U R O L O G I C A L

T R A I N I N G

Produced February 2000
Amended January 2002

Urological Training

1. Overview of training

1.1. Basic Surgical Training (BST)

Surgical training commences during Basic Surgical Training (BST) during which the trainee is exposed to various aspects of surgery including Accident and Emergency, General Surgery, Orthopaedics and Trauma, and of course Urology. At the end of BST, the trainee will take MRCS.

1.2. Higher Surgical Training (HST)

This document needs to be read in conjunction with the document ***" A syllabus in Urology"***.
In Urology this lasts for six years, comprising five clinical years in training and one year in flexible training. In general, the first three years comprise training in "core urology" which is covered in greater detail later. The flexible year might have been spent previously in full-time research, but counting this time towards the flexible year is not compulsory and many trainees prefer to use it to develop a particular interest or visit units abroad. The final two years of training include exposure to more complex aspects of urology and would often include the trainee becoming exposed to a particular sub-specialist interest. The Joint Intercollegiate Examination (FRCS (Urol)) is taken after three years of clinical training (August 2000), but this is likely to be moved to four years of clinical training in the light of the agreed extension to urological training to six years.

It may be that in the future, trainees will need to be attached in years 4 and 5 to particular units if their training in a particular sub-specialist area can be recognised by the SAC.

2. Appointment to a Consultant Post

This requires the candidate to be on the Specialist Register of the General Medical Council (GMC). In order to do this a trainee in the UK will have to have obtained Certificate of Completion of Specialist Training (CCST). Overseas candidates can sometimes be appointed to the Specialist Register and further details can be obtained from the Intercollegiate Joint Committee on Higher Surgical Training (JCHST).

3. Organisation of training

Higher training and subsequent recognition by the GMC is under the aegis of the Specialist Training Authority (STA). The final CCST is awarded by STA. The authority is delegated to the JCHST and then to the relevant Specialist Advisory Committee (SAC).

4. The SAC

Who is on the SAC?

BAUS nominated
Mr G Williams – Chairman, Mr FJ Bramble, Mr D Fawcett, Mr K K Sethia, Mr P D Ramsden , Mr D M Wallace (Chairman of Inter-collegiate Examination Board), Mr K Baxby, Mr I Eardley
Royal Colleges Representatives
Mr NJ George, , Professor D Kirk
Society of Academic Urologists, UEAMS Representative and Trainee Representative
Professor J K Mellon, Mr P Whelan, Mr M Johnson
Invited member from The Royal College of Surgeons in Ireland
Mr J Thornhill

4.1. The Role of the SAC

The SAC is responsible and accountable to the Joint Committee on Higher Surgical Training (JCHST: Chairman Mr J Smith). The JCHST reports to the Inter-Collegiate Senate of Surgery and to STA.

The main role of the SAC is to ensure that we produce competent urologists to take up posts as Consultants within the NHS. At present we have the clear view that such a person should have a sound training in "core urology" and will have acquired some expertise in a special interest. They also should have skills, knowledge, attitudes and work practices that will allow them to develop in the coming years – as urology itself will develop.

4.2. Detailed roles of the SAC

Together with the Post-graduate Deans, the SAC jointly approves and appoints Programme Directors.

Every five years or so, the SAC inspects Regional Programmes of Training. These visits usually take place over 2 days and involve at least two visitors (sometimes more if visits are large or complex).

4.3. What does the SAC look for on visits of inspection

- The minimum size is a two-urologist unit
- The time-table would usually involve:
  Three sessions in theatre, two sessions in outpatients, other sessions (haematuria clinics, urodynamics, TRUS *etc*), one session for administration, X-ray meetings, pathology meetings *etc*, one session for personal research, one session for the formal regional teaching session
- The teaching session should involve all regional trainees and the time-table should be structured to cover the whole curriculum over a period two to three years
- A supportive environment in which trainees achieve progressive delegated training.
- Good supervision and time available in theatre for training.
- Twenty-four access to computer databases and core urology texts.

5. The Postgraduate Dean and the Programme Director

The local Regional Postgraduate Dean is the person directly responsible for the Educational Content of the post. They are responsible for looking after appointments, the annual Record of In-service Training Assessment (RITA) and together with the SAC appoint the Programme Director.

The trainee will largely have contact with the Programme Director who is responsible for allocation to particular training units within a rotation. They should organise (or delegate the organisation of) the weekly regional teaching programme, regular reviews of the trainees, the six-monthly in-service examination (usually the AUA, the Institute of Urology or the EBU MCQs). They should check that trainees have appropriate educational and practical training and have time off for educational activities.

