the United States have Down syndrome.

(Excerpted with permission from the Silver and Gold Record, August 24, 2006.)

Promotion 101 Course

Dr. Steven Lowenstein, Associate Dean for Faculty Affairs, has been attending departmental faculty meetings to present Promotion 101, a one-hour course covering the basic requirements for promotion. Topics include documentation guidelines for dossiers, clinical and teaching portfolios, CVs, teaching evaluations, and promotion matrices. The course also provides information regarding promotion success rates, publication requirements, alternative scholarship examples for clinician-educators and general tips for promotion and career success. Promotion 101 is designed for junior faculty members and for department chairs, administrators and senior faculty who are involved in mentoring, faculty evaluations and promotion reviews. If your department has not yet scheduled Promotion 101, please contact Cheryl Welch at 303-315-7157 or cheryl.welch@uchsc.edu.
Learning to Diagnose Through Video-Based Patients: Project L.I.V.E.

THIRD-YEAR MEDICAL students at CU-Denver and Health Sciences Center are using a groundbreaking video-based curriculum developed by Associate Professors Carol Kamin, Ed.D., and Robin Deterding, M.D., to learn how to diagnose pediatric patients. Called Project L.I.V.E. (Learning through Interactive Video Education), the curriculum uses videotaped case reenactments and distance-learning technology to help students gain experience with important diagnoses they might not otherwise encounter during a traditional pediatric clinical rotation.

“It’s not so unusual now, but we were the first medical school to create cases using video,” says Kamin. “Students work through cases with their peers and with a faculty mentor, and that means they get a chance to think like a doctor in a safe environment so that they can begin learning the process of noticing symptoms and deciding what they think is going on.”

Project L.I.V.E. is an example of problem-based learning, a teaching strategy that poses contextualized, real-world problems to students while providing support for them as they build new knowledge. Unlike a traditional lecture environment, students work in small groups, meeting in person or from remote locations via videoconference — under the guidance of a faculty facilitator — to discuss the video-based cases they have studied. The benefits of the strategy include increased student engagement, the ability for students to place learning in a real-world context, and the chance for students to collaborate and learn from each other as they attempt to diagnose the cases.

Since its inception, Project L.I.V.E. has grown to a consortium of seven medical schools from across the country, with efforts underway to broaden its use among first- and second-year medical students. A grant is in place to build similar video-based cases for use in professional development programs for practicing physicians. In an assessment of the project conducted in 2001, students reported increased motivation, better recognition of patient symptoms and improved clinical reasoning skills — as well as increased confidence in handling difficult situations, such as cases of child abuse.

According to Kamin, “Innovative teaching requires having the same attitude that you might have about your research. You have a spirit of inquiry about things. You want to understand how what you do helps students with their careers. So you try experiments, and you evaluate them to see what works.”

(Excerpted with permission from Faculty at Work, University of Colorado, Spring 2006.)
Influence of a Coronary Care Unit.”

There were two lead articles in the Summer, 1969 issue of the Quarterly. The first was Dr. Henry Silver’s provocative description of an innovative training program for Physicians’ Assistants/Child Health Associates. “One of the major health problems facing the nation,” Dr. Silver wrote, “is that the need for health care is increasing more rapidly than the increase in health personnel.”

Graduates of the new Physician’s Assistant Program will have “problem-solving and decision-making capabilities in certain areas of child care which will closely approximate those of physicians … They will be qualified to diagnose, prevent and treat most of the common medical problems of childhood.” Dr. Silver added, “The program should be particularly attractive to science-oriented women who are anxious to enter a profession that entails working with children but are not willing to spend eleven years in becoming a pediatrician … Men, too, will realize that this program will satisfy their career goals but allow considerably more free time to be spent with their families than physicians spend with their families.”

Dr. Silver outlined the curriculum and internship, and the requirements for licensure and certification by the Colorado Board of Medical Examiners. Prescriptive authority would be granted (a controversial provision). And, Dr. Silver wrote, “We foresee a starting salary between $10,000 and $12,000. But Dr. Silver also cautioned, “Colorado will, for a few years at least, be the only state in which child health associates may legally work.”

There was another lead article, entitled “American medicine: Is it big enough to include minority groups?” It was based on a speech delivered to the School of Medicine community by M. Alfred Haynes, MD, Project Director of the National Medical Association Foundation. Dr. Haynes began:

“There is a direct relationship between positive prejudice or a lack of concern in our society, and the scandalous health conditions which exist among the economically less fortunate of our population. We should not feel comfortable when the poor have five times as much arthritis and rheumatism, six times as much mental and nervous conditions and eight times as many visual impairments as the well-to-do … At one time it used to be considered respectable for learned medical institutions to generate, to analyze and even to teach these statistics and then to remain in splendid isolation from the problem --- because the prime obligation of an educational institution is to teach, and the only respectable and prestigious pursuit of a professor is research.”

