Over the last several years, U.S. Academic Health Centers (AHCs) have developed major initiatives abroad. These are at various stages of development, with the first stage being educational development and training, the second being consulting and advisory services, the third being management services, and the fourth being the provision of education and training. The Harvard Medical Initiative (HMI), for example, provides an organized series of education programs and development services. This includes curriculum development, faculty development, scientific symposia, continuing medical education, and professional development for both health professionals and administrators. These are usually conducted in English and sometimes employ translators.

Many U.S. AHCs are interested in leveraging their name to help build credibility and recognition and develop a network of affiliated institutions to leverage education, training, and development. With the exception of Jackson Memorial Hospital in Miami, Florida, which focuses on its proximity to the Caribbean and Central America, there is no geographic or regional emphasis for most of the institutions. Strategic planning evaluating approaches to international activities, including business development approaches, are underway in several institutions. Weill Cornell Medical College operates a medical school in Qatar conferring Cornell M.D. degrees. Duke University established the Duke-National University of Singapore Medical School management/development agreement. Duke gives a joint M.D. degree, provides its curriculum, and manages the academic programs. Some of the other AHCs among the 16 studied that have significant institutional involvement abroad are:

- Cleveland Clinic
- Harvard Medical International and Harvard Medical faculty physicians at Beth Israel Deaconess Medical Center
- Johns Hopkins International
- University of Pittsburgh Medical Center
- Mayo Clinic
- Baylor College of Medicine
- New York Presbyterian Hospital

(Merritt MG, Ratley CJ, Levin SA, Crone RK. Involvement abroad of U.S. academic health centers and major teaching hospitals: the developing landscape. Academic Medicine. 83:541-549; 2008.)
Investment in Research at University of Louisville

In an initiative that began in 1996, the University of Louisville established a “Bucks for Brains” program aimed at supporting personnel to enhance research funding. It included moving $21 million from low-priority programs to high-priority programs and creating a Research Challenge Trust Fund that resulted in the recruitment of endowed chairs, university scholars, and their teams. It also included the implementation of new promotion and tenure standards with higher and clearer expectations. This was particularly in research, including the creation of salary incentives linked to research productivity as well as post-tenure review with clear and high standards in research and the improvement of research infrastructure, core facilities, and physical plant. Endowed chairs required at least $2 million, of which 80 percent of the income was used by the dean for salary support and 20 percent for discretionary spending supporting academic activities of the chair.

Since it was not expected that individual faculty members could be truly excellent in clinical care, teaching, and research, a path was created for the promotion of researchers based on publication at least annually as a major author and acquiring extramural federal funding of national peer-reviewed projects. In addition, the dean directly tied research productivity to compensation increases. Over a 10-year period, a combination of new funding with clear expectations and innovative administrative policy changed the university culture and more than quadrupled overall extramural funding as well as increasing by seven times NIH funding for the School of Medicine.


Approaching the Dermatologist Shortage by Training Non-Dermatologists

Former Yale University dermatology faculty member Marie-Louise Johnson, M.D., Ph.D., suggests that since two-thirds of patients with skin problems see non-dermatologists, and most of these physicians have little if any dermatology training, dermatologists should offer training to primary care doctors in basic dermatology emphasizing fundamentals and common problems. Since only nine percent of dermatologists currently practice in rural areas, dermatologist Marc Silverstein, M.D., concurs since it is very difficult to get qualified dermatologists to live in rural areas.

However, this is a turf problem for many dermatologists who do not want to share the dermatologic base of knowledge with non-dermatologists and question whether the specialty would be simply training its competition. San Francisco dermatologist Kory Zipperstein, M.D., states that even the most rudimentary level of dermatological competency requires a great deal of skill. He does not think that training primary care doctors in basic dermatology is a viable solution. Instead, he recommends the use of telemedicine and perhaps having academic medical centers provide mini-residency programs where a provider can spend a year or 18 months.

Nevertheless, even those who oppose training non-dermatologists in the fundamentals of dermatology indicate that patients who are unable to schedule an appointment with a dermatologist may end up receiving substandard dermatologic care.

(Training non-derm docs: one approach to access issues. Dermatology World. June 2008; pp 10-11.)
A Look at Virtual Patients and the OSCE

The interactive simulation of patients (ISP) is a high-fidelity virtual patient-based learning tool to help students practice clinical reasoning skills designed to resemble a realistic patient encounter. The ISP permits students to take a patient’s history and receive video clip-based answers, perform a physical examination, request laboratory and imaging studies, suggest a preliminary diagnosis, go back and request additional information from the patient, order more tests or other physical examinations, and obtain feedback.

The ISP can react emotionally and unscripted to sensitive and/or unwanted questions. An assistant was used to introduce students to the system to avoid any problems in using it and to make them feel more comfortable. The ISP system tracks and logs the interaction of students, including information on the medical history, physical examination, tests ordered, and diagnoses suggested.

