

Medical Specialists

The postgraduate training is known as *residency training*.

Examples of residency programs are:

- **Anesthesiology:** Study of how to administer agents capable of bringing about loss of sensation and consciousness.
- **Cardiology:** the branch of medicine dealing with the heart and its diseases.
- **Dentistry:** the branch of medicine dealing with the anatomy and development and diseases of the teeth
- **Dermatology:** Study of the skin and its diseases. Diagnosis and treatment of skin disorders.
- **Emergency medicine:** Care of patients that requires sudden and immediate action.
- **Endocrinology:** the branch of medicine dealing with the endocrine glands and their secretions.
- **Endodontics:** the branch of dentistry dealing with diseases of the dental pulp.
- **Family practice:** Primary care of all members of the family on a continuing basis.
- **Gastroenterology:** the branch of medicine that studies the gastrointestinal tract and its diseases.
- **Gerontology:** the scientific study of aging and the elderly
- **Hematology:** the branch of medicine that deals with diseases of the blood
- **Immunology:** the branch of medical science that studies the body's immune system.

- **Internal medicine:** Branch of medicine specializing in the diagnosis of disorders and treatment with drugs. Diagnosis and treatment of usually complex, nonsurgical disorders in adults.
- **Microbiology:** the branch of biology that studies microorganisms and their effects on humans.
- **Neurology:** the branch of medicine that deals with the nervous system.
- **Oncology:** the study and treatment of tumors.
- **Ophthalmology:** Study of the eye; the diagnosis and treatment of eye disorders.
- **Orthodontics:** the branch of dentistry dealing with the prevention or correction of irregularities of the teeth.
- **Orthopedics:** a medical science concerned with the spine and joints.
- **Otolaryngology:** the medical specialty that deals with diseases of the ear, nose and throat
- **Pathology:** Study of disease. Diagnosis of the cause and nature of disease.
- **Pediatrics:** Branch of medicine specializing in the treatment of children. Diagnosis and treatment of children's disorders
- **Pharmaceutics:** the art and science of preparing and dispensing drugs and medicines.
- **Pharmacokinetics:** the study of the action of drugs in the body: method and rate of excretion; duration of effect; etc.
- **Pharmacology:** the science or study of drugs: their preparation and properties and uses and effects.
- **Psychiatry:** Treatment (IATR/O-) of disorders of the mind (PSYCH/O). Diagnosis and treatment of disorders of the mind.
- **Radiology:** Science of using x-rays in the diagnosis of disease. Diagnosis using x-ray studies including ultrasound and magnetic resonance imaging (MRI)

- **Surgery:** Branch of medicine that treats disease by manual (hand) or operative methods. Treatment by manual (SURG- means hand) or operative methods

A physician may then choose to specialize further by doing *fellowship training*. Fellowship programs (lasting 2 to 5 years) train doctors in *clinical (patient care) and research (laboratory) skills*.

For example, an internist (specialist in internal medicine) may choose fellowship training in internal medicine specialties such as neurology, nephrology, endocrinology, and oncology.

A surgeon interested in further specialization may do fellowship training in thoracic surgery, neurosurgery, or plastic surgery.

On completion of training and examinations, the doctor is then recognized as a specialist in that area of medical practice.

- ❖ **Allergist:** Medical doctor specializing in identifying and treating abnormal sensitivity to substances such as pollen, dust, foods, and drugs. Treatment of hypersensitivity reactions.
- ❖ **Anesthesiologist:** Medical doctor specializing in administering agents capable of bringing about loss of sensation and consciousness. Administration of agents to prevent pain and unpleasant awareness during surgical and other procedures.
- ❖ **Cardiologist:** Physician specializing in the study of the heart and heart disease. Treatment of heart disease
- ❖ **Cardiovascular surgeon:** Specialist in operating on the heart and blood vessels. Surgery on the heart and blood vessels
- ❖ **Colorectal surgeon:** Physician specializing in operating on the colon and rectum. Surgery on the colon and rectum
- ❖ **Dermatologist:** Physician specializing in the skin and its diseases. Treatment of skin disorders

