

Medical Education Digest



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EDUCATIONAL FELLOWSHIP PROGRAMS: WHY DO THEY EXIST?

Continuous curriculum, evaluation, and instructional methodology improvement, as well as responding to changes in students and society, are a recognized need of medical education leaders. Changes in medical practice and financing, health care, biomedical science, and accreditation standards create a need for medical education programs to engage in constant change. New methods have evolved in teaching and evaluation as the understanding of how people learn grows. Consequently, there is a greater interest in learning by faculty members about active-learning methods such as small-group activities, education technology, patient simulations, virtual reality, computer-based education, and standardized patients.

As a result, more faculty development programs have emerged. These include workshops, faculty scholar programs, master teacher programs, and a host of fellowships that include medical education fellowships, faculty fellowships, and faculty scholarship fellowships. Whatever the name, these grew out of the 1980s and emerged from departments of family medicine stimulated by grants from the Health Resources and Services Administration. They have matured and become tools for individual teaching improvement as well as for the development of faculty leaders guiding institutional change. Clinical educators need expertise in clinical teaching, learning theory, educational evaluation, and a variety of teaching methods. In 2005, there were 42 North American medical schools out of 140 with educational fellowships and five interested in beginning one. The programs focused on twelve topics:

- teaching skills for large and small groups of students and residents

- networking with faculty (e.g., mentoring)
- educational leadership
- educational theory (e.g., adult learning)
- curriculum design
- scholarly dissemination (e.g., publications and presentations)
- program and curriculum evaluation
- educational research
- evaluation of learners
- using educational literature
- career advancement
- reflective practice

(Searle NS, Hatem CJ, Perkowski L, and Wilkerson L. "Why Invest in an Educational Fellowship Program?" *Academic Medicine*. 81(11). 936-940; 2006.)



“Medical Education Highlights for Primary Health Care”



VIDEO GAMES AND SURGICAL SKILLS

A Beth Israel Medical Center study in New York reported that surgeons who had experience playing with video games made fewer errors and performed faster than those who never did. The study involved 12 surgical residents and 21 attending surgeons. It found that those who played video games in the past for more than three hours weekly made more than one-third fewer errors and were 27 percent faster in the Top Gun Laparoscopic Skills and Suturing Program than those who never played.

Overall, they scored 42 percent better than surgeons who never played video games. It also was found that those who were in the top third of video gaming skill made 47 percent fewer errors in the Top Gun Program. They also were 39 percent faster and had a 41 percent better Top Gun score. The study concluded that video games might be a practical way to help train surgeons.

(Rosser JC, et al. "Surgeons with Video Game Skill Appear to Perform Better in Simulated Surgery Skills Course". Archives of Surgery. 142; 181-186; 2007.)



SENIOR PARTNERS PROGRAM IN GERIATRIC EDUCATION

Ohio State University goals for geriatric education are designed to meet the competencies set by the American Geriatrics Society and those of the medical college, including understanding how to treat this population, how symptoms differ from those in younger adults, and other influences affecting health care decisions. To help meet these

goals, the university set up a program in which entering students were matched in December with older adults living in the community and stayed linked with these adults for four years.

Except for the first-year summer break, there was no period of interruption. In this way, the students were able to observe, assess, and be part of the real-time aging process of these older adults. They held conferences and small-group discussions throughout the four years and were able to note that none of the older people aged the same, faced the same health issues, or handled the aging process the same way. The school recruited 200 seniors each year or had a total of 400 older people for each group of students in the four-year medical school curriculum. Retirement centers provided

more than half of the senior partners, with the others coming through cooperation with the local Area Agency on Aging.

Reasons for the older adults participating included wanting to interact with a younger person, improve their health, and increase their medical knowledge. Students met the seniors at off-campus senior centers, retirement centers, and churches. They then met them at their homes and, over time, some were visited in assisted-living facilities and nursing facilities. In their first and second year, meetings were held every two months, every six months in the third year, and once in the fourth year. As the years progressed, the students required more sophisticated diagnostic and clinical knowledge. Course materials are available to students online at <http://seniorpartners.osu.edu>. Assignments are submitted, tracked, and graded online.

(Kantor BS and Myers MR. "From Aging...to Saging-the Ohio State Senior Partner Program: Longitudinal and Experiential Geriatric Education." Gerontology & Geriatrics Education. 27(2); 69-81; 2006.)