After each attachment the Programme Director will organise completion of the JCHST yellow and green assessment forms (the one to assess the trainee, the other the trainer). The structure of these forms appears likely to change significantly in the near future.

6. Appointment to a Specialist Registrar Post (SpR)

6.1. Type I programme

Most UK trainees will apply for a type I training post and be appointed in open full competition by the appropriate committee. The trainee will be appointed for six years and will be allocated a National Training Number (NTN). EC nationals and overseas applicants with right of residence will also be allocated an NTN, though some more senior EC nationals can be allocated a Fixed Term Training Appointment (FTTA). Overseas nationals with no right of residence will be allocated a Visiting Training Number (VTN).

The trainee will be allocated an expected date of completion of training and should be registered by the Postgraduate Dean with the SAC.

6.2. LAT and LAS appointments

Short term locum appointments can be recognised for some training. Locum appointment for training (LAT) are appointed in open competition and can be recognised for a minimum of 3 months up to a maximum of one year. As long as the LAT appointment was registered with the SAC it might count for up to a maximum of one year of training if the trainee subsequently obtains a type I training post.

Short- term LAS appointments fill a gap for a few days to up to 3 months. They are not recognised for training and do not count towards CCST.

6.3. Fixed Term Training Appointments (FTTA)

Type 2 FTTA appointments are available to overseas applicants without rights of residence in the UK and in some circumstances to nationals with EC rights of residence. Candidates should be of similar standard to type I appointments. The

candidate should have completed the equivalent of BST and may have an MRCS. It does not lead to CCST, but candidates who are subsequently appointed to a type I programme can apply to have their time in FTTA posts counted towards CCST. On appointment a FTTA training number (FTA) is allocated.

7. Role of research

Training in critical analysis and research method is crucial. This can be achieved in a number of ways.

- Research experience during the flexible year
- Carrying out specific courses such as research methodology, MSc courses of the Diploma in Urology
- Carrying out a period of full time research

In the past this has often been achieved through a period of time in full time research carried out before HST. Many trainees continue to do this and often will want to work towards a higher degree (MD or PhD). It is a somewhat regrettable fact that a large number of trainees continue to do this largely for career reasons as there is apparent benefit when applying for SpR posts.

The SAC is very supportive of trainees who really want to do research. However, the trainee must ensure that full time research is properly structured.

7.1. Full time research

This should be carefully structured. There should be an experienced supervisor with a good track record, a proper research plan with clear aims, clear methodology and goals that are achievable. There should be appropriate basic science and clinical supervisors if laboratory research is being done. The trainee should aim to write up within a year of completion.

The SAC will agree to up to one year of retrospective recognition for time spent in full time research provided it can be shown to be productive (with an MD/PhD or a portfolio of peer-reviewed publications).

7.2. Academic Urology

The number of academic departments of urology continues to be small. Trainees who want to carry out training in academic urology should go and talk to one of the Urological Professors. There are a small number of academic training posts (Lecturer or First Assistant) that are approved for HST. Such posts are structured to allow a greater amount of time available for research and the university will expect results in terms of grants and papers. Such posts are challenging to carry out, but rewarding for the right person. It *may* be that the SAC will recommend a slightly longer period of training to take into account the extra time in research. This will be based on discussion between the Programme Director, the Academic Department, and the SAC.

7.3. Urological Training in More Detail

Training will consist of a mixture of types exposure including

- Clinical and technical training on the job
- In house educational activities (X-ray and pathological meetings)
- The weekly teaching programme
- Personal study and research
- Occasional attendance at external courses. All trainees should expect to go the annual meeting of BAUS (or if this is not possible to another large meeting such as the AUA or EAU), and the Urological Research Society. Attendance at one Basic Science Course is required. On site training in paediatric urology, renal transplantation, and spinal injuries is not found in every rotation and if this is not available the trainee must plan to go an appropriate external course.

8. Clinical Training

The quality of clinical hands-on training is paramount. The principle is one of progressive and more delegated, but supervised training.

Each post on the rotation should have a training profile. Up to now all posts have been recognised equally towards the 5 year programme. However, this may change in the near future. In the future posts will be recognised towards core training. Other posts will be approved for training in more complex urology as indicated below.

9. Current core curriculum

9.1. General Points

This will be carried out in the first three to four years of training, depending on progress.

