Preamble: General Objectives

The rotation at UBC Hospital provides training in tertiary-care adult urology. There is a particular emphasis on ambulatory care surgery and general urologic practice. Residents will gain insight and experience in uro-oncology, stone disease, urinary reconstruction and minimally invasive surgery.

UBC Hospital is also the site of the UBC Bladder Care Centre. There is an opportunity to attend clinics and participate in specialized studies such as videourodynamics.

This is the only rotation with responsibilities for in-patients, emergency room referrals and operative experience where the resident is the lone resident covering the Urology Service due to the subacute nature of the referrals and work being performed at this site. The resident is backed up by the Urology Service at VGH and the onsite Urology faculty who are in attendance daily on a rotating basis.

Typically, a senior level resident would be stationed at this site. The “rotation” at UBC is better described as a longitudinal experience. A resident will usually spend four to five blocks at UBC Hospital during the five year residency. Although an ITER will be issued at the end of each block, it is recognized that most residents will require three to four blocks in the junior and senior roles to amass ongoing competencies required for progressive achievement in the Program.

SPH/MSJ Goals and Objectives

This document refers to the RCPSC Objectives of Training in Urology (2009)
During these rotations it is expected that trainees will acquire the knowledge, skills and attitudes necessary to allow appropriate assessment, investigation and recognition of the need for tertiary referral of adult urological problems in the ambulatory, emergency, and inpatient peri/operative settings.

It should be recognized that much of the teaching during this rotation will occur during, or a result of, direct patient care. The resident will recognize that their own education is intricately linked to delivery of patient care and that, through service, their education will be optimized.

**Locations:**

UBC Hospital is a 332 bed tertiary referral hospital located on the UBC Campus and also includes the Purdy extended care facility and Detwiller psychiatric service facility. Due to its close proximity to the UBC academic campus, many translational research programs are housed adjacent to- or in, UBC Hospital including the Brain Research Center, The Center for Surgical Innovation, and the National Core for Neuroethics. Urology also houses the ambulatory Bladder Care Center, which is an integrated multidisciplinary diagnostic, treatment and research facility for bladder symptoms.

**Urology Competencies**

**Medical Expert:**

The resident will learn skills to enable them to perform consultations utilizing available elements from patient history, physical examination, imaging and lab/special testing and adjunctive history from other health professionals. The component skills include but are not limited to:

- Performing an appropriate focused history and physical exam of the Urologic patient
- Gather adjunctive data relevant to the presentation of the Urologic patient, including medical imaging and reports, lab data, and special test results and reports as well as consultation reports from other health providers.
- Synthesize gathered data and formulate differential diagnoses
- Plan further diagnostic strategies to refine the diagnosis as required with sensitivity to patient concerns, cost and a rationale use of medical testing
- Plan therapeutic strategies based on the Urologic diagnoses with sensitivity to patient concerns, and cost
- Counsel patient empathically and an evidence couched approach, respecting their cultural values and ethics
- Understand the ethical, legal and cultural ramifications of Urological diagnoses and their potential treatments
- Formulate a follow up strategy to appropriately assess the therapeutic plan’s effectiveness and revise as required
- In all aspects, deliver written and verbal communication to attending or associated faculty or health care providers which is logical, direct and informative.
- Formulate a plan for the safe and effective discharge of patients from clinic back to their referring physician or primary care provider.
- Actively contribute to continuous quality improvement of health care quality and safety

The resident will develop and demonstrate the technical skills required of a Urologist in the management of the Urological patient. Conditions to be encountered include but are not limited to:
- Congenital and developmental abnormalities
- Obstructive disease of the upper tract
- Obstructive disease of the lower tract
- Urinary calculous disease
- Urinary fistulae
- Urinary and genital infections
- Trauma
- Renovascular hypertension
- Renal transplantation
- Andrology
- Urological oncology
- Voiding disorders and neurourology
- Adrenal diseases
- Systemic diseases and other process affecting the urinary tract
- Disorders of male genitalia

