April 2017

Dear Urology Residency Applicant:

Thank you for your interest in our Urology Residency Training Program at the University of Colorado School of Medicine. Applications to our program are ONLY accepted through the Electronic Residency Application Service (ERAS). The deadline to apply to our training program is SEPTMBER 15, 2017. Please browse the Association of American Medical Colleges website (www.aamc.org/eras) for specific information on ERAS dates and submission procedures.

Attached you will find some basic information regarding our training program along with a description of our program's educational goals and a synopsis of our various conferences. Please feel free to browse our website at www.urology.cusurgery.com for additional information.

Subsequent to the application deadline and the internal review processing of all applications, selected applicants will be notified and scheduled for interviews in November.

Please note that the University of Colorado Urology Program is #15573. Furthermore, all applicants must enter the American Urological Association (AUA) Urology Match to be considered. Please browse the AUA website (www.auanet.org) for specific details on the AUA Urology Match requirements.

If you have any questions, please feel free to contact our Residency Program Coordinator, Beth Musser, via e-mail at 'beth.musser@ucdenver.edu'.

Sincerely,

Randall B. Meacham, M.D.
Residency Program Director
Professor and Chief
Division of Urology, Department of Surgery
University of Colorado School of Medicine
Contact information
Program Director: Randall B. Meacham, M.D.
Program Coordinator: Beth Musser
Address: UCSOM Division of Urology
12631 E. 17th Ave., M/S C-319
(Room #5602 for UPS/Fed Ex)
Aurora, CO 80045
Phone: 303-724-2715
E-mail: beth.musser@ucdenver.edu

PROGRAM OUTLINE
Status: Full Accreditation
Length of Training: 4 years
Pre-Urology Training: 1 year of General Surgery at UCSOM
Maximum Number of Residents: 12
Approved Residents per Level: 3-3-3-3
2017-2018 Residents per Level: 3-3-2-2

In June 2015, the University of Colorado School of Medicine Urology Residency Training Program received approval from the ACGME Urology Review Committee to increase our resident complement to twelve (12). We are currently in the process of transitioning from two (2) residents per year to three (3) residents per year. At the same time, our program received approval to shorten the duration of our program format from six years (2+4 format) to five years (1+4 format). Instead of requiring two years of preliminary training in General Surgery, our program now only requires one. It is expected that preliminary training will be completed at the University of Colorado School of Medicine with the Department of General Surgery.

In the fall of 2017 our program will be recruiting for three (3) applicants through this season’s AUA Urology Residency Match Program. The individuals who match with us in January 2018 will begin preliminary training in General Surgery at the University of Colorado School of Medicine in late June 2018. Matriculation into the Urology Residency Training Program will occur on July 1, 2019 with an expected completion date of June 30, 2023.

ERAS
The Division of Urology Residency Program at the University of Colorado School of Medicine ONLY accepts applications through the Electronic Residency Application Service (ERAS). Deadline for applications is September 15, 2017. Please check the American Association of Medical Colleges Website (www.aamc.org) for additional information regarding the ERAS program.
AMERICAN UROLOGICAL ASSOCIATION MATCH
All applicants must enter the American Urological Association (AUA) Urology Match to be considered. Please browse the AUA website (www.auanet.org) for specific details on the AUA Urology Match requirements.

NRMP MATCH
All applicants who match into the UCSOM Division of Urology through the AUA Urology Match will need to apply to the National Residency Matching Program (NRMP) for their General Surgery pre-requisite years. It is expected that the one year of pre-requisite General Surgery experience will be completed at the University of Colorado School of Medicine. Please check out the NRMP website at http://www.nrmp.org for additional information.

Website
Information regarding the residency training program can be viewed on our website at www.urology.cusurgery.com. For information on the University of Colorado School of Medicine (UCSOM) and/or the Office of Graduate Medical Education, please visit our institutional website at ‘www.ucdenver.edu’.