- ❖ **Emergency practitioner:** Immediate evaluation and treatment of acute injury and illness in a hospital setting
- ❖ **Endocrinologist:** Specialist in the study of endocrine glands and their disorders. Treatment of endocrine gland disorders
- ❖ **Family practitioner:** Medical doctor responsible for primary care and treatment of patients on a continuing basis. Primary care and treatment for families on a continuing basis
- ❖ **Gastroenterologist:** Specialist in the treatment of stomach and intestinal disorders. Treatment of stomach and intestinal disorders
- ❖ **Geriatrician:** Specialist in the treatment of diseases of old age. Treatment of diseases of old age
- ❖ **Gynecologist:** Specialist in the medical and surgical treatment of female disorders. Surgery and treatment for diseases of the female reproductive system
- ❖ **Hematologist:** Specialist in blood and blood disorders. Treatment of blood disorders
- ❖ **Hospitalist:** A physician whose primary focus is hospital medicine. This includes patient care, teaching, and research related to hospital care. General medical care of hospitalized patients
- ❖ **Infectious disease specialist:** Physician who treats disorders caused and spread by microorganisms such as bacteria. Treatment of diseases caused by microorganisms (bacteria, viruses, fungi, others)
- ❖ **Internist:** Comprehensive care for adults in an office or a hospital setting
- ❖ **Nephrologist:** Specialist in the diagnosis and treatment of kidney diseases. Treatment of kidney diseases
- ❖ **Neurologist:** Specialist in the diagnosis and treatment of nervous disorders. Treatment of nerve disorders

- ❖ **Neurosurgeon:** Physician who operates on the organs of the nervous system (brain, spinal cord, and nerves). Surgery on the brain, spinal cord, and nerves
- ❖ **Obstetrician:** Specialist in the delivery of a baby and care of the mother during pregnancy and labor. Treatment of pregnant women; delivery of babies
- ❖ **Oncologist:** Physician specializing in the study and treatment of tumors. Diagnosis and medical treatment of malignant and benign tumors
- ❖ **Ophthalmologist:** Specialist in the study of the eye and the treatment of eye disorders. Surgical and medical treatment of eye disorders
- ❖ **Orthopedist:** Specialist in the surgical correction of musculoskeletal disorders. This physician was originally concerned with straightening (ORTH/O) bones in the legs of children (PED/O) with deformities. Surgical treatment of bone, muscle, and joint conditions
- ❖ **Otolaryngologist:** Specialist in the treatment of diseases of the ear, nose, and throat. Surgical treatment of ear, nose, and throat disorders
- ❖ **Pathologist:** Specialist in the study of disease using microscopic examination of tissues and cells and autopsy examination. Diagnosis of disease by analysis of cells
- ❖ **Pediatrician:** Specialist in the treatment of childhood diseases. Treatment of diseases of children
- ❖ **Physiatrist:** Treatment to restore function after illness; physical medicine and rehabilitation specialist.
- ❖ **Psychiatrist:** Specialist in the treatment of the mind and mental disorders. Treatment of mental disorders
- ❖ **Pulmonologist:** Treatment of lung diseases
- ❖ **Radiologist:** Physician trained in the use of x-rays (such as computed tomography and also including ultrasound) to diagnose illness.

Examination of x-ray images to determine a diagnosis; interpretation of ultrasound, MRI, and nuclear medicine studies

- ❖ **Radiation oncologist:** Physician trained in the treatment of disease (cancer) with high-energy x-rays or particles. Treatment of disease with high-energy radiation
- ❖ **Rheumatologist:** Specialist in the treatment of diseases of connective tissues, especially the joints. RHEUMAT/O- comes from the Greek rheuma, meaning “that which flows, as a stream or a river.” Inflammatory disorders of joints are often marked by a collection of fluid in joint spaces. Treatment of systemic diseases affecting joints and muscles.
- ❖ **Thoracic surgeon:** Physician who operates on organs in the chest. Surgery on chest organs
- ❖ **Urologist:** Specialist in operating on the urinary tract in males and females and on the reproductive tract in males. Surgery on the urinary tract and for treatment of male reproductive disorders

Dental specialists

- ❖ **Periodontist:** Gums (PERI- means surrounding)
- ❖ **Endodontist:** Root canal therapy (the root canal is the inner part of a tooth containing blood vessels and nerves)
- ❖ **Pedodontist:** Children (PED/O means child)
- ❖ **Prosthodontist:** Replacement of missing teeth with artificial appliances (PROSTH/O = artificial replacement)

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