- Pre and post-operative assessment of urological patients including the appropriate use of imaging, laboratory facilities and paramedical services.
- Endoscopic and open urological surgery and non-surgical therapies appropriate to urology.
- Emergency and elective urology including day case surgery.
- Management of urological services within a hospital and in the broader community.
- Practical management of specific problems

All clinical experience is valuable but trainees are expected to become particularly familiar with certain urological conditions and the fundamental clinical procedures and routine surgical operations involved in their management. These conditions constitute the “core curriculum” which consists of :

Expertise in:

- Urinary tract infection
- Lower urinary tract symptoms (LUTS) and bladder outflow obstruction
- Straightforward stones
- Straightforward urological neoplasia: superficial tumours of the bladder, advanced prostate cancer, kidney cancer and initial management of testis cancer
- Impotence and infertility
- Straightforward urinary incontinence and urodynamics

Theoretical knowledge and exposure to:

- Multi-disciplinary care of complex cases particularly:
    - Renal failure and transplantation
    - Major urological cancer work (cystectomy, radical prostatectomy, large RCC with IVC thrombus, testis cancer)
    - Paediatric urology
    - Neuro-urology and spinal injuries
    - Urinary diversion, undiversion and reconstruction
    - Stone disease
    - Female urology
    - Complex andrology

10. Training in complex urology (Years 5 to 6)

It is intended that clear targets will be set by the SAC to accompany the longer training. These will include the cases seen, operations performed and competencies assessed. The SAC (Appendix 1) has now defined these curricula, logbooks and assessment of competencies. In addition to consolidating expertise in general urology, it is intended that trainees will spend their final two years gaining expertise in one or more of the following areas:

All trainees will be expected to have a broad based knowledge of general urology. The trainee with a special interest would have taken a greater interest and therefore have a wider and deeper knowledge and understanding of his particular subject and would normally have written papers, presented research work and attended meetings related to his sphere of interest.

The would-be specialist will need to work with a urologist whose chief interest and predominant activity is within that sub-speciality. He would normally work in a tertiary referral unit, which would generally have a multi-disciplinary approach to the specialty.

There would generally be facilities for investigation and other clinical support service peculiar to that sub-specialty.

10.1. General Urology

The trainee wanting further exposure to general urology will carry out an attachment that has been approved for this purpose. Further exposure to the conditions outlined above will be acquired. The trainee will also want to gain exposure in more detail to one or more areas.

10.2. Urological cancer

This will involve gaining expertise in the care of complex cancer cases involving multi-disciplinary teams of urologists, radiologists, pathologists and oncologists. Practical expertise will be gained in cystectomy and radical prostatectomy. There will be some exposure to the care of patients with large renal cell carcinomas with IVC thrombus and the surgical management of testis cancer.

10.3. Urinary diversion, undiversion and reconstruction

The curriculum will include theoretical and practical aspects of urinary diversion, un-diversion, bladder reconstruction. Experience of more complex surgery including AUS placement, bladder neck reconstructive procedures and urethroplasty will be provided. Operations to correct ureteric injuries and fistulae will be included.

10.4. Stone disease and endourology

This will include expertise in basic procedures such as ureteroscopy plus operations such as PCNL, endo-luminal treatment of PUJ obstruction. More complex procedures such as laparoscopic operations will require a more prolonged attachment to specialised units carrying out larger numbers of cases.

10.5. Female Urology

This will include competence in basic procedures such as colposuspension and a good working knowledge of urodynamics. Other procedures included will be AUS placement, sling procedures and cystoplasty.

10.6. Renal failure and transplantation

This will involve attachments to a major transplantation unit. If the urologist is to actively carry out renal transplantation then a period of 18 months attachment will be required. There is a possibility that the SAC in Urology might be able to train a number of surgeons to help provide a service in renal transplantation. This would be done within the 6 year training programme. It would require some discussion with the British Transplantation Society and the SAC in General Surgery. However given the difficulties in recruitment of renal transplant surgeons from the ranks of general surgery, we would suggest that this is an option that is worth consideration by STA. We are able to identify 5 or 6 posts to provide such training – though this would require the allocation of extra NTNs.

10.7. Complex andrology

The procedures will include microscopic vasectomy reversal, epididymo-vasostomy and experience in modern infertility management (ICSI etc). Other penile procedures will be penile prostheses and phalloplasty.