Dr. Haynes wrote eloquently about the challenges minority students face in gaining admission to medical schools, and he pointed out that we do not know all the criteria that should be used to predict a great doctor. “We all know that there are no reliable, objective, inflexible standards for admission to medical school. If this were so, there would be no need for an admissions committee. Fortunately, members of these committees are humane, compassionate physicians who will frequently recognize potential, as well as actual, academic achievement.”

Dr. Haynes articulated clearly the problems that minority students continued to face as interns, residents, fellows and community-based physicians.

When Dr. Haynes presented these remarks to the medical school community, exactly one year had passed since the assassination of Dr. Martin Luther King. Dr. Haynes spoke of the dream that minority students and physicians have, “that American Medicine will make room for us at all levels … so that we will advance together.” In closing, Dr. Haynes stated, “I do not like to think of what will happen if that dream is not realized.” Borrowing from the African-American poet James Langston Hughes, he asked, What happens to a dream deferred?

In 1888 the School of Medicine moved into its own building, Medical Hall, built at a cost of $2,540. Photograph is from Slaven RN, Shakow RH. The University of Colorado School of Medicine: A Millennial History. A B Hirschielf Press, 2000.
Women in Medicine

Carol Rumack, M.D.

Leadership Book Club focuses on Professional Skills and Attitudes

CAROL RUMACK, M.D., Women’s Liaison Officer, and Jason Thompson, Interim Director of the UCHSC Office of Diversity, have organized a book club devoted to Leadership Skills and Attitudes. The UCHSC Bookstore is providing refreshments and assistance in purchasing books at discounted prices.

At the first book club meeting, on June 6th, Dr. Rumack led a discussion of Debra E. Meyerson’s “Tempered Radicals: How everyday leaders inspire change at work.” About 30 UCHSC faculty and staff members participated in the discussion. *Tempered radicals* is an engaging book that reveals how adaptive, family-friendly and socially responsible work places are built. They are built not by revolutionaries, but by those whom she calls “tempered radicals,” who balance company conformity with individual rebellion. While their differences often put them at odds with the “mainstream” organizational culture, Meyerson argues that these “everyday leaders” act as crucial sources of new ideas, alternative perspectives and organizational learning and change.

Drawing from fifteen years of research and the compelling stories of tempered radicals in a variety of organizations, Meyerson illustrates a spectrum of innovative ways that individuals use to “rock the boat” from inside the corporate ship and steer a course for powerful, positive change. In all the environments and organizations that Professor Meyerson studied, she found the following process at work: (1) People resist quietly, in ways that let them stay true to themselves; (2) personal threats are turned into opportunities to teach and improve the situation; (3) The focus shifts and broadens, as new supports are recruited and small wins are leveraged into bigger ones through skillful improvisation and negotiation; and (5) tempered radicals join with others, to take collective action that leads to bigger changes. In each case, the individual grows beyond thinking of his or her career as “the only game in town.” The tempered radical tries to establish a “wholeness” with work, personal life and self. The role model is someone like Lech Walesa, rather than the radical firebrand who causes confrontation and loses. Although the road is a difficult one, many people find this approach to organizational change psychologically and emotionally rewarding. The book’s appendices have extensive methodological details that made the work much more understandable.

A second book club was held in August. Participants engaged in a discussion of “An Address Unknown” by Kathrine Kressmann Taylor. *Address Unknown* speaks powerfully to peer pressure and its effects on genuine friendships. The book takes place in 1938, when Hitler had just come to power in Germany, and a former American friend was corresponding with his German colleague. This is a powerful book that is only 50 pages long; you must read it yourself to experience its impact and understand how critical it is to use peer pressure in positive ways to counter the negative biases that exist.

The next book club will take place on October 3, 2006 from 4:30 - 5:30 PM at the UCHSC Bookstore. Participants have selected “Talking from 9-5: Women and Men at Work” by Deborah Tannen. Tannen, a talented linguistic researcher, describes the unique “world of work” — where we spend countless hours with people we may not understand or even like, and where the way we talk determines not only how we get the job done, but how we are evaluated for our efforts. *Talking from 9-5* offers new ways of understanding what happens in the workplace, from the simplest exchanges to the complex contemporary issues of the glass ceiling. Tannen explains a variety of conversational and communication styles and reveals how each of us can develop the flexibility and understanding we need.

Leadership Beyond the Basics: The First SELAM Regional Conference

The first regional conference of SELAM, the Society for Executive Leadership in Academic Medicine, was held August 11-13th at the Given Institute in Aspen, Colorado. SELAM was formed by the alumni of the Executive Leadership in Academic Medicine (ELAM) program at Drexel University. SELAM is committed to the advancement and promotion of women to executive positions in academic medicine and dentistry, through programs that enhance professional and career development, networking and mentoring opportunities. Participants of the conference included faculty from the Schools of Medicine and Dentistry. Roberta Sonnino, M.D., President of SELAM and Rosalyn Richman, M.A., Co-Director of ELAM, were the primary organizers of the meeting. Dean Richard Krugman, M.D., attended a Panel on Diversity moderated by Harry Gibbs, M.D., VP for Institutional Diversity at the MD Anderson Cancer Center.

