A Student Guide to Urology









What is Urology?

Urology is the branch of surgery relating to the **management of** conditions affecting the urinary system, including the kidneys, ureters, bladder and urethra, and the male and female external genitalia. Urology is the most varied and diverse of all the surgical specialties, and involves both medical and surgical treatments.

Urology is the oldest true surgical specialty and surgeons working in this area are called either Urologists or Urological Surgeons. Conditions can be congenital, arise due to trauma, infection maliqnancy or as a consequence of the effect of age on the urinary tract. They represent a huge proportion of medical practice, with up to 10% of all consultations in general practice (GP) being urological in nature and up to 20% of all acute hospital surgical referrals.

What does a Urologist do?

Urological Surgeons deal with a wide range of conditions. Most patients can be managed on an elective basis but some need emergency management. For this reason, Urologists will spend part of their week 'on call', ready to deal with such emergencies. All surgeons have different elements within their job. This includes clinical and non clinical elements with time spent operating in theatre, consulting patients in outpatient clinics and performing ward rounds to care for emergency and pre and post- operative day case and inpatients.





The outpatient clinic is where patients discuss their Urological problems with doctors and specialist nurses. They may undergo diagnostic tests such as flow studies, flexible cystoscopy, urodynamics (urinary pressure flow studies) or prostate biopsies.

entry to core training (2 years, there are currently 31 Urology themed UK posts). Upon completion, there is further competitive entry into specialty training (5 years).

It is essential to gain experience in Urology, either as an undergraduate or during Foundation Years (FY1-2). This will afford you a flavour of the specialty and provide you with an opportunity to meet Urologists and get involved in projects and audits etc, all of which will enhance your chances of success.

How can I get involved?

If you are interested in Urology, BAUS suggests:

- Locally, get in touch with trainees and consultants in Urology. let them know you are keen to come and get experience, and they will to direct you in particular to local audits and projects.
- Build a relationship with someone supportive; each Medical School has its own "Medical School Liaison Representative" who will be able to offer you more advice and support. BAUS has the list available on their website: http://www.baus.org.uk/ EducationAndTraining/undergrad-syllabus/local-champions.htm.
- Arrange to do placements on a Urology firm. Record any operations you see or help with in a logbook, preferably the panspecialty e-logbook. BAUS has developed a procedure logbook for you to record other Urological procedures and skills that you may see and do.

BAUS is enthusiastic about you interested in Urology. They have created an undergraduate curriculum (available free on their website) to help students understand the level of knowledge and the skills needed in Urology.

BAUS also encourages abstract submission for their Annual Meeting (June) and the annual medical student essay competition (September), both great ways of learning about Urology and potentially attending the informative and exciting BAUS Conference.

Is there good work-life balance?

Many Urological Surgeons combine work and family life successfully in varying proportions depending upon the individual and their circumstances, aspirations and ambitions. Many Urologists pursue professional interests related to Urology, whether educational, managerial or national association work, and most will also continue to actively pursue hobbies and home life, striking the perfect balance.

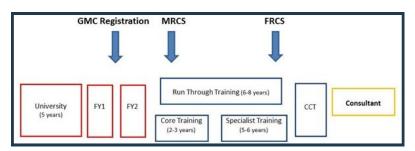
Urological emergencies, whilst broad and varied, are not overly common and as such the on call is not overly onerous. When they do occur, they range from acute kidney infections to urinary retention to trauma to the urinary tract.

Did you know?

Urology has the highest number of less than full time trainees of all the surgical specialties. It is therefore the ideal specialty for those wanting to combine an exciting surgical career with other commitments, such as family or being a carer. There are more female surgical trainees (currently 25%) and consultants in Urology than any other surgical specialty, providing excellent role models.

How do I get to be a Urologist?

Like all attractive careers, becoming a Urological surgeon is both competitive and challenging. It is an advantage to decide early on your career pathway and start planning. After completing a recognized medical degree, the postgraduate pathway includes progression through foundation training (2 years) followed by competitive



Complex patients are discussed at **departmental and multi- disciplinary team (MDT) meetings** to ensure that optimum and individualized care is given to such cases. MDT also allows decisions to be made with other allied health specialists including radiologists, oncologists, gynecologists and colorectal surgeons. **Administrative time** allows Urological Surgeons to review and act upon results of different patient investigations, write letters to GPs and patients, and deal with individual patient enquiries.



Teaching and training is an integral part of a Urologists work. This varies from discussing careers with medical students, delivering undergraduate and postgraduate education, supervising Urology trainees, and lifelong peer-to-peer education and training. Time may also be set

aside for those interested in basic sciences and clinical research.

A significant number of Urologists also become involved in **management and society representation**, which may be on a local, regional, national or even international stage, offering even greater variety and the potential to network with colleagues from other regions and specialties.

Daily routine...

The typical working day of a Urological Surgeon may include:

- <u>Ward round</u>— to review previous elective surgical patients and recent emergency admissions.
- <u>Theatre</u>—operating in Urology is very diverse as surgery can be small or complex and may include endoscopic, laparoscopic, open or robotic surgery.
- Outpatient clinic sessions—these involve seeing multiple patients and coordinating a management plan for them. Clinics may also have an interventional aspect e.g. flexible cystoscopy, urodynamics or TRUS.

What sub-specialties are there within Urology?

Most Urological Surgeons are involved in the management of the common Urology conditions, known as core, or general urology, but many will develop further sub-specialty, including the following areas:



Endourology – this deals with conditions via minimally-invasive key hole techniques using telescopes, known as endoscopes. Common operations include the management of urinary tract stones and small bladder tumours.

<u>Urological Oncology</u> – this is the management of any cancers affecting the urinary tract or external genitalia. The main types are prostate, bladder, kidney, testicular and penile cancer and a multidisciplinary team approach is an essential.

Functional Urology – this is the investigation and treatment of benign conditions of the lower urinary tract and female genital tracts including: BPE, bladder symptoms and urinary incontinence. It also includes the management of patients with neurological disorders which affect the urinary tract, such as spinal injury and multiple sclerosis.



Andrology— this involves the management of male sexual health and reproductive conditions e.g. erectile dysfunction, conditions of the penis and urethra, and male factor infertility.



Reconstructive Urology - is usually allied to Andrology, and is the branch of Urology focusing on repair and restoration of the lower urinary tract and in particular the urethra and the management of urethral stricture disease.

<u>Academic Urology</u> – this focuses on developing of high quality research into certain aspects of Urology and its treatment.

In addition, there are opportunities to develop an interest in **Paediatric Urology**, which although is a distinct speciality, is widely practised to a degree by adult Urologists. Historically **Renal transplantation** was often undertaken by Urological Surgeons, and whilst this again is now it's own speciality, there remains an element of overlap.

Why should I go into Urology?

Urology is such a varied specialty that it quite literally has something for everyone, whether your interest is in acute diagnostics, cutting edge technology, metabolism and endocrine, or the basic science of carcinogenesis, Urology will provide a fascinating lifelong career and unparalled job satisfaction. The degree of variety and flexibility within Urology makes it the ideal career choice for a wide number and type of individuals regardless of gender.

This variation is reflected not only in the operative arena but also within the diagnostic and outpatient setting, where the vast array of tests and conditions will ensure constant interest, learning and stimulation. There is a wide range of complexity enabling direct hands on learning from the earliest of stages for students, junior doctors and trainees, meaning practical exposure to the subject.





Did you know?

Urology is at the forefront of medical technology and innovation, having pioneered and adopted many of the early technological advances. Urology was the first specialty to adopt minimally invasive technology and is at the forefront within the field of robotics and minimally invasive surgery.

4