10.8. Neuro-urology and spinal injuries

Experience will include attachments to spinal injury units and the general management of the spinal injured. Operative procedures will include cystoplasty, AUS placement and electro-ejaculation procedures.

10.9. Paediatric Urology

Trainees wanting to carry out general urology in the District General Hospital setting may want to gain 6 months exposure to paediatric urology so that they are confident in carrying scrotal and inguinal surgery in children above the ages of 2 years. Occasionally trainees will want to gain more detailed exposure so that they can undertake an interest in adolescent urology. Less frequently a trainee will want to become a full-time paediatric urologist. This will require discussion with the SAC in Urology and Paediatric Surgery. An early discussion with the Programme Director is vital.

11. Practical aspects of Training in Complex Urology

The units in which training in more complex urology will be carried out are currently being identified by Programme Directors. In each training programme there will be some units able to offer training in more complex aspects of urology. Some units will be able to offer training in several sub-specialty areas. Such units will have other trainees having general urological training. In general and sub-specialist training operative experience should be recorded as indicated on the attached record form. A "portfolio" of experience should be developed showing the general, clinical and practical experience that the trainee has developed during the course of training including the courses attended, the presentations given and the papers published.

12. Record Of Operative Experience And Assessment Of Competence

This record complements and does not replace the RCS Log Book that should be completed by the trainee and be reviewed and signed by the trainer each month. It does not duplicate information because of the component that addresses competence. The log book may be available in electronic form soon.

12.1. Trainee

On appointment indicate the extent of your experience of the listed operations with numbers. At the end of your attachment enter details of your experience. This must include numbers taken from your log book.

12.2. Trainer

On appointment review with the trainee where she/he is and where she/he expects to be at the end of the 6/12 months taking into account both your expectations (formative assessment).

At the end of six months review with the trainee her/his operative achievements and indicate on the record the level of competence reached for each procedure (with an 'x' in the appropriate column) based on your personal observation of the trainee's operative technique and general conduct of the operation (summative assessment).

13. Levels Of Competence

Level 1	Needs training to perform the task
Level 2	Needs supervision in performing the task
Level 3	Competent to perform the task unsupervised
Level 4	Competent to train others to perform the task

Both trainee and trainer should sign the record and each keeps a copy.

At the beginning and the end of the second six months repeat the formative and summative assessments.

Trainee ……. Year of Training ……..

	Completed by Trainee						Completed by Trainer							
	On appointment			At Completion			Competence level at 6 months				Competence level at 12 months			
	Seen	Assisted	Solo	Seen	Assisted	Solo	1	2	3	4	1	2	3	4
General Urology														
Flexible cystoscopy														
Rigid Cystoscopy														
Cystoscopy & biopsy & diathermy														
Cystoscopy & retrograde pyelogram														
Visual internal urethrotomy														
Transurethral resection of bladder tumour														
Transurethral incision of prostate														
Endoscopic insertion of JJ stent														
Endoscopic stone extraction														
Epididymal cysts														
Hydrocoele														
Varicocoele														
Vasectomy														
Circumcision														
Simple nephrectomy														

Radical nephrectomy														
Nephro-ureterectomy														
Ileal conduit urinary diversion														

	Completed by Trainee						Completed by Trainer							
	On appointment			At Completion			Competence level at 6 months				Competence level at 12 months			
	Seen	Assisted	Solo	Seen	Assisted	Solo	1	2	3	4	1	2	3	4
General Urology cntd.														
Orchidectomy														
TURP														
New technology for BPH														
Retropubic prostatectomy														
Pyeloplasty														
Colposuspension														
Repair of ureter														
Reimplantation of ureter														
Urodynamic study														
TRUS & biopsy														

Transrectal ultrasound														

xxxx = expect level 4 by 3 years *xxxx = expect level 2 by 3 years*

Date: Signed Trainee: Signed Trainer:

LEVELS OF COMPETENCE

Level 1 Needs training to perform the task

Level 2 Needs supervision in performing the task

Level 3 Competent to perform the task unsupervised

Level 4 Competent to train others to perform the task

Trainee ……. Year of Training ……..