In general terms, the objectives of the Conference were to:

- Summarize current trends in quality improvement and review various theories and methods that can be applied in academic healthcare settings and situations;
- Increase awareness of executive coaching and consulting

(Continued on page 11)
Leadership Beyond the Basics: The First SELAM Regional Conference

(Continued from page 10)
practices in academic health care, and review “when” and “how” to recruit outside resources;

• Expand participants’ knowledge of diversity issues as they affect workplace dynamics, including such topics as discrimination and leadership challenges related to age, gender, disability and sexual orientation.

Conference attendees heard several panel discussions that addressed career and leadership development throughout the academic career “lifecycle.” For example, there were presentations on executive coaching, “graceful self-promotion” and “converting a curriculum vitae to a resume.” Page Morahan, Ph.D., Co-director of ELAM, presented a tool to assist faculty to prepare “executive career summaries.” According to Dr. Morahan, all medical school faculty should: Engage in an annual career audit; keep a detailed list of accomplishments; and, for each accomplishment, develop a “PAR summary.” The PAR summary states a problem (P) or challenge, the action that you took (A) and the result (R) or benefit that occurred. Then, Dr. Morahan advises, develop a story around that PAR event as “Facts tell, Stories sell.” From this list of accomplishments, an Executive Career Summary can be developed, based on the PARs that are most needed by the organization to which you are sending your resume. The 1-2 page Executive Summary should start with an objective statement of what you want to accomplish, how you will go about it, and how your skills will be an advantage to the new organization. The Executive Summary is typically attached to your CV, along with a cover letter that summarizes your education, experience related to the position, affiliations, grants and awards that pertain to the organization’s goals.

The Plenary session, “Quality in Health Care,” was presented by Sharon K. Martin, M.Ed, M.T., Vice president for Process Improvement at the MD Anderson Cancer Center.

Annual Faculty Development Symposium: CU Women Succeeding

THE FACULTY COUNCIL Committee on Women announces a CALL FOR PROPOSALS for the Annual Faculty Development Symposium. The Symposium will take place March 2, 2007, 8:30am-4:30pm, on the downtown Denver campus.

Proposals are invited for workshops, roundtables, panels, book discussions, and other innovative formats that address the interests and concerns of CU women faculty. Topics can span teaching, clinical practice, research or broader educational and professional issues related to women faculty.

Session organizers will be responsible for coordinating their sessions and confirming other panelists once the session is accepted. The Committee on Women can provide assistance with panel selection, if necessary.

Proposals should include:
• Proposed topic with brief description (200 words)
• Time block preference (one hour or two hours),
• Approximate number of panelists envisioned (and whether any panelists have already been identified)
• Contact information
• Name of organizer
• CU campus and department
• Email address and phone number

Please submit proposals by September 29 to:
Marjorie Levine-Clark
Chair of the Faculty Council Committee on Women
marjorie.levine-clark@cudenver.edu

The Committee will finalize the program by mid-October.

New Faculty Career Development Workshop

THE FOURTEENTH ANNUAL New Faculty Career Development Workshop (formerly the New Faculty Orientation) is scheduled for December 4, 2006, at the Nighthorse Campbell Native Health Building Auditorium. At this workshop, new faculty will receive important information about the administrative structure of the School and the regulatory environment. New faculty will also have an opportunity to meet many of the institution’s key leaders and to learn more about the new medical school curriculum, how to build careers as educators, criteria for promotion, the support systems that are available and tips for academic success. Department chairs will be asked to free new faculty from their usual responsibilities for this important program.

If you are a new faculty member, you will be receiving a formal invitation soon, but mark your calendars now so you will not miss this important workshop!
THE SCHOOL OF MEDICINE’S Educational Development and Research (ED&R) Office is offering a series of faculty development workshops for medical school faculty during the 2006-2007 academic year. These workshops will focus on teaching skills for faculty in the basic and clinical sciences. Topics will include: Constructing Written Test Questions; Lecturing to Improve Student Learning; Preparing Better Small Group Facilitation; Pedagogical and Technical Issues in Using the Audience Response System; Introduction to Blackboard and ILIOS; Improving Your Clinical Teaching; and Mentoring. Announcements and advance sign-up for these workshops will be distributed through the campus email announcement system.

Along with these general workshops that are open to all faculty members, ED&R also offers the School of Medicine Teaching Scholar’s Program (SOM TSP), which is directed by Carol Hodgson, Ph.D. and Gretchen Guiton, Ph.D. In this 18-month program, faculty members learn the basics of educational theory and medical education research methodology. Each Scholar completes a curriculum and scholarly project. Coursework is completed in the first 10 months of the program, with the remaining time used to conduct the scholarly project. The first SOM TSP class completed the formal class work in June 2006, and a new class of Scholars began in August. Formal presentations of completed scholarly projects for the first group graduating from the SOM TSP will take place in February 2006. Faculty members can apply to the SOM TSP each spring. Approval of a 10% release time by the applicant’s department chair is required for application to the program.