RESIDENT ELIGIBILITY
To be considered eligible for a training program at the University of Colorado School of Medicine, the following minimum eligibility requirements for selection must be met:

1. Graduation from a medical school in the United States or Canada accredited by the Liaison Committee on Medical Education (LCME); or
2. Graduation from any college of Osteopathic Medicine in the U.S. accredited by the American Osteopathic Association (AOA); or
3. Graduation from medical school outside of the United States or Canada and meeting one of the following additional qualifications:
   a. Holds a currently valid certificate from the Educational Commission for Foreign Medical Graduates (ECFMG) prior to appointment; or
   b. Holds a full and unrestricted license to practice medicine in Colorado; or
   c. Has graduated from a medical school outside the United States and completion of a Fifth Pathway Program provided by an LCME – accredited medical school.
4. Residents in our program must be a U.S. citizen, lawful permanent resident, refugee, asylee, or otherwise possess or be able to obtain prior to the start date the appropriate documentation to allow resident to legally train at the University of Colorado School of Medicine.
5. Applicants must be eligible for either a training certificate or a permanent medical license as granted by the Colorado Medical Board.

Selection from among eligible applicants is based on residency program-related criteria such as ability, aptitude, academic credentials, communication skills, and personal
qualities such as motivation and integrity, as well as the ability to function within the
parameters expected of a practitioner in the specialty.
http://www.ucdenver.edu/academics/colleges/medicalschool/education/graduatemedical
education/GMEDocuments/Documents/GMETechStandards.pdf

The Division of Urology does not set a minimum USMLE score as part of the criteria for
application and/or selection.

EDUCATIONAL PHILOSOPHY
The educational philosophy of the department is to provide the best possible resident
training in urology. To achieve this, the goals for urology resident training are:

A. To provide adequate volume and variety of surgical experience in general urology and
the various urologic subspecialties. This includes urologic cancer, geriatric urology,
urodynamics, female urology and neuourology, pediatric urology, infertility and
impotence, erectile dysfunction, endourology and stone disease, laparoscopy,
renovascular disease, infectious disease and genitourinary trauma.
B. To provide adequate ambulatory experience (outpatient clinical experience) in general
urology and various urologic subspecialties as listed above.
C. To provide educational and research conferences to further enhance the training
experience. These conferences will cover the basic sciences as they relate to urologic
physiology and pathology, urologic imaging, combined morbidity and mortality
conferences for all participating institutions, urological pathology, journal reviews, and
other subjects having educational value in the basic and clinical domains of urology.

To meet the above listed goals of the urology residency training, it is necessary to have three
(3) participating institutions in addition to the sponsoring institution. Each participating
institution is unique and essential in providing the necessary volume and variety of cases for
optimal resident training. All the participating institutions are within an 8-mile radius of the
sponsoring institution, allowing for resident interaction and combined conference
participation at least two (2) times per week.

The goals for urology resident education for each particular assignment are:
A. **URO-1** – The overall goals of the URO-1 rotation is to provide the incoming Urology
Resident a sound introduction to urologic practice. Although much will be learned on a
one-to-one basis from the Urology Chief Residents, the junior resident participates in
surgical procedures under the direct supervision of the urology faculty performing less
complex surgical procedures in that setting. The junior resident also participates in the
attendings' clinics to learn how faculty members manage complex urologic problems. In
addition, residents are exposed to “bread and butter” pediatrics as well as unique and
complicated diagnostic and treatment challenges.
B. **URO-2** – The URO-2 rotation for the urology resident provides the opportunity to refine
clinical and surgical skills in adult and pediatric urology and to perform ESWL at the
Kidney Stone Center. Outpatient clinic exposure is stressed and characterized by joint
resident / attending clinics for all patients. A portion of this rotation is set-aside for the
resident to learn investigative urology. Although a clinical project may be pursued during this rotation, the resident is encouraged to gain hands-on experience in one of the Urology research laboratories.

C. **URO-3** – The overall goal during the URO-3 rotation is to become comfortable as the primary urologic surgeon. The resident should be prepared for every case and, prior to the case, know and understand all of the major steps required to perform any procedure. In addition, he/she should be able to discuss all surgical options and complications as well as their management. The resident is also expected to learn how to perform as first assist during major open procedures. In addition, the resident will be responsible for patient care, evaluation of outpatients in the clinics, and the emergency evaluation of patients in the Emergency Department or Medical Surgical Specialties Clinic under the direct supervision of the urologic faculty.