Technical skills to develop and demonstrate include, but are not limited to:
- Laparoscopy
- Endoscopy
- Genital/Inguinal extirpative and reconstructive surgery
- Open abdominal and pelvic extirpative and reconstructive surgery
- Minimally invasive abdominal and pelvic surgery

The resident will develop and demonstrate knowledge of the mechanism of action and physiological effects of therapeutic technologies relevant to Urology including but not limited to:
- Electrosurgery
- Extracorporeal Shock Wave Lithotripsy
- Lasers
- Transurethral surgery
- Radiofrequency ablation
- Cryotherapy
- Botulinum toxin
- Neurostimulation

The resident will develop and demonstrate knowledge of how to appropriately use and interpret diagnostic testing in Urology, including but not limited to:

SPH/MSJ Goals and Objectives

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- Urinalysis
- Prostatic fluid examination
- Biochemical serum studies
- Retrograde urethrography, cystography and pyleography
- Antegrade imaging of the kidneys and pelvic vessels
- Loopography
- Voiding cystourethrography
- Ultrasonography
- Radioisotope studies
- CT scans
- MRI scans
- Angiography
- Urodynamic studies
- Phalldynamics
- Interpretation of diagnostic histopathology

**Communicator:**

The resident will develop and demonstrate skills Urologists use to effectively facilitate the doctor-patient and doctor-patient family relationship and the dynamic changes that occur before, during and after the medical encounter. These include but are not limited to:
- Recognizing communication skills to be fundamental to delivery good care
- Establishing trust, respect, honesty and empathy
- Respect patient confidentiality, privacy and autonomy
- Listen effectively
- Recognize and be sensitive to nonverbal cues
- Facilitate a structured clinical encounter effectively

The resident will further develop and demonstrate communication skills exemplified by:
- Delivering information in a logical, direct and informative manner that is patient centered and encourages discussion
- Communicate bad news to patients empathically
- Respect patient diversity including race, sexual orientation, gender, religion and culture
- Engage patients in shared decision making
- Understand and engage patients and their families in the informed consent process
- Address challenging communication issues effectively such as the angry, anxious, confused patient for example
- Generate and maintain clear, concise and informative documentation for recordkeeping and for communication with other health care providers
- Present oral reports to peers, supervisors, other faculty or associated consultants / health care professionals in a clear and concise manner
- Share health care information and plans with patients and their families
Collaborator:
The resident will develop and demonstrate skills Urologists use to work effectively within a health care team to achieve optimal patient care. These include but are not limited to:
- Understand and communicate the Urologists role to patients, and other health care providers
- Recognize and respect the diversity of roles, responsibilities and competencies of other professionals on the team
- Work with other team members to plan, provide and integrate care for patients
- Participate in interprofessional rounds / meetings
- Demonstrate a respectful attitude towards other colleagues
- Work with others to prevent and resolve conflict
- Demonstrate safe handover of care

Leader:
The resident will develop and demonstrate skills Urologists use to make decisions about allocating resources, and contributing to the effectiveness of the health care system. These include but are not limited to:
- Work collaboratively with others in the organization
- Participate in quality improvement initiatives
- Describe principles of health care financing including physician remuneration, budgeting and organizational funding
- Manage time and priorities appropriately to balance patient care, education and personal life
- Demonstrate knowledge of issues related to running an office including staffing, billing and maintaining patient records
- Utilize information technology appropriately
- Understand resource restrictions and allocate urologic resources in a rational and cost effective manner
- Understand triaging surgical patients on a waitlist
- Participate in meetings / rounds and provide leadership when appropriate
- Understand and begin to implement the science of quality improvement to delivery of patient care
- Analyze patient safety incidents to enhance systems of care
- Demonstrate leadership in professional practice

