Curriculum for

Post-Doctoral Fellowship

in

 PAEDIATRIC UROLOGY

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**SRI AUROBINDO UNIVERSITY**

SAIMS HOSPITAL CAMPUS, Indore Ujjain, State Highway, Bhawrasla, Indore, Madhya Pradesh 453555

**Sri Aurobindo University ,Indore**

**Post Doctoral Fellowship (Paediatric Urology)**

**Eligibility Criteria**

The candidate must have passed M.Ch/Dip NB urology or Pediatric surgery from a recognized university

**Selection Procedure**

An advertisement will appear on the website. On the basis of interview and examination the candidates will be short listed for the fellowship. The candidate will be selected on the basis of CV, suitability on the basis of need and eagerness to pursue the course and finally the performance of the candidate.

**Duration Of Training**

One Year

**Post Doctoral Fellowship (Pediatric Urology)**

**Syllabus for PDF in Pediatric Urology**

The following topics shall be covered during the training period both in theory and practical.

**(I)Theoretical syllabus (Lectures,Seminars,Symposia)**

* **A. Embryology and anatomy of genitourinary system**
* **B. Renal physiology with special reference to fetal and neonatal stages**
* **C. Morphological investigations**
	+ Prenatal diagnosis of Fetal renal abnormalities
	+ Postnatal Sonographic renal screening
	+ Contrast studies in pediatric urology
	+ Computerized tomography and magnetic resonance imaging of the kidneys in children
* **D. Functional Investigations**
	+ Radioisotope imaging of the kidneys and urinary tract
	+ Urodynamic studies of the lower urinary tract
	+ **E. Fluid and electrolyte management in children**
* **F. Neonatal disorders/emergencies**
* **G. Upper Urinary tract**
	+ Renal cystic diseases
	+ Fusion anomalies & Renal Duplex
	+ Ureteropelvic junction obstruction
	+ Renal and upper ureteric stone
	+ Renal tumours in childhood
	+ **H. Lower urinary tract**
	+ Phimosis, Paraphimosis
	+ Penile and scrotal anomalies
	+ Hypospadias
	+ Undescended testis, testicular tumours and varicocele in childhood
	+ Urinary tract infection
	+ Vesicoureteric reflux
	+ Megaureter
	+ Neurogenic bladder
	+ Dysfunctional elimination syndrome
	+ Disorder of Sex differentiation
	+ Renal ,Ureteric and bladder stone
	+ Bladder diverticulum
* **I. Trauma [Renal and lower urinary tract]**
* **J. Reconstructive procedures**
	+ **Upper tract**
		- i. Pyeloplasty
		- ii. Ureteroureterostomy/ureteropyelostomy
	+ **Lower tract**
		- i. Hypospadias repair
		- ii. Orchiopaxy
		- iii. Ureteric reimplant
		- iv. Urethroplasty
		- v. Genitoplasty [Male and Female]
		- vi. Augmentation cystoplasty
		- vii. Exstrophy epispadias repair
		- viii. Incontinence procedures
		- ix. Cloacal anomalies
		- x. Urinary diversion [Vesicostomy, ureterostomy , Continent and incontinent]
* **K. Endourology of lower tract**
* **L. Endourology of upper tract**
* **M. Laparoscopy in pediatric urology**

**(II ) SURGICAL TRAINING**

The candidate should gain the ability to do all index cases independently.the candidate will be exposed to state of art facilities and both open and endoscopic procedures.

**A. Open Procedures**

* Pyeloplasty including infants
* Ureteric reimplant with or without tapering of ureter
* Introduction of Teneckhoff catheters (both open and laparoscopy)

**(B) Day Care Procedures**

* Circumcision
* Hernia, hydrocele
* Orchidopexy
* Testis and appendix of testis torsion
* Ovarian torsion

**(C) Cystoscopy And Related Procedures**

* Cystoscopy
* RGP
* Stent removal
* Insertion of DJ stent under fluoroscopy
* PUV fulguration (including newborns)
* Cold knife stricturotomy
* Deflux injection
* Botox injection
* Ureterocele deroofing

**(D) laparoscopy**

* Diagnostic
* Orchidopexy
* Nephrectomy
* Biopsy
* Insertion of peritoneal dialysis catheter

 **(E) Reconstructive Urology**

* Mitrofannof and Monti procedures (appendix, ureter, small bowel)
* Augmentation cystoplasty (Ileum, colon)
* Preparation and creating of pouches (like Indiana Pouch)
* Exstrophy repairs (including bladder closure in newborns)
* Bladder neck procedures (like YDL bladder neck plasty)
* Use of slings to elevate the bladder neck
* Epispadias repair
* Ureterosigmoidostomy