D. **URO-4** – The URO-4 residents are the Chief Residents in Urology. In close consultation with the Residency Program Director, the Chief Residents assume significant responsibility for coordinating the residency program; i.e. organizing the conferences, teaching the other residents and medical students both didactic and surgical technique and passing on his/her experience to the junior residents. The chief resident is also responsible for coverage / assistance of all major surgical procedures as well as assisting in clinics whenever the schedule allows. At the Veteran’s Administration Medical Center, the chief resident is responsible for running all outpatient clinics under the supervision of the urologic faculty. Upon completion of the URO-4 training year, the resident will be able to perform complicated major urologic surgeries competently.

**COURSES / EDUCATIONAL MEETINGS**
The residents are exposed to a variety of post-graduate courses and educational meetings during their training. Residents and faculty attend meetings of the Rocky Mountain Urological Society held in the Denver area which host visiting professors from across the country. All URO-1 residents are required to attend the annual AUA Fundamentals of Urology course in Charlottesville, Virginia.

**PRESENTATIONS**
The residents have regularly presented the results of their research in both regional and national forums. Each annual meeting of the American Urological Association (AUA) and South Central Section of the AUA have included presentations on the work of our residents. In addition, residents have presented at other such prestigious national meetings as the American Society for Reproductive Medicine, the American Association of Pediatrics and the Society for Urodynamics, Female Pelvic Medicine and Urogenital Reconstruction. Over the past five years residents have participated in over 100 such presentations. At least 50 peer-reviewed publications and 10 book chapters have resulted from this work as well.

**VISITING PROFESSORS**
The Division of Urology hosts visiting professors throughout year. These visitors are drawn from the ranks of the premier educators in the urologic specialty. Visiting Professors conduct informal case discussions, basic science reviews and prepared lectures with the residents, students, and faculty.
PRE-UROLOGY TRAINING
The University of Colorado School of Medicine offers Pre-Urology training through the Department of Surgery training program, which is ACGME accredited. One year of preliminary training is mandatory and will cover the ACGME requirements to spend a minimum of three months in general surgery, as well as a minimum of three months in the core surgical rotations of critical care, vascular surgery or trauma. The remaining six months will include rotations of educational value focusing on surgical and urologic training.

The objectives of the surgical internship year are to achieve a wide experience in the broad field of surgery, experience in pre-operative evaluation and post-operative care of all classes of surgical patients and to begin the development of technical surgical skills. The essentials of pre-operative and post-operative care include the recognition and treatment of surgical complications, fluid and electrolyte balance, wound care, and nutritional support. The intern performs supervised surgical procedures, gains expertise in vascular access, and other invasive procedures (e.g. tube thoracostomy, diagnostic peritoneal lavage, etc.). The intern also performs admission work-ups, writes pre and postoperative orders, progress notes and hospital discharge summaries.

CONFERENCES
Textbook Review and Basic Science Discussion – The purpose of this conference is to review in detail the contents of the major urologic teaching text, Campbell-Walsh Urology, with a detailed interactive discussion of clinical and basic science issues conducted by a member of the faculty. The chief resident is responsible for establishing the schedule of this conference in consultation with the Residency Program Director. Succinctly stated, the intent of this conference is to cover the most relevant portions of Campbell-Walsh Urology on a bi-annual basis. Additionally, selected chapters may be introduced from other standard urology text if it is felt that this will provide a superior educational experience rather than using Campbell-Walsh Urology.

Uroradiology / Uropathology Conference - Once per month, the residents and faculty participate in a Uroradiology / Pathology Conference conducted at The Children’s Hospital. Participating faculty for these meetings are from the Division of Urology, the Department of Radiology, and the Department of Pathology. During these conferences, the residents present and discuss actual clinical scenarios and the associated radiographs and histology slides are reviewed. This conference is held in an interactive format with individual residents discussing the cases under the guidance of the faculty.

