

# **ADULT ENDOCRINOLOGY & METABOLISM**

## **SUBSPECIALTY PROGRAM TRAINING OBJECTIVES**

### **GOALS:**

On completion of training, the graduate physician will be able to function effectively and ethically as a consultant in endocrinology and metabolism, integrating all of the CanMEDS roles.

Residents must:

- Possess a sound understanding of endocrine and metabolic physiology and pathophysiology.
- Demonstrate clinical knowledge and skills pertinent to diagnosis and management of endocrine and metabolic disorders.
- Demonstrate effective consultancy skills.
- Be able to incorporate attitudes relating to gender, cultural and ethnic perspectives in clinical practice as well as research methodology and analysis.
- Fulfill the specific training objectives as outlined.

### **Specific Objectives**

#### **Medical Expert/Clinical Decision Maker**

On completion of the training program the physician will be able to:

1. Obtain, interpret, and apply relevant clinical knowledge to the diagnosis and management of patients with endocrine disorders including:
  - Type 1 & 2 diabetes mellitus
    - acute and chronic care
    - prevention, identification, and management of diabetic complications
    - counselling/promotion of self management skills
    - management of diabetes in pregnancy
  - Thyroid disorders
    - hyper and hypothyroidism/autoimmune thyroid disease
    - thyroid nodules
    - thyroid carcinoma
    - proficiency in thyroid biopsy/interpretation of isotope studies
  - Adrenal disorders including endocrine hypertension
  - Hypoglycaemia/Metabolic disorders
  - Lipid disorders
  - Hypothalamic & pituitary disease
    - functioning and non-functioning pituitary adenoma
    - hypopituitarism
  - Metabolic bone disease and disorders of calcium homeostasis
  - Reproductive disorders

- Oligo/amenorrhea
- hirsutism
- infertility
- gynecomastia
- hypogonadism
- impotence
- contraception

- Fluid and electrolyte disturbances related to endocrine dysfunction
  - Hereditary endocrinopathies
  - Disorders of growth
  - Abnormalities of sexual determination and differentiation
  - Endocrine disorders in pregnancy
  - Nutrition as it applies to endocrine disorders
2. Demonstrate diagnostic and technical skills for effective and ethical patient centred care, including the ability to:
- Obtain an accurate, concise and appropriate medical history, including relevant psychosocial issues
  - Perform a relevant physical examination
  - Accurately interpret laboratory data including basal and stimulated hormonal assays
  - Accurately interpret radiologic and ultrasound imaging in the diagnosis of endocrine disorders
  - Perform fine needle aspiration biopsy of the thyroid
  - Seek, when appropriate consultation from other health professionals
3. Demonstrate effective consultancy skills in provision of concise and timely assessments and recommendations to other health care providers with respect to patient care, education of patient or provider, and legal opinions

**Communicator:**

On completion of training, the trainee will be able to:

- Obtain and synthesize relevant information from, patients, their families and other health professionals.
- Accurately convey relevant information and explanations to patients, families and colleagues and develop a shared plan of care
- Develop therapeutic relationships with patients and families, characterized by trust and rapport.
- Take into consideration the patient's age, gender, socioeconomic status, cultural and religious beliefs as well as the patient's health belief system in counselling and treatment.
- Present effective verbal reports of clinical encounters and care plans
- Provide clear concise written communication in consultation letters, progress notes, and orders.

**Collaborator:**

On completion of training, the trainee will:

- Be able to work effectively within an interprofessional health team.
- Be able to consult effectively with other physicians and health care professionals.
- Have a recognition and understanding of the roles and skills of allied health care professionals
- Be able to effectively negotiate with other health care professionals to prevent or resolve interpersonal conflict

**Manager:**

On completion of training, the trainee will:

- Demonstrate appropriate use of finite health care resources in diagnosis and management of patients with endocrine problems while providing optimal care.
- Be able to participate in activities that contribute to efficient and effective health care within organizations (quality assurance, etc.).

**Scholar:**

On completion of training, the trainee will:

- Be able to develop, implement and document a continuing personal education strategy.
- Possess appropriate critical appraisal skills
- Be able to facilitate learning of patients, students, residents and other health professionals.
- Demonstrate an understanding of the principles of research and the basic biochemical and statistical skills required for research in endocrinology and metabolism.

**Health Advocate:**

On completion of training, the trainee will be able to identify the important determinants of health in the individual patient and in the community and respond with provision of education and advocacy where appropriate.

**Health Professional:**

On completion of training the trainee will:

- Demonstrate a commitment to personal excellence and to delivery of high quality health care
- Be reliable and empathetic with high professional ethical standards
- Be able to undertake appropriate and accurate self assessment
- Demonstrate high professional ethical standards in both clinical and research settings