GOLD SYMPOSIUM ON HUMANISM AND CALL FOR ABSTRACTS

The Arnold P. Gold Foundation is sponsoring a symposium on teaching humanism in medicine on September 27-29, 2007, in Chicago, Illinois. All meeting expenses will be paid to the first authors of all accepted abstracts, including travel,

meals, and lodging. The Gold Foundation's mission is to improve patient care by fostering humanism in medicine. It partners with medical schools and teaching hospitals to provide innovative educational experiences to students and residents that help to develop the skills and habits of compassionate and respectful patient care. The Gold Foundation Symposium's purpose is to inform its own work as well as the work of the broader educational community about how humanism is taught and to identify the most effective interventions.

There are five goals of the symposium, including

- to identify what medical schools and residency programs are doing to teach/impart humanistic values and skills to medical trainees, including respect for a patient's concerns and values and compassionate consideration for a patient's physical and emotional well being
- to explore the effectiveness of highlighted strategies, interventions, and programs
- to consider the evaluation methods for such interventions
- to establish partnerships between participants and

collaborative networks for multi-institutional projects

- to identify potential new programs and funding opportunities for the Gold Foundation

Recognized leaders in the field will make oral and poster presentations. The symposium will also feature workshops on evaluation and focus on themes that are identified for teaching humanism. Abstracts are currently being sought that relate to medical student or resident education in humanism. They must include a goal/problem statement, project description or intervention, and evidence of its effectiveness. Submissions must be submitted on or before May 1, 2007.

Further information is available by visiting:

<http://humanism-in-medicine.org/cgi-bin/htmllos.cgi/04616.1.5810997042018940510>.

TENURE AT LCME-ACCREDITED AMERICAN MEDICAL SCHOOLS

Only 12 of the 125 LCME-accredited U.S. medical schools do not offer tenure to clinical faculty, reports the Association of American Medical Colleges as a result of a 2005 survey. The survey's response rate was 100 percent. However, the percentage of full-time, tenure-eligible faculty has dropped from 57 percent in 1985 to 42 percent in 2004. But the AAMC points out that the number of tenured and tenure-eligible faculty has increased by 50 percent (i.e., 14,026 in 1985 and 21,921 in 2004).

The AAMC further states that while there has been a decline in the percentage of faculty members who are tenure-eligible, one cannot conclude that tenure is in jeopardy of disappearing. The study also showed that of the 113 medical schools that provide tenure, 56 (50 percent) had a financial guarantee associated with tenure while 38 percent, or 43 schools, did not. Furthermore, the study determined that 43 percent of medical schools also have lengthened the time it takes for the probationary period for tenure-track faculty to eight or more years in 2006 compared to 23 percent in 1983.

The study concluded that while tenure systems remain well established in LCME-accredited medical schools, the proportion of clinical faculty on tenured or tenured-eligible tracks has declined over time.

(“The Continuing Evolution of Tenure Policies for Clinical Faculty in U.S. Medical Schools.” Analysis in Brief. AAMC. 7(1); March 2007.)

PATIENT SAFETY AND WEB-BASED EDUCATION

A Harvard University study evaluated the usefulness of Web-based education of medical students and residents in areas related to the U.S. health care system and patient safety. Accredited residency programs are now expected to evaluate the competency of graduates in these areas of systems-based practice. A randomized study included 276 medical students and 417 residents. Of these, a total of 512, or 80 percent, completed the survey.

The investigators pointed out that there are only few faculty members with any expertise in this area and few instruments that can assess this topic. A significant improvement in education test scores was noted when using Web-based modules. In the modules on patient-safety topics, a 16-percentage-point improvement was noted. It was concluded that Web-based programs, “can effectively cross a wide range of medical specialties, institutions, and levels of training to generate substantial learning and retention in the competency of systems-based practice.”

(Kerfoot BP. “Web-Based Programs Aid System-Based Practice Education.” Archives of Internal Medicine. 167: 361-366; 2007.)



TEACHING SCHOLARS PROGRAM

The University of Arkansas for Medical Sciences began a Teaching Scholars Program (TSP) in 1996 serving all of the health professions colleges. It intends to nurture groups of faculty who actively engage in the scholarship of teaching. The program includes a monthly three-hour workshop on topics

related to teaching and educational research. While initially only for College of Medicine faculty, it now includes nursing, pharmacy, public health, and allied health participants.

