Guidelines

for

Competency Based Training Programme

In Pediatric Endocrinology (PDCC)

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**SRI AUROBINDO UNIVERSITY**

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

* Course Director-

Dr Ankita Maheshwari (7046370787)   
(MD, PDF, ESPE fellow, ISPAD Fellow)

Experience- 2 + 3 years

**Proposed Faculty-**

* Dr Ankita Maheshwari (7046370787)   
  (MD, PDF, ESPE fellow, ISPAD Fellow)

Experience- 2 + 3 years

* Dr. Jitendra Chouhan (9424144358

MD, DM

Experience-

Intake Capacity - 1

Duration – 1/1.6 (one and half years)

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**INTRODUCTION**

The specialty of Pediatric endocrinology has been developed as a Sub-Specialization of Pediatrics and is concerned with the care of pediatric and adolescent patients with growth disorders, diabetes, thyroid disorders, adrenal disorders, disorders of calcium & bone metabolism, pubertal problems.

**PROGRAMME GOAL**

* To train the fellows to be able to meet and respond to the changing healthcare needs and expectations of the society.
* To develop pediatric endocrinologists who possess knowledge, skills and attitudes that will ensure that they are competent to practice endocrinology safely and effectively.

**PROGRAMME OBJECTIVES**

The educational and training process aims to produce Pediatric endocrinologists who:

* Can address all aspects of healthcare needs of patients and their families.
* Maintain highest standards appropriate in their professional field.
* Are aware of current thinking about ethical and legal issues.
* Are Able to acts as safe independent practitioners whilst recognizing the limitation of their own expertise and are able to recognize their obligation to seek assistance of colleagues where appropriate.
* Are aware of the procedures and able to take appropriate action, when things go wrong, both in their own practice and in that of others.
* Will be honest and objective when assessing the performance of those they have supervised and trained.
* Can take advantage of information technology to enhance all aspects of patient care.
* Can develop management plans for the “whole patient” and maintain knowledge in other areas of medicine which impinge on the specialty of Pediatric Endocrinology.
* Understand that effective communication between them and their patients can lead to more effective treatment and care.
* Apply appropriate knowledge and skill in the diagnosis and management of patients.
* Establish a differential diagnosis for patients presenting with medical problems by the appropriate use of the clinical history, examination and investigations.
* Are competent to perform the core investigations and procedures required in their specialties.
* Develop clinical practice which is based on an analysis of relevant clinical trials and have an understanding of their research methodologies.
* Are able to apply the knowledge of biological and behavioral sciences in clinical practice.
* Are able to identify and take responsibility for their own educational needs and attainment of these needs.
* Have developed the skills of an effective teacher.

**ELIGIBILITY CRITERIA FOR ADMISSIONS TO THE PROGRAMME**

PDCC Pediatric Endocrinology Course:

Any medical graduate with DNB/ MD Pediatrics qualification,who has qualified the Entrance Examination(written test and interview) conducted by SRI AUROBINDO UNIVERSITY and fulfill the eligibility criteria for admission to PDCC

Duration of Course: 1 Year

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**TEACHING AND TRAINING ACTIVITIES**

The fundamental components of the teaching programme should include:

* Case presentation & discussion- once a week
* Seminar – Once a week
* Faculty lecture teaching- once a month
* Clinical Audit-Once a Month
* A poster and/ or an oral presentation at least once during their training period in a recognized conference.
* Research paper during tenure (original paper/review article/case series )

The rounds should include bedside sessions, file rounds & documentation of case history and examination, progress notes, round discussions, investigations and management plan.

The training program would focus on knowledge, skills and attitudes (behavior), all essential components of education. It is being divided into theoretical, clinical and practical in all aspects of the delivery of the rehabilitative care, including methodology of research and teaching.

**Theoretical:** The theoretical knowledge would be imparted to the candidates through discussions, journal clubs, symposia and seminars. The students are exposed to recent advances through discussions in journal clubs. These are considered necessary in view of an inadequate exposure to the subject in the undergraduate curriculum.

**Symposia:** Trainees would be required to present a minimum of 10 topics based on the curriculum during their tenure. A free discussion would be encouraged in these symposia. The topics of the symposia would be given to the trainees with the dates for presentation.

**Clinical:** The trainee would be attached to the concerned faculty member to be able to pick up methods of history taking, examination, prescription writing and management in rehabilitation practice.

**Bedside:** The trainee would work up cases, learn management of cases by discussion with faculty of the department.

**Journal Clubs:** This would be a weekly academic exercise.The candidate is expected to summarize and discuss the scientific article critically. The faculty member will suggest the article and moderate the discussion, with participation by other faculty members and resident doctors.

**Research:** The student would carry out the research project in accordance with SRI AUROBINDO UNIVERSITY guidelines. He/ she would also be given exposure to partake in the research projects going on in the departments to learn their planning, methodology and execution so as to learn various aspects of research.