A Karolinska Institutet (Sweden) study of a class of 118 students included 110 who participated in using the ISP on a voluntary basis. Students all sign a consent form since video observation is conducted (used with 47 of the 110 students). The study seemed to indicate that computer-based simulation like the ISP is able to simulate realistic patient encounters at an acceptable level of complexity and allow for differentiation of their performance. Another advantage of the ISP is that it can be programmed to score students immediately, saving expensive labor and facility resources.


Facts for Medical Students, Residents

The Association of American Medical Colleges (AAMC) publishes a fact sheet especially designed for medical students and residents that focuses on financial issues that attempt to help them understand the many often complex topics they soon will be facing in the economic and related areas of practice. The fact sheet is available without cost at first@aamc.org. Some of the issues addressed in FIRST Facts are the following:

- The Cost of Applying to Medical School
- Your Credit Report: Getting Familiar with the Basics
- Borrowing 101: An Introduction to the World of Credit
- Doing Well by Doing Good: Loan Forgiveness for Public Service
- Your Credit Score: What it Is and Why it Matters
- New Income Based Repayment Plan
- Postponing Loan Repayment During Residency
- Loan Repayment Choices
- Consolidating Your Loans
- Budgeting Basics: Managing Your Money During the Lean Years

(FIRST Facts. Tomorrow’s doctors, tomorrow’s cures. AAMC. June 2, 2008.)

Mortgage on D.O. Medical Education

In a letter to the editor, Chadd K. Kraus II, M.P.H., a student at the Pennsylvania College of Osteopathic Medicine, expresses considerable concern about the large debt medical students face. He points out that this is greatest among medical students attending D.O. institutions, which have 5 of the 10 medical schools with the highest debt among graduates. Three of these five are at COMs that have opened branch campuses (i.e., Kirksville College of Osteopathic Medicine/A.T. Still University, Philadelphia College of Osteopathic Medicine, and Touro University College of Osteopathic Medicine-California).

Kraus believes this could possibly threaten the solvency of colleges of osteopathic medicine (COMs), reduce applicants and matriculants from racial and ethnic minorities, and negatively affect the perception of the quality of COMs. Opportunities are few for the reduction or elimination of such debts among students in D.O. programs, except for those who enroll in programs sponsored by the federal services. In addition, Kraus believes the debt COM students experience could affect their ability to become generous alumni donors. He also believes that if COMs had lower tuitions, this could result in the ability to recruit higher-quality students. A question posed by Kraus is what additional value is there to choosing a COM over an allopathic medical school when the debt a D.O. student accrues is so high?

Evolving Changes in U.S. Medical Licensing Examination

As a result of the changes that have occurred in medical practice during the past two decades, the U.S. Medical Licensing Examination (USMLE) has become engaged in an initiative to change the format of its examination. This is in concert with the belief that the USMLE should be congruent with the core competencies expected of those who receive a medical license. The Composite Committee that establishes USMLE policy assessed a report of the Committee to Evaluate the USMLE Program (CEUP), which includes medical students, residents, fellows, deans, associate deans, basic science and clinical faculty, international medical graduates, state medical board members, practicing physicians, and the public. The Composite Committee broadly endorsed the CEUP report, including

- assessments of physician readiness to provide patient care should be at the interface between undergraduate and graduate education and at the beginning of unsupervised practice
- adoption of a national scheme of competencies consistent with national standards
- emphasis on the importance of scientific foundations of medicine

The CEUP also recommends that assessments be developed on the ability to access information, evaluate its quality, and solve clinical problems. It is now engaged in the next phase designed to create new models for the USMLE, which is anticipated to take at least four years before affecting test-takers.

(USMLE moves to next step in design review. Comprehensive Review of USMLE. June 10, 2008.)

Effect of USMLE Clinical Skills Exam on Clinical Skills Education

The Clerkship Directors in Internal Medicine (CDIM) conducted a survey of 109 institutional members to assess changes instituted in medical school curricula resulting from the implementation of USMLE Step 2 CS—the clinical skills examination instituted in 2004. There were 89 responses or 81 percent of those institutions that completed the survey. Of these, 45 percent felt there were significant changes in the Introduction to Clinical Medicine (ICM) course objectives, and 39 percent that believed there were significant changes in course content.

Standardized patients were increased by 31 percent and simulators using synthetic mannequins by 16 percent. Among those who responded to the survey, 74 percent believed their students were adequately prepared for the Step 2 CS examination. It was concluded that the examination has resulted in an increase in the emphasis on clinical skills education in spite of the fact that the examination has only been instituted since 2004. The CDIM realized, however, that the Step 2 CS is not the only force leading to curricular changes in the ICM courses. Finally, it was indicated that it was not actual educational practice that was surveyed but rather the perception of respondents.

(Gilliland WR, et al. Changes in clinical skills examination resulting from the introduction of the USMLE Step 2 Clinical Skills (CS) examination. Medical Teacher. 3: 325-327; 2008.)