For more information about the ED&R faculty development program, please email the ED&R office at som.edro@uchsc.edu or contact the Director and Associate Dean for Curriculum and Evaluation, Carol Hodgson, Ph.D. at carol.hodgson@uchsc.edu. In addition to the faculty development program, ED&R coordinates and implements the SOM course and faculty evaluation system. All faculty members teaching in the Essentials Core curriculum are evaluated by students online through the CoursEval system and are notified when the evaluation results can be viewed online. During the 2006-2007 academic year, all clinical clerkship faculty members will also be evaluated online. These evaluations are important products that should be included in your educator’s portfolio. If you are unsure whether you have been evaluated or do not know how to view your evaluation results online, please contact Gretchen Guiton, Ph.D., Director of Evaluation for ED&R at Gretchen.guiton@uchsc.edu.
New Diversity Plan

ON JUNE 13th the School of Medicine Faculty Senate gave final approval to an ambitious school-wide diversity plan. The plan states that diversity is a core value that is central to the School’s teaching, research, community service and health care missions. The primary goal of the plan is to achieve a diverse and representative student body, house staff, faculty and administrative staff. The plan also seeks to: a) promote the academic advancement and success of minority students, house staff and faculty; b) enhance cultural, bilingual and diversity instruction throughout the curriculum; c) promote an institutional climate of inclusiveness, respect and understanding; 4) promote unexplored research agendas and new areas of scholarship related to cultural and racial disparities in health and health care; and 5) improve access to quality health care for poor, minority and underserved populations.

The Diversity Plan begins with an introduction and a review of the 2002 LCME accreditation visit to the School of Medicine, which prompted the writing and approval of a Diversity Mission Statement. In July, 2004 the Executive Faculty of the School of Medicine added a formal Diversity Mission Statement to its Rules; this Statement articulates the School’s commitment to diversity among its students, residents, faculty, staff and administration.

Section III of the Plan outlines the SOM’s definitions of “diversity” and “underrepresented in medicine” (URM). The School of Medicine has adopted a definition of diversity that embraces race, ethnicity, gender, religion, socioeconomic status, sexual orientation and disability. The definition of diversity also includes life experiences, record of service and employment and other talents that enhance the scholarly and learning environment.

Section IV presents the rationale for a diversity plan, addressing the question, “Why do we want diversity in the School of Medicine?” Citing recent peer review publications and national consensus documents, this section summarizes the evidence that a diverse student body, faculty and administration will enhance the scholarly and learning environment of the School of Medicine. There is compelling evidence that achieving diversity within a medical school has a strong, positive effect on the quality of medical education that is provided, helps to advance student, resident and faculty achievement, strengthens the School’s ties to nearby communities, informs and broadens the research agenda and contributes in measurable ways to improving the community’s health. Increasing diversity among medical students and other trainees will lead to greater representation of minorities, not only among practicing physicians, but also among medical educators, scientists, public health officials, health services researchers, health insurance executives and health care policy makers. There is also strong evidence that achieving diversity of the health care workforce translates directly into improved delivery of health care services to underserved and minority populations.

Sections V, VI and VII present additional background information pertaining to medical student, house staff and faculty diversity, respectively. These sections include information from national sources, as well as data from the School of Medicine student, graduate medical education and faculty data bases. Section VIII provides information about cultural competency training in medical education. There is a discussion of the SOM’s recently revised curriculum, which includes a cultural competency “thread” throughout all four years of the MD training program.

The diversity plan is the culmination of months of research and literature review on best practices to promote diversity and inclusion and to address health disparities. The plan includes five major recommendations and more than sixty-five specific implementation tasks. The implementation tasks---including recruiting and “pipeline” initiatives, efforts to strengthen community connections, search committee training, and departmental accountability for diversity activities---were selected by members of the SOM Diversity Council, based on an assessment of importance, effectiveness and feasibility during a time of limited resources. The recommendations focus on action steps that can be taken over the next 12 - 18 months, and especially those that have defined and measurable outcomes.

The recommendations include appointment of an Associate Dean for Diversity and Inclusion as well as planning for a health disparities research center. The plan recommends creating a permanent Office of Diversity and Inclusion to oversee implementation of the diversity plan and to serve as the central point of responsibility and accountability for the school’s diversity programs. In addition, according to the plan, the SOM should also ensure that participation in pipeline activities, public service and community-engaged scholarship are recognized and rewarded during faculty members’ annual performance reviews and when promotion and tenure decisions are made.

Taken as a whole, Council members believe the five recommendations and the accompanying implementation tasks will help the SOM demonstrate its commitment to diversity and successfully implement its new Diversity Mission Statement.

