

## In the Name of God

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

## Endocrinology and Metabolism Degree: Subspecialty

### Program Description

Recent years have witnessed remarkable improvements in the field of endocrinology and metabolism across the world. These improvements inevitably call for a review of the relevant curricula. Careful assessment of the needs, shortcomings, strengths and weaknesses, getting inspiration from research and training curricula of world's top universities, interviewing students, and benefiting from the experiences of the field's esteemed professors have all been greatly valuable in the path towards a comprehensive curriculum that takes national priorities and social needs into consideration. This curriculum has been developed and made available to universities following discussions and ideations in committee meetings.

### Definition and Duration of the Training Program:

Endocrinology and metabolism is a subspecialty of internal medicine, and is about diseases of the endocrine glands including hypothalamus, pituitary gland, thyroid gland, pancreas, adrenal glands, ovaries and testes, and parathyroid gland, as well as with the disorders of calcium and phosphorous metabolism, bone metabolism, and lipid metabolism.

Duration is 2 years.

### Aims:

1-To train capable, efficient, committed sub specialists who would make every effort to prevent, diagnose, manage, and follow up on the diseases of endocrine glands and hormonal and metabolic disorders of all individuals within the society, as well as help to enhance and enrich the knowledge and research in the field.

2-In next 10 years, we expect to be offering standards and quality of education, science production, and services in endocrinology and metabolism that are superior to other countries in the region.

### Expected Competencies at the End of the Program

#### General Competencies\*

#### Procedural Skills (Diagnostic and Therapeutic Procedures)

- 1 Thyroid FNA
- 2 Ultrasound-guided FNA of thyroid
- 3 Inhibitory and stimulatory tests
- 4 Osmometry
- 5 Insulin injection
- 6 Measuring the ketone content of blood and urine
- 7 Using an insulin pump
- 8 Using a glucometer
- 9 Constant monitoring of blood glucose level using CGMs

#### Educational Strategies, Methods and Techniques\*

## **Student Assessment:**

### **Assessment Methods**

The trainers monitor how students provide care and treatment for the patients, the students' academic progress, and their conforming to the principles of medical ethics when interacting with patients and colleague, and fill in relevant assessment forms every six months. Furthermore, meetings are held every six months where trainers and students assess the progress on the curriculum, and trainers discuss and provide feedback to the students regarding their clinical performance and progress. The following assessment methods are generally applied:

1. Written Multiple Choice Questions (MCQ) examination
2. Objective Structured Clinical Examination (OSCE)
3. Case Based Discussion (CBD) assessment
4. Oral examination

### **Periods of Assessment**

The students will be assessed at the end of the program through a written multiple choice examination and an OSCE oral exam. There are also written MCQ exams every three months for two years.


### **Ethical Considerations\***

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

## General structure of the training

| Ward, unit, or education setting                   | Contents – Measures   | Duration (Months) |
|--|---|-------------------|
| Adult endocrinology and metabolism clinic and ward | Visiting and managing outpatients and inpatients, hospitalizing patients, following up patients, attending training programs, medical consultations and on-call hours according to the ward schedule, making progress with thesis, doing procedures | 19                |
| Pediatric endocrinology ward and clinic            | See above   | 1                 |
| Endocrine pathology ward                           | Endocrine pathology training  | 1                 |
| Endocrinology and genetics laboratory              | Endocrine pathology training  | 1                 |
| Endocrine pathology training                       |   | 1                 |
| Nuclear medicine ward                              |   | 1                 |

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