Advocate:
The resident will develop and demonstrate skills to influence and advance the health and well being of individual patients, communities and populations. These skills include but are not limited to:
- Identifying the health needs of individual, groups and populations of Urological patients
- Identify opportunities for health advocacy, health promotion and disease prevention
- Identify determinants of health of populations including barriers
- Identify vulnerable populations
- Describe an approach to health promotion on an individual, community, and population policy level
- Understand the dynamism that can occur between health advocacy and manager roles
- Understand the role of the Canadian urological association and other national, provincial or international groups in health advocacy in Urology

**Scholar:**

The resident will develop and demonstrate skills Urologists use to achieve a lifelong commitment to reflective learning as well as the creation, dissemination and translation of medical knowledge. These include, but are not limited to:
- Describing principles of maintenance of competence
- Describing a personal knowledge management system
- Participate in scholarly activities for the purpose of improving patient care (QA, lab work, case reports, clinical trials, etc)
- Access and integrate new medical evidence into practice
- Demonstrate principles of critical appraisal
- Deliver effective presentations to patients, peers and other health professionals in evidence based manner
- Ensure patient safety is maintained when learners are involved
- Teach students, residents, the public and other health care professionals

**Professional:**

The resident will develop and demonstrate skills Urologists demonstrate in the establishment of ethical practice, profession-led regulation, and high personal standards of behavior. These include but are not limited to:
- Exhibiting honesty, integrity, commitment, compassion, respect and altruism
- Demonstrate adherence to best practices
- Demonstrate meticulous documentation practices
- Recognize and manage ethical issues in practice
- Recognize and manage conflicts of interest in practice
- Maintain appropriate boundaries with patients and their families
- Participate in Canadian and international professional organizations in Urology
- Understand and fulfil the regulatory and legal obligations required of current practice
- Balance professional and personal life commitments appropriately
- Demonstrate a commitment to patient safety and quality improvement
- Demonstrate the ability to recognize and respond to societal expectations in health care

SPH/MSJ Goals and Objectives

This document refers to the RCPSC Objectives of Training in Urology (2009)
- Exhibit professional behaviours in the use of technology-enabled communication
- Demonstrate a commitment to physician health and well being to foster optimal patient care

**Procedural**

The resident may be exposed to and be expected to demonstrate graduated competency in the following procedures (Surgical Procedures List A):

- Cystoscopy, urethroscopy, ureteric catheterization, stent insertion and removal and retrograde pyelograms
- Urethral dilation and visual internal urethrotomy
- Transurethral biopsy of bladder and urethra
- TURP
- TURBT
- Transurethral management of ureterocele
- Manipulation of bladder calculi including lithopaxy
- Ureteroscopy and in-situ lithotripsy of calculus
- Endoscopic injection for VUR
- Suprapubic catheter insertion
- Percutaneous nephrolithotripsy
- Circumcision
- Suprapubic cystotomy
- Urethral meatotomy, meatoplasty
- Meatal repair for hypospadias
- Fulguration of venereal warts
- Biopsy of penile lesions
- Vasectomy
- Cavernosal shunting procedures for priapism
- Varicocele repair
- Pediatric indirect hernia repair
- Orchidopexy for inguinal testis
- Radical orchidectomy
- Repair of testicular torsion
- Correction female SUI
- Ureteroneocystostomy
- Repair of urinary fistulae
- Urinary diversion ; ileal conduit
- Radical cystectomy and anterior pelvic exenteration
- Procedures for ureteral and bladder trauma repair
- Pelvic lymphadenectomy
- Pyeloplasty for UPJO
- Nephrectomy (simple and radical, open and MIS)
- Partial nephrectomy for cancer
- Uretero-ureterostomy
- Partial penectomy
- Radical prostatectomy (open and MIS)
- Renal biopsy
- Nephrolithotomy and ureterolithotomoy
- Ureterolysis, ureteroplasty, ureterocalycostomy
- Cutaneous ureterostomy / pyelostomy
- Vesicostomy

