Student Access and Opportunities

The Department of Surgery offers courses at three levels of learning: (a) Medical Students; (b) Residents; (c) Advanced Post-residency training (fellowships).

(a) Medical Students: Access to medical students in the department is dictated by School of Medicine. In other words, the School selects the students and the department provides the educational environment in surgery. Thus, our opportunities are determined essentially by the School.

(b) Residents: The General Surgery Residency Program at the University of Washington Affiliated Hospitals provides integrated training in all areas of General Surgery through an intensive five-year clinical, didactic and investigative program. This program is one of the highest ranked programs in the country. The annual Match Day program has its own rules and incorporates all the medical schools and graduating students nationwide—we select from this pool.

The Department submits its preferences in a list to the National Matching Program and thus, has an opportunity to express the strong departmental commitment to diversity. In the last 10 years, approximately half of the graduating residents from our department have been women whereas the U.S. average for surgical residents during the same period of time was 18% (AAMC data – Surgery Synopsis, 2003). This was accomplished through a dedicated effort to rank women high in our list, composing about 50% of the top 20 places from where we usually draw our residents. Secondly, we proactively recruited women by assuring them that we had created an environment where we cherished family values, where people were not asked to postpone the development of families, and where we accommodated the individual needs of this growing cadre of surgeons.

Today, many women seek the department of surgery because of our success rate finishing the training of many women. Similarly we have been extremely successful in the recruitment of Asians, Native Americans and other minorities to our program. We have been much less successful with the recruitment of African American graduates. Through post interview calls we have learned that the area in Seattle has such a small proportion of African Americans that they prefer other locations.

(c) Fellowships: Advanced surgical training is provided in many areas such as Transplantation, Cardiothoracic Surgery, Congenital Heart Disease, Plastic and Reconstructive Surgery and advanced gastrointestinal surgery. We follow the same philosophy as stated above with these applications. An example of which is our residency in cardiothoracic surgery, which has recruited and graduated more women than any other program in the U.S.

The Department of Surgery provides a rigorous, comprehensive experience for all these programs that is designed to produce the highest caliber surgeon. It is intellectually as well as physically challenging, with high expectations and standards for its trainees. At the same time it fosters a sense of camaraderie and accomplishment emanating from the collective talent and dedication of the entire department, an enthusiastic faculty, top-notch administrative support and a chairman, Dr. Carlos Pellegrini, who is a national leader in surgical education.
We continue to attract top applicants of all strata of society to our program, improve residency training and increase work efficiency. We invite applicants that wish to join a team of dedicated, collegial, well-rounded individuals in one of the most exciting and challenging careers in medicine, to review our program and encourage them to apply.

Student Development and Retention

Some noteworthy improvements to our residency program have been: pre-printed orders, development of a consult service, long white coats for all residents, adequate call room facilities, alpha-numeric pagers, resident intranet, web-based surgery operative log, bedside CIS computers, PACS system, system-wide third night call, a TICU service, clinical nurse coordinators, a newly revamped Thomas L. Marchioro Library, and adding residents to the Education Committee. Finally, the Schilling Surgical Fellowship will make a significant contribution by allowing more residents to gain experience in laboratory research.

Plans and challenges facing our residency program in the immediate future are:
• Improving our evaluation system with a new Web-based tool will increase the timeliness of feedback to the residents.
• Continuing to increase the efficiency of resident work, using computerized systems and workflow processes.
• Monitoring the interests and needs of our applicant pool to modify our recruitment strategies such as the significant expansion of our applicant website to provide prospective residents with relevant information about our program.
• Increasing the significance of the title Chief Resident. The Chief year is a time to hone leadership skills, learn effective exposure techniques and how to take junior residents through a case, and refine administrative skills through first-hand experience.
• With Karen Horvath, Residency Director, and Mika Sinanan’s interest in operative skills acquisition, plus Brant Oelschlager, Lily Chang, Dave Flum & Richard Satava joining the faculty, our group plans to further develop formal residency training modules in open and laparoscopic technical skills. A long-term goal will be to get residents into the laboratory once per week in some form.
• Our Faculty Advisor System shifted to a Faculty Mentor System in July 2003. While parts of the old advisor system will be retained, the new enhancements will satisfy two goals: to train and develop surgeons in clinical management, technical proficiency, and professionalism, plus to guide and mentor our group of exceptionally bright and talented individuals in achieving their own personal goals.