The 2006 School of Medicine Diversity Plan is available for review at http://www.uchsc.edu/som/diversity/plansumm.htm. The SOM Diversity Mission Statement may be found at www.uchsc.edu/som/diversity.
Changing Structure of Basic Science Departments

The organization of basic science departments in U.S. medical schools has been in a continuing state of evolution, according to a new analysis by the AAMC. Achievements in molecular biology, human genetics, neurosciences and other disciplines “have contributed to the realization that the complexity of science now lends itself to interdisciplinary and collaborative efforts … Some have proposed that the [traditional] discipline-based departments impede scientific progress and that a new structure that breaks down boundaries is needed. Others believe that traditional basic science departments continue to foster valuable and distinct contributions to research and education.”

For this report the AAMC analyzed data related to basic science departments from 1980 – 2004. Pathology departments were excluded. Among the findings: a) for the “traditional” basic sciences departments (anatomy, biochemistry, microbiology, physiology and pharmacology) the average number of departments per school remained steady from 1980 to 1993, but then began a steady decline that has continued through 2004; b) considering all basic science departments (except pathology), the number of departments has increased slightly over this 25-year period; c) new departments have been created in areas such as neurosciences, genetics, preventive medicine and public health; and d) there were 16 departmental mergers reported between 2000 and 2004, most commonly between departments of anatomy and physiology and between departments of biochemistry and pharmacology.

According to the AAMC, these data suggest that basic science departments are neither disappearing nor being replaced by centers and institutes. To review the complete report, see: http://www.aamc.org/data/aib/aibissues/aibvol6_no1.pdf.

Fitzsimons Campus Development Update

Don Aldrich, Director of Facilities and Planning

Construction activity on the Fitzsimons Campus is at an all-time high. UCDHSC, UCH & TCH all have major projects in various stages of completion. The table below highlights the UCDHSD & UCH construction projects presently under way. The goal is to vacate the 9th Avenue Campus by the end of calendar year 2008. It should be noted that the construction completion date does not necessarily correlate to a move-in date. For UCDHSC projects, building start-up and commissioning activities may push occupancy start dates out another 30 to 60 days.

In addition to the new construction activities, UCH is presently completing the build-out of floors seven (7) through eleven (11) and 12-E in the AIP, and completing the 7th floor of the AOP. UCDHSC is presently completing the build-out of the second and third floors of the Barbara Davis Center at Fitzsimons, continuing to remodel/renovate Building 500, renovating Building 400, and continuing infrastructure development to support the new facilities. The Children’s Hospital continues work on their site with a targeted construction completion date of October 2007.

For additional information on the development of the Fitzsimons Campus, please visit the Facilities Projects (http://www.uchsc.edu/projects/) and Institutional Planning (http://www.uchsc.edu/instplan/) web sites.

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<tr>
<th>Institution</th>
<th>Project</th>
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<th>Construction Completion Date</th>
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**Resources for Medical School Faculty**

**Faculty Vitae: The AAMC's Newsletter for Medical School Faculty**

As readers of this Newsletter know, the Association of American Medical Colleges recently launched *Faculty Vitae*, an electronic publication for medical school faculty. This no-cost, password-free publication focuses on strategies to promote faculty success and to strengthen the academic medical community. Each issue of *Faculty Vitae* includes articles, bibliographies, reports of scientific studies and other resources that address faculty development, diversity and gender balance, leadership training and institutional vitality. Articles are aimed at all medical school faculty, from early career to senior administration.

*Faculty Vitae* is published quarterly and may be accessed at [http://www.aamc.org/facultyvitae](http://www.aamc.org/facultyvitae). This link has also been added to the School of Medicine Office of Faculty Affairs website (www.uchsc.edu/som/faculty). The Winter 2006 issue of *Faculty Vitae* includes the following topics:

- **Featured article:** Using business knowledge to advance academic medicine: Investing in a diverse workforce.
- **Leadership lesson:** Creating a poster using PowerPoint.
- **Spotlight:** Award-winning “women in medicine” programs
- **Perspectives:** How do “women in medicine” programs benefit all faculty?

The Spring 2006 issue of *Faculty Vitae* includes the following topics:

- **Featured article:** Managing the functions of faculty affairs in medical schools.
- **Leadership lesson:** Preparing for new leadership roles.
- **Spotlight:** Group on Educational Affairs’ 2006 Consensus Conference on Educational Scholarship.
- **Perspectives:** New leadership roles: Are you prepared for the first 100 days?

**Women in Academic Medicine**

Each year the AAMC publishes an annual report, *Women in U.S. Academic Medicine*. The report provides a national snapshot of women students, residents, faculty and medical school administrative leaders. The report also provides trend data, comparing numbers of faculty who have been newly recruited, those who have left their academic positions and those who have advanced in rank. Benchmarking data are provided in such categories as: distribution of faculty by race/Hispanic origin, gender and rank; new tenures and promotions; division and section chiefs and department chairs; and organization and staff support of “women in medicine” activities.

In 2004-2005 women represented: 50% of applicants to medical school; 38% of assistant professors; 27% of associate professors; 15% of full professors; 11% of department chairs; 29% of associate and senior associate deans; and 10% of medical school deans.

The full report and accompanying PowerPoint slides are available at [http://www.aamc.org/members/wim/statistics/stats05/start.htm](http://www.aamc.org/members/wim/statistics/stats05/start.htm).

