Graduate Urologic Education: Challenges and Opportunities

Chairman, Glickman Urological Institute, The Cleveland Clinic Foundation, Professor of Surgery, Associate Dean for Faculty Affairs, Cleveland Clinic Lerner College of Medicine
Andrew C. Novick

The evolution of the specialty of urology during the past 15 years has been unprecedented among surgical disciplines. Urologists now comprise a heterogeneous group of clinicians and scientists working in diverse areas linked by a global relationship to the genitourinary system. Urologic sub-specialization now exists in several distinct areas such as oncology, female urology, pediatrics, infertility, neurourology, endourology/stone disease, and transplantation.

In the United States, urological training and practice are overseen by the Urology Residency Review Committee which accredits graduate training programs, and the American Board of Urology which is responsible for certifying the competence of individual practicing urologists. Both of these groups function under the umbrella of a broad parent organization termed the American Board of Medical Specialties.

There are a number of challenges and obstacles in the field of graduate urological education today:
1) Sub-specialization has increased the challenge of providing a comprehensive core curriculum for trainees.
2) Increasing clinical and administrative demands on our faculty are rendering them less available for teaching.
3) Fewer open surgical cases are being performed with an increase in the volume of outpatient-based practice and procedures, which has led to a two-tiered system of practice in the United States.
4) New minimally invasive surgical therapies such as laparoscopy pose new challenges to surgical training which are spawning the development of novel approaches to skill acquisition involving virtual reality techniques and telementoring.
5) We exist within an increasingly restrictive medical economic environment that has eventuated in shortages of hospital beds, operating time, and nursing support in some centers.
6) Funding to support research training is less readily available than in the past.
7) Maintenance of accreditation for our graduate training programs now entails compliance with new limitations on resident work hours, and the requirement to objectively assess six measures of competence in our trainees.

Most worrisome, are recent trends in the United States that have impacted adversely on the training of academic surgeons or surgeon-scientists who have been an important product and life blood of our urological training programs. This has occurred in part because of the need for additional postgraduate training in subspecialty areas which has lengthened the overall duration of clinical training, more restrictive funding for training positions, and a reduction in the number of residence programs that currently offer a fixed period of time devoted exclusively to research.

The process of medical discovery in general, and certainly within our specialty of urology, is progressing at its most rapid rate ever and we are on the precipice of exciting advances, at both the clinical and molecular levels, that will reshape our current concepts regarding many diseases. It is vitally important that capable and motivated trainees have the opportunity to contribute toward these advances through a career in academic medicine. Potential strategies for accomplishing this will be discussed.