The ACGME Report of the new 80-hour resident workweek was recently published and also became effective July 2003. This is a wonderful opportunity to improve the lifestyle of our residents and their families. It is also a chance to increase educational opportunities in terms of reading and building a stronger knowledge base. Resident staffing at all hospitals is designed so residents will be on call no more often than every third night, though every fourth or fifth night is common throughout the program. In the senior years, call is often taken from home except when...
on service at Harborview Medical Center. Our residents also get at least one day off in seven. Our chairman is a national leader in reducing resident work hours and improving the residents’ quality of life. The department is committed to maintaining working conditions and time off in compliance with guidelines set by national accreditation bodies, including the 80-hour workweek.

The department offers a surgical sub-intern program for international physicians. The objective of this course is to permit the international physician to work in a US teaching hospital as well as further develop his/her knowledge of surgical disease and enhance his/her ability to manage comprehensively the problems encountered in surgical patients. This course will provide an opportunity for the physicians to perfect his/her clinical skills in dealing with medical as well as surgical problems and will permit the physician to assume added responsibility. This program will be for preparation for participation in the UW surgical residency programs.

**Engagement with the External Community**

University of Washington (UW) School of Medicine is a regional resource for the WWAMI states:

- Washington
- Wyoming
- Alaska
- Montana
- Idaho

The UW School of Medicine is the only medical school in this five-state region, a geographic area that encompasses one-fourth of the United States’ landmass. UW medical students train in Seattle and in more than a hundred towns and cities across the region. Some 4,000 physicians and other health professionals in the WWAMI states volunteer in their communities to teach medical students.

One of the outreach activities the department has sponsored through its chair, Dr. Pellegrini, has been the development of a “mini medical school”, a 2 month long program that incorporates anyone from the region who wishes to attend, at no cost to them. Included are students from high school, parents, teachers, friends etc. This program highlights aspects of medical school education and medical education in general of value to the community and in particular to young individuals considering medicine as a profession.

**Staff and Administrative Diversity**

UW Human Resources performs applicant screening based on the policies and procedures that are in place. The departments initiate their recruitment efforts based on the referral list as a result of HR’s thorough process.

The Department of Surgery enjoys the diversity in our staff members and respects the cultural differences, wide range in perspectives, unique professional and personal experiences, and
individual contributions that represent a successful team. Employees are encouraged and recognized for their initiative, ideas, and values that not only promote professional growth, but also further enhances successful personal development. The department invites individuals to celebrate and cherish their own ethnic background and to share it with others at potluck lunches and other activities.

**Faculty Diversity**

The department has established guidelines to ensure compliance with the University policy of equal opportunity regardless of race, color, creed, religion, national origin, sex, sexual orientation, age, marital status, disability, or status as a disabled veteran or Vietnam era veteran. Faculty positions are advertised in peer-reviewed journals that include a diversity statement: *The University of Washington is building a culturally diverse faculty and strongly encourages applications from female and minority candidates. The University is an Equal Opportunity/Affirmative Action employer.*

Women comprise a very small percentage of the surgical workforce in America. In both academic and private practice and in almost all surgical specialties (except for Obstetrics and Gynecology), the female gender is seriously underrepresented. In spite of the fact that over the last 20 years women have been applying to (and entering) medical school in ever increasing numbers, applications to and admission to surgical training programs have lagged behind. In fact, the percentage of women graduating from medical school increased from 23% in 1980 to 43% in 2000, but in 2000, only 20% of graduating general surgery residents were women. Here at the UW, the first surgeon to graduate from our training program was Dr. Hilding Olson back in 1951. Twenty-eight years—and many cultural changes—would pass before a woman completed our program—Dr. June Heilman in 1979.