The resident may be exposed to and will be expected to know how to do the following procedures (Surgical Procedures List B):

- TRUS
- Resection of PUV
- Endoscopic pyeloplasty
- ESWL
- Percutaneous nephrostomy

SPH/MSJ Goals and Objectives

This document refers to the RCPSC Objectives of Training in Urology (2009)
- Renal trauma repair
- Vasovasostomy
- Perineal urethrostomy
- Transureteroureterostomy
- Peyronie’s disease operations
- Total penectomy
- Urethrectomy
- Augmentation cystoplasty
- Drainage of retroperitoneal abscess
- Cadaveric and Living donor procurement
- Adrenalectomy (Open and MIS)
- Insertion of testicular prosthesis
- Insertion of AUS
- Simple retropubic prostatectomy
- RPLND
- Radical nephrectomy with caval thrombus below diaphragm
- Correction of mid and distal shaft hypospadias
- Procedures for male SUI
- MIS Pyeloplasty
- MIS orchiopexy/orchiectomy
- MIS partial nephrectomy

The resident will be able to describe the following procedures, and indications and perioperative complications thereof: (Surgical Procedures List C):

- TUR incision external sphincter
- Correction proximal hypo/epispadias
- Transplant nephrectomy
- Renal transplantation
- Nephrectomy with caval thrombus in suprahepatic and atrial thrombus
- Urethral reconstruction for anterior strictures and pelvic fracture distractions
- Epididymo-vasostomy with microscope
- Post chemotherapy RPLND
- Inguinal LND for penis cancer
- Continent urinary reservoir
- MIS varicocelectomy
- MIS living donor nephrectomy

SPH/MSJ Goals and Objectives

This document refers to the RCPSC Objectives of Training in Urology (2009)
**Teaching Method**

**Medical Expert:**

These competencies will be taught and assessed in the following ways:

1. Assignment to a high-quality clinical service. Attending urologists at UBCH will be knowledgeable of the rotation goals and objectives and will be highly motivated to ensure each resident has sufficient exposure to clinical material.
2. High volume of emergency surgical cases and emergency room consultations where residents will be the primary responders.
3. Careful review of resident documentation (dictated consults, OR reports and discharge summaries) to teach and evaluate communication and professional skills.
4. Real-time teaching and assessment of technical skills during each procedure.
5. Use of the OR report card – as requested by the resident.
6. Written ITER at the end of each block.
7. Face-to-face feedback (in real time) throughout the rotation and at the end of the block.

**Communicator:**

These competencies will be taught and evaluated in the following ways:

1. During direct patient care, the residents will have the opportunity to speak and assess patients in the presence of the attending urologists. Issues related to communication will be explicitly discussed and developed with the attending at an appropriate time.
2. During the surgical “time out” residents will be taught and evaluated regarding their knowledge of the case and their synthesis of patient concerns, clinical information and patient safety. Their ability to communicate in a manner that encourages shared decision-making will also be assessed.
3. Residents counselling and gathering of, and review of informed consent from surgical patients will be directly observed and assessed to be fed back to the resident face to face with attending staff.
4. Resident delivery of status updates, bad news, or general communication with patients and their families will be assessed by faculty in realtime and fed back to the residents face to face.
5. Residents will attend BCC clinics and urodynamics studies and work closely with specialized clinic nurses and faculty in lower urinary tract symptomatology, gathering patient histories, physical examination and interpreting these special tests under the supervision of subspecialty Urology faculty for direct feedback.
6. Nursing evaluation of the junior residents’ communication skills will be done at the end of each block. This will typically be done by the Nursing Leader in the OR and be based on the junior residents’ written and verbal skills during elective and emergency cases.
7. Respect patient privacy and confidentiality and be knowledgeable of the Vancouver Coastal Health Authority and UBC policy on patient confidentiality.
8. All written reports (consults, OR reports, discharge summaries) will be reviewed by the attendings and feedback given.
9. During scholarly presentations that may occur during the rotation (presentation of grand rounds, preparation for NWUS meeting or resident research day), residents will receive help or feedback on effective communication and presentation skills from the attending surgeons.