	Completed by Trainee						Completed by Trainer							
	On appointment			At Completion			Competence level at 6 months				Competence level at 12 months			
	Seen	Assisted	Solo	Seen	Assisted	Solo	1	2	3	4	1	2	3	4
Urological Oncology														
Radical nephrectomy + caval surgery														
Conservative surgery for renal cancer														
Radical cystectomy														
orthotopic neo-bladder														
continent urinary diversion														
Anterior exenteration														
Radical prostatectomy														
Para-aortic lymph node dissection														
Amputation of the penis														
Block dissection of iliac lymph nodes														

Date: Signed Trainee: Signed Trainer:

LEVELS OF COMPETENCE

Level 1	Needs training to perform the task
Level 2	Needs supervision in performing the task
Level 3	Competent to perform the task unsupervised
Level 4	Competent to train others to perform the task

Trainee ……. Year of Training ……..

	Completed by Trainee						Completed by Trainer							
	On appointment			At Completion			Competence level at 6 months				Competence level at 12 months			
	Seen	Assisted	Solo	Seen	Assisted	Solo	1	2	3	4	1	2	3	4
Endourology														
Use of guidewires & stents														
Ureteroscopy and stone extraction														
Percutaneous nephrostomy														
Antegrade ureteric stenting														
PCNL														
Open stone surgery														
Laparoscopic urology														
Endoscopic treatment of PUJ obstruction														
ESWL														

Date: Signed Trainee: Signed Trainer:

LEVELS OF COMPETENCE

Level 1 Needs training to perform the task

Level 2	Needs supervision in performing the task
Level 3	Competent to perform the task unsupervised
Level 4	Competent to train others to perform the task

	Completed by Trainee						Completed by Trainer							
	On appointment			At Completion			Competence level at 6 months				Competence level at 12 months			
	Seen	Assisted	Solo	Seen	Assisted	Solo	1	2	3	4	1	2	3	4
Female Urology														
Colposuspension														
Vaginal bladder neck suspension														
Sling procedure														
AUS														
Augmentation cystoplasty														
Continent urinary diversion														

Date: Signed Trainee: Signed Trainer:

LEVELS OF COMPETENCE

Level 1 Needs training to perform the task

Level 2 Needs supervision in performing the task

Level 3	Competent to perform the task unsupervised
Level 4	Competent to train others to perform the task

Trainee ……. Year of Training ……..

	Completed by Trainee						Completed by Trainer							
	On appointment			At Completion			Competence level at 6 months				Competence level at 12 months			
	Seen	Assisted	Solo	Seen	Assisted	Solo	1	2	3	4	1	2	3	4
Reconstructive urology														
Ureteric reconstruction														
Ureteric replacement														
Transuretero-ureterostomy														
Psoas hitch/ Boari flap														
Closure of vesico-vaginal fistula														
Augmentation cystoplasty														
Substitution cystoplasty														
Continent diversion														
Anastomotic urethroplasty														
Surgery for hypospadias														
Patch urethroplasty														

Date: Signed Trainee: Signed Trainer:

LEVELS OF COMPETENCE

Level 1	Needs training to perform the task
Level 2	Needs supervision in performing the task
Level 3	Competent to perform the task unsupervised
Level 4	Competent to train others to perform the task

Trainee ……. Year of Training ……..

	Completed by Trainee						Completed by Trainer							
	On appointment			At Completion			Competence level at 6 months				Competence level at 12 months			
	Seen	Assisted	Solo	Seen	Assisted	Solo	1	2	3	4	1	2	3	4
Andrology														
Microscopic vasectomy reversal														
Epididymo-vasostomy														
Nesbit's procedure														
Implantation of semi-rigid penile prosthesis														
Implantation of inflatable penile prosthesis														
Epididymal sperm aspiration														
Electro-ejaculation														
Penile lengthening procedures														
Penile thickening procedures														
Micro-revascularisation of the penis														
Phalloplasty														

Date: Signed Trainee: Signed Trainer:

LEVELS OF COMPETENCE

Level 1 Needs training to perform the task

Level 2	Needs supervision in performing the task
Level 3	Competent to perform the task unsupervised
Level 4	Competent to train others to perform the task

Trainee ……. Year of Training ……..

	Completed by Trainee						Completed by Trainer							
	On appointment			At Completion			Competence level at 6 months				Competence level at 12 months			
	Seen	Assisted	Solo	Seen	Assisted	Solo	1	2	3	4	1	2	3	4
Transplantation														
Vascular access surgery														
CAPD														
Kidney retrieval														
Kidney transplantation														
Transplant nephrectomy														

Date: Signed Trainee: Signed Trainer:

LEVELS OF COMPETENCE

Level 1 Needs training to perform the task

Level 2 Needs supervision in performing the task

Level 3 Competent to perform the task unsupervised

Level 4 Competent to train others to perform the task