Grand Rounds
A. Journal Club – The Administrative Chief Resident is responsible for obtaining a list of appropriate journal articles from the faculty, organizing the articles, and distributing the list to the other residents. Individual residents are required to have read all of the articles and be prepared to discuss them. Residents are further required to evaluate statistical and investigative techniques as well as summarize the most relevant information contained within the article. Faculty members attend Journal Club and provide comments and discussion of the articles as well as a critique of the residents’ review of the subject matter.
B. **Morbidity and Mortality (M&M)** – An individual faculty member is assigned to moderate each Morbidity and Mortality Conference with participation of all division faculty members. The residents are responsible for accumulating the data regarding the cases performed at their individual institutions during the preceding month as well as providing a detailed description of all complications and deaths. A resident who participated on the case to be reviewed presents the pertinent details of the procedure as well as the learning points. Through discussion of all members present, the group constructs an approach for the prevention of future complications of this type. The moderating faculty member is responsible for insuring the smooth flow of the discussion as well as calling on other members of the faculty and members of the urologic community in attendance to comment on the cases discussed and identify methods for minimizing the potential for future complications. Additionally, the moderating faculty member is responsible for inviting authorities from other disciplines to participate in the conference and provide commentary on the specific cases discussed.

Additionally, the Denver Health Medical Center and the Denver Veteran’s Administration Medical Center also have weekly M&M conferences that pertain specifically to the cases which presented in their respective institutions. These conferences are led by the respective Chiefs of Surgery and are attended by the residents assigned to the rotations for these specific institutions.

C. **Invited Presentations** – The Chief Resident is responsible for identifying a topic of special clinical or basic science significance each month and inviting an individual faculty member from this or other institutions to make a presentation. The selection of topics and individual presenters is accomplished with input and advice from the Residency Program Director. Full time faculty attend these conferences and provide discussion during the course of and at the conclusion of the presentations.

D. **Resident / Faculty Presentations** – Grand Rounds are routinely set aside for a resident or faculty presentation. Each resident will present at one Grand Rounds per year on an assigned topic during each year of his/her training. Other weeks are set aside for faculty presentations on a topic related to their subspecialty practice.

E. **Case Presentation Conference** – The residents are responsible for identifying and organizing specific clinical presentations. During these presentations, appropriate radiographs are presented and interpreted by residents who were not previously familiar with the specific cases in question. Appropriate modalities and approaches to diagnosis and management are also discussed. Faculty members are responsible for monitoring and guiding the discussion at hand and for confirming the residents’ interpretation of the radiographs and clinical data.

F. **Uroradiology and Uropathology** – On a regular basis, a member of the faculty of the Urology and Radiology staff present Uroradiology or Uropathology Conference at Grand Rounds. This is in addition to the monthly Uroradiology conference held at The Children’s Hospital. During the course of this conference, a faculty member from radiology or pathology
is required to organize individual case presentations with appropriate radiographs and histologic slides. These are projected and discussed by the residents. Full-time faculty members with the Division of Urology are in attendance and provide additional discussion during the course of the conference.

G. **Urinary Stone Treatment Conference** – Once per month residents and faculty attend a treatment discussion meeting at the Rocky Mountain Kidney Stone Center. The resident who is rotating at the Rocky Mountain Kidney Stone Center prepares a minimum of six clinical cases with including interpretation of radiographs. Other members of the resident staff then discuss these cases emphasizing diagnostic and treatment modalities. The entire treatment staff of the Rocky Mountain Kidney Stone Center critiques the presentation and discussion and offers additional insight.

H. **Visiting Professorships** – The Division of Urology routinely hosts Visiting Professors from outside the institution. During the course of their Visiting Professorship, these nationally known urologists provide a formal presentation at Urology Grand Rounds. The Visiting Professorship may also include a journal club, case presentations or a presentation at the Department of Surgery Grand Rounds. All members of the Division of Urology attend these events.

**Second Opinion Conference (optional)** - Current urologic oncology cases are discussed on a weekly basis along with relevant radiological and pathological studies by a multi-specialty cancer care team.