One of the promises our chairman, Dr. Carlos Pellegrini, made to the late Dean Philip Fialkow when he assumed leadership over 10 years ago was that he was going to work hard at increasing diversity in our general surgery residency and in the faculty of the department. Interestingly, we realized that to address the paucity of women in the faculty we had two ways: one was to recruit women away from other academic institutions, the other one was to train more women residents and then to retain those with academic inclinations in our faculty. We chose the latter. And thus, while the American Association of Medical College’s national average indicates that currently about 20% of graduates from general surgery residencies are women, we are proud that over the last six years 57% of our surgical residency graduates were women and that twice in the last five years we graduated five women and one man from our program. This has led our program to be recognized nationally for its stance in this issue and thus we continue to attract top women graduates to our residency program.

Sixty-five percent of our female graduates have pursued careers in the private sector (including the Armed Services) while eleven (35%) have joined the academic ranks. We recently asked six of our female faculty members to tell us their thoughts on the topic of women in surgery. (Four trained entirely in our department, one served her fellowship here, and one trained outside the UW.) The only recurring issue for them was whether or not they were capable of becoming surgeons; their gender never entered into the equation.
The Winter 2003 issue of the department newsletter *Surgery Synopsis* was dedicated to women surgeons. We thought it was important to share their views as each one of them serves as an extraordinary role model to the younger generations. We are proud of our Department’s stance on this issue and proud of our graduates.

**Curriculum and Research**

Our five-year training program in General Surgery provides a comprehensive curriculum at one of the finest universities – and greatest places to live – in the country. As the only designated academic medical center in the five-state area of Washington, Alaska, Idaho, Montana and Wyoming, the University of Washington is a regional tertiary and quaternary referral center. The curriculum is designed to produce surgeons that have the knowledge, technical skills and professional standards necessary for a productive successful career.

The training program consists of a multi-faceted curriculum of didactic and technical instruction provided through regular conferences, open and laparoscopic technical labs, and seminars. The faculty are committed to surgical education. Research time is not required, but guaranteed to those interested. Graduates go on to fellowship and practice opportunities. Our chief residents finish with over 1,200 cases. They enter some of the top fellowships in the country and some of the best clinical and academic job opportunities available.

The Department of Surgery vigorously supports scientific investigation and continues to build programs in research and research training despite the current trend toward managed healthcare with fewer dollars available for research. Our challenge is to produce new scientific insights and beneficial medical innovations. The Department’s current funding from the Federal government, from industry, and from other private sources supports more than 90 research programs across all Divisions of the Department.

Despite today’s economic climate where an increasing number of highly qualified investigators are competing for fewer funding sources, our consistent track record of attracting research dollars continues. Almost all of our investigators receive funding from the National Institutes of Health (NIH), National Science Foundation, Centers for Disease Control, U.S. Army & Navy, and other federal and private peer-reviewed sources. Because of its uniformly-accepted reputation, many institutions refer to their level of NIH funding as a benchmark of academic vigor. While there is no single way to determine the quality of the research being conducted at an academic institution, we generally accept the level of NIH funding as a proxy in assessing both the quantity and quality of research. Many of our faculty are, in addition to excellent clinicians, investigators funded by NIH grants. In fact, at the close of this past fiscal year (FY03), our investigators held a total of 38 active NIH grants – up from 29 grants in FY02. We received a total of 8.5 million in NIH funding, which is a full 50% increase over the previous year and places us at the top of academic departments of surgery in the nation. While our NIH funded grants increased 50%, total research funding increased 29% overall.
Climate

The Department of Surgery continues to support a working and learning environment that promotes and enhances the furthering advancement of staff careers for members of the faculty, residents, staff members and post-doctoral fellows. We remain fully dedicated to expanding the opportunities within the department, while fostering our mission of excellence in teaching.