

Program increases medical student interest in surgical careers



DIGITAL VISION

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For the 20 years from 1980 to 2000, a higher-than-average percentage of graduates from the University of Michigan (Ann Arbor) Medical School selected surgical fields for their postgraduate training. University of Michigan medical students were very successful in the match when seeking surgical residencies. These observations attested to the positive influences of the surgical faculty as role models for medical students and to opportunities for professional development in surgery that the University of Michigan afforded.

Nonetheless, the nationwide trend in decreasing interest in surgical careers became manifest at the university in the years 2000 and 2001. Not coincidentally, medical student satisfaction with surgical clerkships, as measured by completion surveys, declined significantly over the five-year period before 2000. The students perceived that there was a decreasing personal contact with surgical faculty. Interviews conducted with surgical faculty were virtually unanimous in confirming the student observations. In addition, surgical faculty believed that the increasingly hectic pace of clinical practice left little quality time for student instruction. These observations made it clear that innovative approaches to medical student education should be a high priority for the department of surgery.

“Re-energized” teaching curriculum

In an attempt to reverse these trends, four new job descriptions, to be performed by current faculty, were designed to bring innovation and new energy into the medical student teaching enterprise of the department of surgery. These physicians were funded by the department, which provided salary support equivalent to 25 percent full-time equivalents for each faculty. Job descriptions included:

1. Development of a medical student/faculty interactive curriculum for the third-year surgical clerkship in the areas of general surgery and vascular surgery.
2. Development of a third-year medical student/faculty interactive curriculum for the surgical subspecialties.
3. Development of an intensive mentoring pathway for fourth-year medical students interested in surgical careers.

4. Development of a curriculum in surgical economics and leadership skills.

Topics included areas such as effective communication in teaching, conflict resolution, management principles, negotiation, time management, and medical ethics.

Evaluation of faculty teaching efforts in the promotion process were also made more rigorous for surgical faculty. The belief was that the current tenure track promotion process would function well with teaching accepted as equivalent to basic science or clinical research, for a few select faculty members, in terms of contribution to the academic mission of the University of Michigan. New criteria for promotion were developed that more explicitly recognized excellence in teaching.

Efforts were made to make the surgical faculty much more visible to first and second-year medical students. The department of surgery made a commitment to have a surgical faculty member teaching in every course in the first two years, including those traditionally conducted by the basic science departments. Additional teaching efforts were made in the anatomy course in the form of clinical anatomical correlations. Medical students found the presentation of surgical movies as a teaching adjunct to gross anatomy to be particularly stimulating.

A “meet a surgeon” lunchtime series was initiated for first- and second-year medical students so that they could interact with faculty on a more informal basis. A program for “shadowing” a surgical faculty member was extended to all members of the first- and second-year class. In this program, medical students were typically invited to meet with the faculty on a monthly basis, usually attending operating room cases. A surgical Web site was developed to provide laboratory and clinical mentoring services for first- and second-year students as an additional outreach effort.

Additional outreach programs also focus upon third- and fourth-year medical students. A monthly career development series has been developed, usually conducted over lunch, to familiarize medical students with surgical opportunities. During the summer of the fourth year, a series of meetings are held in the homes of surgical faculty. Topics addressed during these

meetings include the application process, how to write a personal statement, and what happens during the interview.

Outreach and the College


The resources available through the American College of Surgeons have been especially important to our outreach efforts. In October 2002, the department of surgery funded the travel of 31 medical students to the American College of Surgeons' Clinical Congress held in San Francisco, CA. These third- and fourth-year students were selected on the basis of an expressed potential interest in surgery as a career. They were exposed to both the clinical and research forums that were available during the Clinical Congress. The students were also included in the social activities of the department, including the departmental reception and informal dinners with surgical house staff and faculty. The returning students were universal in their view of this experience as a positive influence. They were surprised by the breadth of surgical opportunities, by the positive and upbeat "feel" of the annual meeting, and by the dedication of the College to their future development. This outreach program will be continued in 2003 for the Clinical Congress in Chicago, IL.

Evaluation

In order to judge the effect of these changes and the value of our investment in medical students, defined criteria will be used:

1. Results of medical student satisfaction surveys conducted upon completion of third-year surgical clerkship.
2. Medical student performance on standardized surgical examinations administered at the completion of the surgical clerkship.
3. Medical student performance on specific surgical sections of the comprehensive clinical assessment, given at the beginning of the senior year of medical school.
4. Results of medical student educational surveys administered by the Office of Graduate Medical Education after residency matching.
5. And most importantly, the percentage of University of Michigan medical students entering surgical training upon graduation. In 2003, 24 percent of the University of Michigan gradu-

ating class matched to surgical residencies.

These data have been collected prospectively from the beginning of this experiment. The program has been funded for five years. If these interventions are considered successful, they will certainly be recommended for continuation. 

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