**Collaborator:**

These competencies will be taught and evaluated in the following ways:

1. Resident participation in general urology clinics of various faculty where attending Urologists will directly observe and assess how residents communicate the role of the Urologist in their care along with other health care professionals.
2. Resident participation in inpatient ward management and Emergency patient management where attending faculty will observe how residents interact with other health care professionals and allied health in the overall care of the patient.
3. Feedback from OR nursing will be obtained through a one45 on-line evaluation form – to evaluate the junior residents’ collaborative skills with anaesthesia and nursing in the OR.
4. During the surgical time-out, issues of collaboration will be discussed and the residents’ will receive feedback whenever they are given responsibility for the time out.
5. The residents will receive daily feedback from the attendings on issues of collaboration whenever the situation arises.
6. Direct observation of handover of care from one resident to another during periods of transition of care including: evening on-call, daytime on-call, daytime attending service, to another resident/fellow/faculty member, transfer of care to another service, transfer of care to another facility, discharge planning, discharge summaries, communication with primary care provider or other responsible health care provider regarding pending or past discharge of patient.

**Leader:**

These competencies will be taught and evaluated in the following ways:

1. Assignment to a high quality clinical service. The resident assigned to this site can lead the service in terms of directing inpatient care, discharge status, operative time-out and debriefing.
2. Participate in monthly Morbidity and Mortality rounds, presenting cases as appropriate and discussing key points, generating reports for Hospital/Health Authority administration.

**UBCH Goals and Objectives**

This document refers to the RCPSC Objectives of Training in Urology (2009)
3. Understand and utilize appropriate technology for interprofessional communication on a day to day basis with peers, faculty and other health care providers.
4. Participate in morning rounds, evening rounds, interdisciplinary rounds as a basis for gaining leadership insight and management skills.
5. Address complications or systems issues with a view towards formal failure-analysis with faculty, staff and adjunct personnel as required.

**Advocate:**

These competencies will be taught and evaluated in the following ways:

1. Identify the unique populations served by this hospital and Health Authority and the determinants and barriers to health while interacting with them during ER, inpatient and perioperative periods.
2. Identify where Special Authority requests may be made on behalf of patients.
3. Residents will work with transplant and hospital based social workers, occupational therapists, and physiotherapists to identify issues related to disposition and long term maintenance of Urologic health post discharge.
4. Residents at UBC are automatically enrolled in the CUA, and attendance and presentation when able at the annual conference and partaking in the various CUA sponsored educational and advocacy events will be noted.

**Scholar:**

These competencies will be taught and evaluated in the following ways:

1. Residents will participate in the weekly formal Urology Academic Half Day, and lead/participate on topics as assigned.
2. Residents will participate in weekly Urology Grand Rounds and lead/participate on topics as assigned.
3. Residents will seek research projects with faculty supervision and be directly assessed and mentored in their scientific methods, verbal and written communication skills and presentation skills of said research.
4. Residents will be assessed in their integration of contemporary best practices guidelines in Urology with day to day operations by faculty.
5. Residents will teach students, residents, the public and other health care professionals and be assessed by said groups through One45 assessment templates and ITERS.

**Professional:**

These competencies will be taught and evaluated in the following ways:

UBCH Goals and Objectives

This document refers to the RCPSC Objectives of Training in Urology (2009)
1. Residents will be observed in their interactions with other housestaff, their peer urology residents, other services and with attending faculty.
2. Residents’ written documentation in the form of progress notes, orders, clinic notes, and discharge notes will be reviewed with attending staff and feedback given face to face.
3. Residents will be observed in their interactions with patients and their families within the context of managing boundaries, and exhibiting ethical, courteous, compassionate respectful care.
4. Residents will be observed with regards to management of their own and other colleagues health and welfare.