**Training Rotations:**

Specialty training shall comprise of rotations in:

* Clinical endocrinology- 10 months
* Laboratory endocrinology – 2 weeks
* Radiology posting- 2 weeks
* Pediatric surgery & Urology- 2 weeks
* Posting in Diet Department- 2 weeks
* Posting in paediatric Neurology/Genetics (2 weeks)

**Diseases and presentations**

**Growth Disorders**

* Know the normal growth physiology
* Growth chart plotting and assessment in relation to growth disorders
* Know about various causes of short and tall stature
* Recognize features in the presentation which suggest serious pathology
* Know work-up and management of growth disorders
* Become familiar with stimulation & suppression tests with respect to growth disorders
* Know to recognize and manage cases of short stature & tall stature
* Be familiar with all aspects of growth hormone therapy
* Be able to counsel the parents about various management aspects

**Thyroid Disorders**

* Know the detailed anatomy, embryology and functions of thyroid gland
* Be familiar with the importance of newborn screening of thyroid disorders
* Be able to recognize hypothyroidism and able to investigate and manage thyroid disorders
* Know the details about imaging modalities for thyroid disorders
* Be able to manage and follow patients with hypothyroidism & hyperthyroidism

**Diabetes**

* Be able to understand the basics of pancreas anatomy and function
* Be able to diagnose and understand the severity of diabetic ketoacidosis
* Know about insulin therapy with different regimes
* Be able to give diabetes education to families
* Be familiar with complications of diabetes and regularly follow-up patients with diabetes
* Be familiar with newer therapies (insulin pump, CGMS) in diabetes management

**Calcium & bone metabolic disorders**

* Know the presenting features of calcium disorders, rickets, osteogenesis imperfecta, collagen disorders
* Be familiar with potential associated abnormalities
* Know about investigations and management plan
* Know about the novel therapies for osteoporosis and related disorders
* Know about prognostication of these disorders

**Pubertal disorders**

* Be familiar with the normal physiology of puberty
* Know and recognize precocious puberty
* Be able to perform stimulation tests in cases of precocious puberty
* Be able to manage precocious puberty cases and counsel the relatives about therapy and prognosis
* Be able to investigate for etiology of delayed puberty
* Know about Hormone replacement therapy

**Adrenal disorders**

* Know about physiology of adrenal glands and the pathology related to them
* Understand the potentially life threatening nature of these disorders
* Know the approach to adrenal disorders with management
* Be able to work in liason with Pediatric surgery/urology department for management of various adrenal disorders

**Disorders of sexual development(DSD)**

* Know the anatomy & embryology of gonads and sexual differenciation
* Assess the severity of the condition and the social emergency in cases of atypical genitalia
* Institute appropriate emergency treatment in cases of congenital adrenal hyperplasia
* Be able to investigate DSD in a proper manner
* Understand the concept of multi-disciplinary management in DSD and work in liason with pediatric surgeon/ urologist, child psychiatrist/ psychologist, geneticist
* Know the importance of empathy & counselling in cases of DSD

**Other areas in which knowledge is to be acquired:**

* Biostatistics, Research Methodology and Clinical Epidemiology

Ethics

* Medico legal aspects relevant to the discipline
* Health Policy issues as may be applicable to the discipline

**Competencies**

Residents of this training program will be equipped to function effectively within the current and emerging professional, medical and social contexts. At the completion of the training program in Pediatric Endocrinology, as defined by this curriculum, it is expected that the pediatric endocrinologist will have developed the clinical skills and have acquired the theoretical knowledge for competent pediatric endocrinology practice.

**LOG BOOK**

A candidate shall maintain a log book of cases ,academic activities, stimulation tests performed during the training period, certified by the concerned teacher / Head of the department.

This log book shall be made available to the board of examiners for their perusal at the time of the final examination.

The log book should show evidence that the before mentioned subjects were covered (with dates and the name of teacher(s) The candidate will maintain the record of all academic activities undertaken by him/her in log book .

Personal profile of the candidate

Educational qualification/Professional data

Record of case histories

Procedures learnt

Record of case Demonstration/Presentations

Every candidate, at the time of practical examination, will be required to produce performance record (log book) containing details of the work done by him/her during the entire period of training as per requirements of the log book. It should be duly certified by the supervisor as work done by the candidate and countersigned by the administrative Head of the Institution.

In the absence of production of log book, the result will not be declared.

**Leave Rules**

PDCC Trainees are entitled to leave during the course of PDCC training as per the Leave Rules prescribed by SRI AUROBINDO UNIVERSITY

**EXAMINATION**

The scheme includes:-

The summative assessment of competence will be done in the form of Exit Examination in a two-stage examination comprising the theory and practical part.

Theory Examination:

The Theory examination comprises of 2 papers with maximum marks of 100.

Practical Examination:

Maximum marks : 300

Comprises of Clinical Examination and viva

The candidate has to score a minimum of 50% marks in aggregate i.e. 250 out of total 500 marks (Theory & Practical) with at least 50% marks in theory examination to qualify in the Fellowship Exit Exam.

The Theory and Practical of Fellowship Exit Examination shall be conducted at the same examination centre of the concerned specialty.

Declaration of Fellowship Exit Results

Fellowship Exit Examination is a qualifying examination.

Results of Fellowship Exit Examination (theory & practical) are declared as PASS/FAIL.