## In the Name of God

# Islamic Republic of Iran Ministry of Health and Medical Education Deputy for Education

# Urology

## **Degree: Specialty**

## **Introduction:**

Urology has achieved dramatic progress not only in Western countries, but also in Islamic Republic of Iran in recent years. Rarely kidney and ureteral stones are managed with open surgery in our academic centers. We are currently prominent in the region in the field of kidney transplantation. We have already begun and are expanding laparoscopic training, which is used as a preferred approach in a number of diseases, such as adrenalectomy. Our specialists are actively involved in the management of infertility (ART) in all major cities. Currently, surgeries, such as robotic laparoscopy, microsurgery, three-dimensional surgery, the use of stem cells, selective chemotherapy against malignant cells, and treatment of urology diseases using immunological methods are included in programs of the world's scientific societies, toward which we are advancing.

### **Definition and Duration of Training Program:**

Urology is a branch of clinical and surgical sciences dealing with preventive measures, diagnosis, management, care and rehabilitation of medical and surgical diseases of genitourinary tract and includes the following areas: diseases of the adrenal glands, kidney, ureter, bladder, urethra, and prostate, urinary incontinence in both sexes, male infertility, impotence, developmental disorders, and congenital diseases of these organs, such as ambiguous genitalia, as well as the surgery of urologic retroperitoneal and inguinal canal diseases.

This course duration is four years.

According to the 35<sup>th</sup> session of the Council of Graduate Medical Education dated September 16, 1991, departments which are able to provide a 5-year training are permitted to implement this 5-year-course with the agreement of the Head of Department.

#### Aims:

In the next 10 years, this course in the country will be among top countries in the region in terms of educational standards, research production, and providing health services to people.

2- To train specialists who are scientifically updated, competent, responsive, and sensitive to the health of individuals and society in the field of urology and interdisciplinary fellowships.

## **Expected Competencies at the End of the Program**

# General Competencies\* 🗩

**Procedural skills (Diagnostic-therapeutic procedures)** Cystoscopy Trans ureteral lithotripsy (TUL) Percutaneous nephrostomy Percutaneous cystostomy Sperm retrieval for IVF Testicular biopsy Retrograde ureteral catheterization Extracorporeal shock wave lithotripsy Urodynamic procedures **Prostate Biopsy** Urinary catheterization Ureteroscopy Ureteral catheterization, including insertion and removal of the stent, retrograde pyelography Urethral dilatation Transurethral bladder biopsy Transurethral Resection of the Prostate Transurethral resection of bladder tumor Percutaneous drainage of kidney cyst Percutaneous nephrostomy Circumcision Bladder neck incisions Meatotomy – meatoplasty Meatal advancement and glanuloplasty incorporated (MAGPI) Distal hypospadias repair Cavernosal shunt placement for the treatment of priapism Diagnostic laparoscopy Endoscopic Posterior urethral valves destruction Endoscopic injection to treat reflux and urinary incontinence Drainage of the renal, bladder, and retroperitoneal abscesses Urinary incontinence surgery Repair of penile trauma Penile curvature correction Hydrocele Epididymal cysts Simple orchidectomy Varicocele Herniotomy Herniorraphy Orchidopexy Testicular torsion repair Pyeloplasty for narrowing the pelvic junction Kidney Cyst Surgery Simple, radical, and partial nephrectomies Nephroureterectomy Open surgeries of kidney and ureteral stones Urethroplasty Urethrectomy Urethrostomy Reflux correction

Bladder augmentation Urethral fistula repair Radical cystectomy Surgical procedures for kidney, Ureteral, and bladder damages Pelvic lymphadenectomy Bladder diverticulectomy Types of prostatectomy Retroperitoneal lymphadenectomy Ultrasound of the kidneys, bladder and testicles Transrectal ultrasonography for the prostate biopsy and urologic diseases Surgeries of retroperitoneal tumors associated with urological diseases Vasovasostomy and vasoepididymostomy Kidney transplant Adrenalectomy Correction of proximal hypospadias Vaginal or abdominal surgeries associated with the main urinary tract in women **Epispadias** repair Urethrotomy under direct vision Placement of genitourinary tract prostheses Radical prostatectomy \*Preferably trained in a general surgery ward.

# Educational Strategies, Methods and Techniques\*

## **Student assessment:**

#### **Assessment methods:**

Students will be assessed by the following methods:

1. Written, Oral, OSCE, DOPSS, 360-degree feedback, Computer interaction tests

2. Portfolio assessment, including: the results of tests performed, Logbook assessment, article assessment, certificates of lectures and the curricula implemented, Acknowledgements, notifications

## **Periods of Assessment:**

Every six months Final exam

Ethical Considerations\*

\*Note: The related document(s) can be found at http://hcmep.behdasht.gov.ir/.

# The overall Structure of the Course

Educational ward, unit, or area	Syllabus- Measures	Duration (month)
Clinic	Outpatient visit- selecting, filing cases, and hospitalizing patients, performing outpatient procedures, educating the lower-level classes, following up the expert consultations given to the patients, responding to expert consultations requested, and other measures in accordance with the ward schedule	Three days a week during the course
In-patient ward	Visiting hospitalized patients, stabilizing patients admitted in the ward, performing diagnostic- therapeutic procedures at the bedside, Preparing patients for surgeries, patient care, educating the lower-level classes, and other measures in accordance with the ward schedule	Every day during the course
Operating room	Participating in surgeries by observation, assisting, or performing independently, in accordance with the ward schedule	Three days a week during the course
Procedure room	Participating in procedures by observation, assisting, or performing independently, in accordance with the ward schedule	During the course, case study
General Surgery ward	Familiarity with the basics of surgery and tissue repair, familiarity with the operating room and surgical instruments, familiarity with patient care before, during, and after general surgeries and vascular surgery	2 months
Pediatric Surgery ward/ pediatric urology ward	Participation in the surgeries of children's genitourinary tract	1 month
Gynecology ward	Familiarity with and participation in surgeries, management of pelvic floor disorders in women and the female pelvic anatomy	1 month
Pathology	Familiarity with the microscopic view of normal and abnormal tissues of the urinary tract	During the course
Radiology	Familiarity with the analysis of imaging associated with genitourinary system Familiarity with the principles of ultrasound	During the course
Elective ward	According to the ward selected	1 month

Seyed-Hassan Emami-Razavi MD Secretariat of the Council for Graduate Medical Education Seyed Mansour Razavi MD Secretary of the Supreme Council for Medical Sciences Planning

Larijan MD For Education th and Mydical Education Bagher Deputy Ministry