**OMBUDS Office**

The Ombuds Office is a resource available to all students, faculty, and staff of UCDHSC to provide informal conflict resolution. The office provides a forum for prompt, impartial and confidential discussion for individuals to review options for informal resolutions of differences. All visitors’ identities and their information are kept confidential. The office does not take sides when listening to issues and is able to mediate between parties when appropriate. The Ombuds Office can assist with interpersonal conflicts, grade disputes, disciplinary actions, sexual harassment, discrimination and disputes regarding working conditions.

The Ombuds Office is located at all UCDHSC campuses. At 9th and Colorado (303.315.0563), the Office is in the School of Medicine in Room 0403. At Fitzsimons (303.724.2950), the office is in Building 500, Room C7005. Walk-ins are welcome; however, please note that if they are meeting with someone, their door will be locked to protect confidentiality. If this is the case, please leave a message and they will return your call.

**The Office of Faculty Affairs Web Site**

The Office of Faculty Affairs Web Site, located at [http://www.uchsc.edu/som/faculty](http://www.uchsc.edu/som/faculty), is a valuable resource for faculty. It includes information on faculty appointments, promotions and faculty development. There are links to School of Medicine and University Rules and Policies, Faculty Senate announcements, AAMC faculty development sites and other resources for faculty success.
The impact of centers and institutes on faculty life: Findings from a study of basic science and internal medicine faculty at research-intensive medical schools

*Acad Med.* 2006; 81:734-743

Increasingly, US medical schools are re-examining the configurations and boundaries of their basic science and clinical departments. In the past thirty years, inter-disciplinary research centers and institutes have become more popular; these centers typically operate across the boundaries of individual departments and have separate governance structures and budgets. Despite their appeal and increasing popularity, little is known about the impact of centers and institutes on faculty allegiances, career satisfaction or research productivity. In this study, the authors surveyed a random, stratified sample of full-time faculty in basic science and internal medicine departments at the top 40 research-intensive US medical schools. A total of 778 faculty members (72%) completed the questionnaire. Basic science faculty who were affiliated with centers or institutes produced more research publications and were awarded more grants, while devoting equal effort to teaching, when compared with their peers who were not affiliated with centers. However, center-affiliated faculty reported greater dissatisfaction with their workload and their overall mix of job responsibilities. Among academic physicians in internal medicine departments, respondents who were center-affiliated were also more productive in research (publications and grants); they had more protected time for research and spent less time in patient care, when compared with non-center-affiliated colleagues. Center-affiliated internists were more satisfied with promotion opportunities and “the pace of their professional advancement.” As outlined in a detailed and thoughtful discussion, centers and institutes can have major impacts on: the stability and vitality of traditional departments; interdisciplinary research productivity; faculty development and mentoring; a medical school’s teaching and clinical missions; and other core academic duties. With proper communication between department chairs and center directors, according to the authors, departments and centers can “pool their resources” to provide scientists and physician-researchers with greater colleague interactions, more opportunities for scientific training and a richer and more varied career environment, which can serve to advance the missions of the departments and the school.

Variability in the costs of institutional review board oversight


Prior studies have demonstrated wide variability among institutions in the costs incurred by institutional review boards (IRBs). The authors conducted a survey of academic medical centers to measure IRB costs, economies of scales and various measures of resource utilization for different types of study review. The quality of protocol review was not studied. Data from 59 institutions were utilized. Among the findings: a) the overall median cost for reviewing a protocol was $560; b) staff time was the largest component (65%) of total IRB costs, followed by board member time (22%); c) IRB costs were highly variable, and only a portion of this variation could be attributed to institution size or economies of scale; d) high-volume institutions had the lowest costs per protocol in every cost category, except for outside services. Surprisingly, “protocols that undergo expedited review were slightly higher in cost than those undergoing full review ($1,060 vs. $1,020), while protocols that were exempt from review ($694) and protocols receiving continuing review ($271) were the least costly.” Expedited reviews were the most costly for low-volume institutions. The high variability among institutions in overall costs of operating IRBs and in individual costs per type of protocol suggests that some institutions are conducting reviews in a manner that is not optimally efficient.

Educational infrastructure technology and services in North American Medical Schools.

*Acad Med.* 2006; 81:632-637

The lead author of this paper is Dr. Carol Kamin, Associate Professor and Director, Educational Research and Development, Department of Pediatrics, University of Colorado School of Medicine. In this study, Dr. Kamin and her colleagues sought to describe the range of educational technology infrastructure and services deployed in U.S. medical schools. Educational technology was defined as “electronic and other forms of technology used to support teaching and learning.” The survey included questions about computer-based learning programs, computerized mannequins and other patient simulations, instructional web sites, wireless access, PDA requirements for students or other trainees, video production equipment, E-portfolios and online course management and teaching evaluation systems. Of 137 schools contacted, 88 (64%) participated in the survey. Educational technology services used for undergraduate, graduate or continuing medical education were tallied separately. In general, medical schools had invested in a wide range of educational technologies (although there were no questions regarding assessments of cost-effectiveness, improved efficiency or improvements in meeting learning objectives). Educational technology services did not differ according to geographic region, public versus private medical school or size of the graduating class. The authors concluded: “While integrating educational technology presents a challenge to medical educators, the greater challenge is adopting the wise use of educational technology to improve learning and to increase the efficiency and effectiveness of educational programs.”
The “gender gap” in authorship of academic medical literature: A 35-year perspective.