 **(F) Hypospadias**

* TIP
* Onlay
* Tubed pedicle flaps
* Staged procedures
* Buccal mucosa (harvesting and onlay)

**(G) ONCOLOGY**

* Wilms' tumor
* Neuroblastoma
* Testicular and Ovarian tumors
* Rhabdomyosarcoma – biopsy

**(H) Stone management**

* Uretero-renoscopy and lithotripsy
* PCN – access to the kidney
* ESWL in children

**(III) OPD Training**

The candidate should screen patients in a Pediatric Urology OPD on a daily basis and formulate a plan of management for every case that should be discussed with the consultant

**(IV) Urodynamics And Uroflow**

The candidate should be in charge of doing all urodynamic and uroflow studies on children presenting to the department. The results of the study should be discussed with the consultant who can then assess the grasp of the candidate

(**V) Contrast Studies In An X-Ray Suite**

The candidate should be able to perform contrast studies in children in the radiology department under fluoroscopy – like MCU, AUG etc

The candidate should actively participate in all interventional radiology procedures in children.

**(VI) Nuclear Medicine Studies**

The candidate should become thoroughly familiar with all aspects of Nuclear Medicine Studies like DTPA, DMSA, DRC etc. A short period of attachment to the department may be needed for this.

**(VII) Renal Ultrasound**

The candidate should have a working knowledge of how to do a renal ultrasound. If feasible the candidate can be attached to a ped ultrasonologist and can become thoroughly familiar with the performance of a renal ultrasound.

**(VIII) Antenatal Ultrasound And Interventions**

The candidate should be encouraged to have a working knowledge of antenatal ultrasound and participate if possible in antenatal interventional procedures

**(IX) Dialysis And Transplantation**

The candidate should have a working knowledge of peritoneal and hemodialysis in children. A short period of attachment to a pediatric nephrology department may be needed.

The candidate should have a working knowledge of renal transplantation in children including scrubbing up and assisting in transplants.

**(X) Presentations & Publications**

The candidate should be encouraged to actively present in all hospital, departmental and city meets. This will encourage clear thinking, ability to answer questions and also encourage study.

The candidate should present at least one paper in a NATIONAL/INTERNATIONAL conference

The candidate should publish at least one paper in a INDEXED journal

**(XI) Retrospective Outcome Analysis**

The candidate should be encouraged to carry out a retrospective study of departmental material and do a critical analysis of outcome

**(Xii) Clinical Problem Study**

Instead of a forma thesis the candidate can be asked to formulate a clinical question and carry out one prospective study in an attempt to answer the question.

(**XIV) GRAND ROUNDS**

The candidate can be taken on a round of all the clinical cases once every week and can be quizzed at the bedside like a clinical exam. This will enable a problem based approach to become familiar

(**XVI) Journal Club & Topic Discussion**

Weekly journal clubs (at least one publication should be thoroughly analyzed every week)

One topic can be discussed every week so that in one year the entire subject can be covered

**(XVII) Log Book Maintenance**

The candidate should maintain a logbook of all procedures assisted and done independently. Follow-up notes of adverse events are mandatory.

**(XVIII) Rotations In Other Departments**

Rotations in other departments (like Ped Nephrology / Nuclear Medicine / Transplantation) can be an internal arrangement. However the candidate should not spend more than one month away from the parent department during the training year. This one month period can be spread throughout the training year so that the candidate is not absent for a prolonged period of time from the parent department. Another way of getting the candidate to get maximum exposure to all subspecialty areas is to get the relevant departments to call the candidate if there is a suitable case. In this way time away from the parental department is at a minimum.

**Text Books Recommended**

* Campbell Walsh text book of urology , 4th Volume, 9 Ed.
* Text book of Pediatric urology, Bellman, King and Kramer
* Pediatric urology, by John P Gearhart, Richard C Rink

**Journals Recommended**

* journal of Pediatric urology [European Society of Pediatric Urology]
* Pediatrics [American Academy of Pediatricians]
* Pediatrics Surgery International
* Journal of Urology [American Urological Association]
* BJU International
* Pediatric Nephrology
* Pediatric transplantation
* Journal of Pediatric surgery
* Journal of Indian Association of Pediatric Surgeons
* African Journal of Pediatric Surgery
* Indian Journal of Urology
* Urology Annals
* Progress in Pediatric Urology

**Dissertation/Projects/Publications**

Within 3 months of joining a fellow will be given two clinical or basic sciences projects, which he/she will complete and submit 3 months before the completion of his tenure. The experts in the particular field will examine his dissertation/projects.

**Assessment**

There will be an in-house assessment /examination of the candidate one months before the completion of his tenure. This will be mandatory to pass this internal assessment test and only then the certificate of training shall be issued to the candidate.