Those who complete the project participate in the required workshops over one year and complete an educational project over the next two years. Not only did the program participants feel that the TSP could improve teaching skills and make them better teachers, they also saw a general educational effect by helping to improve the education of learners. There was congruence between those who took the course and those whom they believe they have influenced.

(Moses AS, Heestand DE, Doyle LL, and O’Sullivan PS. “Impact of a Teaching Scholars Program.” Academic Medicine. 81 (10 Supplement). S87-90; 2006.)

BASIC SCIENCE AND CLINICAL DIAGNOSIS

Preclinical basic science courses that fail to include and do not explicitly examine the relationship between mechanisms and disease manifestations are likely to be of little value. Basic sciences are shown to not be an inert group of facts that do not integrate with clinical knowledge. A good understanding of basic science appears to be a long-term major determinant of diagnostic success. Knowledge of basic sciences is central in the development of clinical expertise. Instruction divorcing mechanisms of clinical correlation is likely to be of little value.

Problem-based learning exemplifies how instruction can explicitly link with clinical features and disease mechanisms. While students who learn symptoms of disease in the context of biomedical information perform similarly to those who learn them separately, there is a substantially smaller degradation of performance after a one-week delay when basic science is linked with clinical instruction.

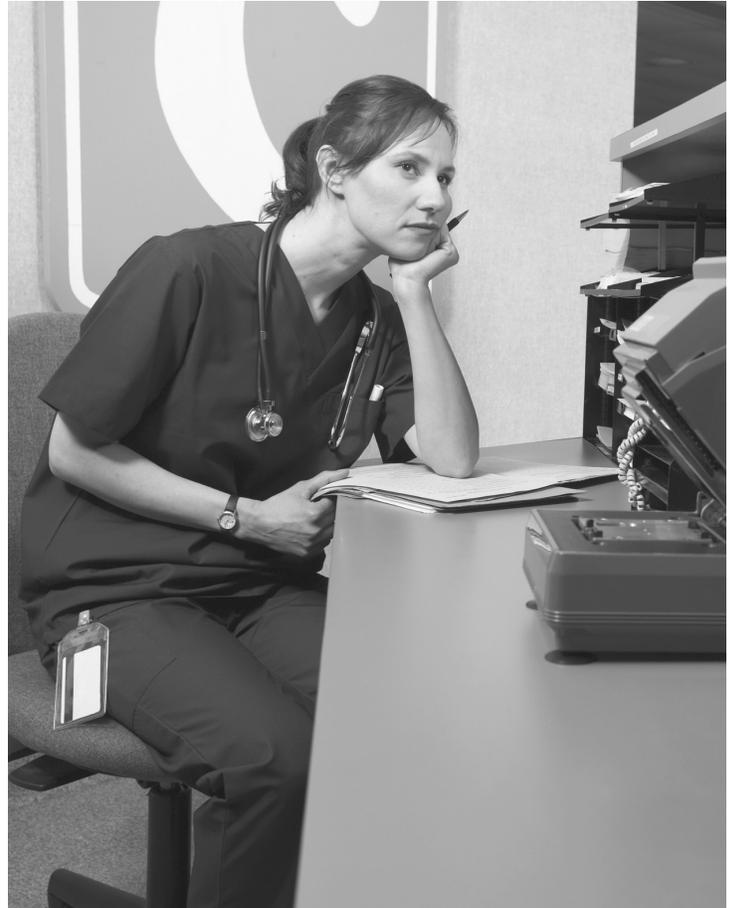
(Woods NN, et al. "The Value of Basic Science in Clinical Diagnosis." *Academic Medicine*. 81 (10 Supplement). S125-S127; 2006.)

PROBLEMS WITH CONTINUITY IN CLINICAL CLERKSHIPS

The relatively long-term relationship that used to occur among medical students, faculty, and patients no longer exists today. These experiences provided an opportunity for learning in a relaxed, mentored environment. However, with quotas for clinical care and the demands of maintaining a research schedule, clinical faculty members are unable to spend prolonged periods on a clinical service and do not have time to get to know the students. The discontinuity that occurs creates an inefficient system as well as frustration for students and added challenges to teachers.

A recommendation is to return to the days prior to Abraham Flexnor's famous 100-year-old report on medical education and recreate a new apprenticeship model so continuity can be reinstated and faculty can have protected time with students. Other models of continuity could be identified that also enhance continuity to make clinical education more effective as well as efficient.

(Irby DM. "Educational Continuity in Clinical Clerkships." *New England Journal of Medicine*. 356(8); 856-857; 2007.)



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