Increasing numbers of women are entering and graduating from medical school, completing residency training and entering the ranks of medical school faculty. But several studies have documented that women advance more slowly to senior academic ranks and tenured and leadership positions. For example, according to data reviewed in this article, women now make up 32 percent of full-time medical school faculty members but only 14 percent of full professors, 11 percent of department chairs and 10 percent of medical school deans. “Women last composed 14 percent of all medical students in 1972.” Publication in medical journals is an important measure of academic productivity and a major criterion for academic promotion. In this study, the authors examined original articles published in six prominent medical journals over a 35-year period (1970, 1980, 1990, 2000 and 2004). Articles were categorized according to the gender of the first and last (senior) authors. Guest editorials in JAMA and the New England Journal of Medicine were included. The study was restricted to authors from US institutions and those holding MD degrees. Over the study period, the proportion of first authors who were women increased six-fold, from 5.9 % in 1970 to 29.3 % in 2004 (See figure). The proportion of women among senior authors increased from 3.7 % to 19.3 %. The sharpest increases were

found in two of the journals studied --- Obstetrics and Gynecology and Journal of Pediatrics. Smaller increases were observed in the Annals of Surgery. In 2004, 11.4 % of the authors of guest editorials in NEJM and 18.8 % of guest editorials in JAMA were women. Thus, there have been significant increases in authorship of medical and scientific papers by women, but a “gender gap” remains, especially among senior authors and editorial commentators. And, as the authors point out, the data depict a possible fall-off in momentum among both first- and senior-authors between 2000 and 2004. The authorship gender gap probably reflects several factors. One is the limited pool of senior women faculty members who have achieved the career longevity and recognition to serve as senior authors. Another explanation for the gap may be the different career choices that are made by men and women faculty members. Previous studies have demonstrated that women tend to devote more of their professional time to teaching and clinical activities and less to research. Studies have shown that women faculty members are hampered, because they receive inconsistent mentoring and lower salaries, and they report fewer colleague interactions. Also, according to some studies, the careers of women faculty members often follow a different time-clock, with some choosing to work fewer hours early in their careers, accepting a more delayed path to seniority, research leadership and academic promotion.


Figure: Female Physician-Investigators Who Were First and Senior Authors of Published Original Research.

In the six journals studied, the representation of women among first and senior authors of published original research increased during the past four decades. The cumulative trends over time are depicted by curves showing female representation among students enrolled in medical school and among professors on medical school faculties (data on faculty rank according to sex were not available from the Association of American Medical Colleges for 1980, 1970, or 1960).
Abstracts and Commentary (cont.)

Academic research record-keeping: Best practices for individuals, group leaders and institutions.
*Acad Med.* 2006; 81:42-47

During the last fifty years, according to Schreier, Wilson and Resnick, regulatory and technologic changes and new legal and ethics imperatives have “challenged traditional research record-keeping practices, making them either insufficient or obsolete.” It is well-known that research records are used to resolve intellectual property disputes, and they play a central role in inquiries regarding research misconduct. In this article in *Academic Medicine*, the authors present a set of systematically-compiled “best practices” for research record-keeping for academic research groups. Information was gathered from literature reviews, a survey of 96 academic medical center “integrity officials,” focus groups of active researchers and analyses of university policies on research record-keeping. The best practices for record-keeping are presented in three tiers within the university: the individual researcher; the research group leader; and the department or institution. The importance of computerized data-bases, self-recording research instrumentation, and new-generation laboratory information management systems and electronic research notebooks are considered, along with best practices regarding records of emails and telephone conversations, research meeting minutes and teleconferences. The authors caution that these results are only a “snapshot” of current research record-keeping practices; they are offered as “ethical and practical guidelines subject to continuing evolution and not as absolute rules.” They may also prove useful in training the next generation of researchers.

Analysis of downstream revenue to an academic medical center from a primary care network.

In this comprehensive fiscal analysis of budgets at the Ohio State University Medical Center, the authors studied “revenue streams” from charges and collections resulting from inpatient and outpatient care, including both a Primary Care Network and specialist physicians. All told, the total downstream net revenue generated by the network ($115 million) was more than 6 times the $18.9 million net revenue to the Network. The downstream “direct contribution margin” generated by the Network outweighed the Network operating loss by nearly $6 million. Primary care networks may not be “profit centers” in their own right; but according to this study, primary care networks, which are essential for educating students in ambulatory care settings and for assuring referrals to specialists, can generate significant financial support for an academic medical center.

The impact of the changing health care environment on the health and well-being of faculty at four medical schools.
*Acad Med.* 2006; 81:27-34

Several recent studies have affirmed the obvious --- that medical school faculty face increasing pressures to generate revenues through clinical practice or research grants, that support for teaching is declining, that there is insufficient time to teach or engage in satisfying scholarship, that morale is adversely affected and that faculty turnover is high. Our recent survey at the University of Colorado School of Medicine found that 42 percent of faculty were “seriously considering leaving academic medicine within the next five years.” In this article, the authors distributed a 136-item questionnaire to 3,519 faculty at four US medical schools. They used validated scales to measure depression, anxiety, work strain and job and life satisfaction. The survey also includes questions regarding the impact of their institution’s “financial stability.” All told, 1,951 faculty-members (54.3%) participated in the survey. Twenty percent of respondents reported “significant levels of depressive symptoms,” with higher levels found among younger faculty and among surgeons. Older faculty, who had “experienced the most changes in academic medicine over the course of their careers,” were least affected by various stressors. There were minimal differences according to gender. Faculty members’ perceptions of institutional instability were associated with increased levels of work-related stress, depression and anxiety. Reporting that colleagues had left their academic positions was also correlated with job dissatisfaction and work-related strain. Work-related stressors did not affect the broader domains of overall “life satisfaction” or physical health. Indeed, according to the authors, faculty respondents reported high levels of satisfaction with their family life, leisure activities and social situation. Faculty worked hard but appeared to be paying greater attention to balancing their work and home lives, and most seemed to “attend to their health.” Still, the authors noted that high levels of depression, anxiety and job dissatisfaction could affect not only the stability and productivity of medical school faculty, but also patient care and medical education. The challenge remains, according to the authors, to find ways to support and encourage faculty in their personal and professional development, through mentoring and faculty development programs. Medical schools must also “identify and offer assistance to our colleagues who are dispirited or depressed.”
Guidelines for interactions between clinical faculty and the pharmaceutical industry: One medical school’s approach

*Acad Med.* 2006; 81:154-160

As the authors of this report remind us, “although synergies between the pharmaceutical industry and physicians have promoted drug discovery and public health, potentially serious conflicts of interest complicate the relationships between physicians and the marketing components of industry.” According to research reviewed in this article, the pharmaceutical industry supports over 80,000 drug sales representatives; on average, physicians meet with a pharmaceutical representative four times per month, and over 90 percent of physicians accept free drug samples, while over 60% receive meals, tickets or free travel. One review of industry sponsored educational events found that such CME activities “do not consistently present a balanced view of therapeutic alternatives and are associated with subsequent requests to add the sponsor’s drugs to hospital formularies and increased prescription rates of the sponsor’s drugs.” In academic medical centers, there is little doubt that “biased or misleading information may be disseminated in the education of physicians and trainees [and that] interactions with pharmaceutical marketing representatives can adversely affect practice patterns, the cost of medications and the integrity of educational and educational programs.” According to the authors, “one patient survey revealed that an overwhelming majority of patients would like physicians to stop seeing drug representatives (79%) and to stop receiving gifts (84%).” *Editor’s note: Also see Health Industry Practices that Create Conflicts of Interest: A Policy Proposal for Academic Medical Centers, published in JAMA 2006; 295:429-433, and reviewed in the last issue of the Faculty Success Newsletter.*

This article describes a series of guidelines developed by faculty at the Yale University School of Medicine to promote ethical relationships between faculty physicians and pharmaceutical representatives. Their overriding goal was to ensure, to the extent possible, that “the integrity of clinical decision-making is not compromised by financial or other personal relationships with industry.” Input was obtained from physician faculty and from industry representatives. The guidelines ban faculty from receiving any form of gift, industry-sponsored meal or free drug sample (for personal use). The authors outline in detail why the Yale faculty decided to prohibit all gifts, regardless of monetary value. Additional guidelines were adopted governing industry sponsorship of educational activities on the Yale campus and participation of faculty in symposia and other industry-sponsored educational activities that occur off-campus.

**Related article of interest:**

Narrative review: The promotion of gabapentin: Analysis of internal industry documents.


This article offers a unique view of pharmaceutical industry sales practices, using documents that became available through litigation. It describes how gabapentin was promoted through “activities traditionally considered independent of promotional intent,” including continuing medical education and research.

Residents’ perceptions over time of pharmaceutical industry interactions and gifts and the effect of an educational intervention.


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*Acad Med.* 2006; 81:239-244.

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Please plan to attend!

School of Medicine State of the School Address

Tuesday, October 24, 2006
4:30-5:30 pm
Fitzsimons Campus, RC-1 North, 1st floor, Hensel Phelps Research Auditorium
(Followed by the Faculty Reception in the RC-1 North 1st floor atrium)

Broadcast to the following locations:
9th Avenue Campus: 3rd Floor Lecture Hall
The Children's Hospital: Tammen Hall Auditorium

Office of Faculty Affairs
School of Medicine Dean’s Office
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