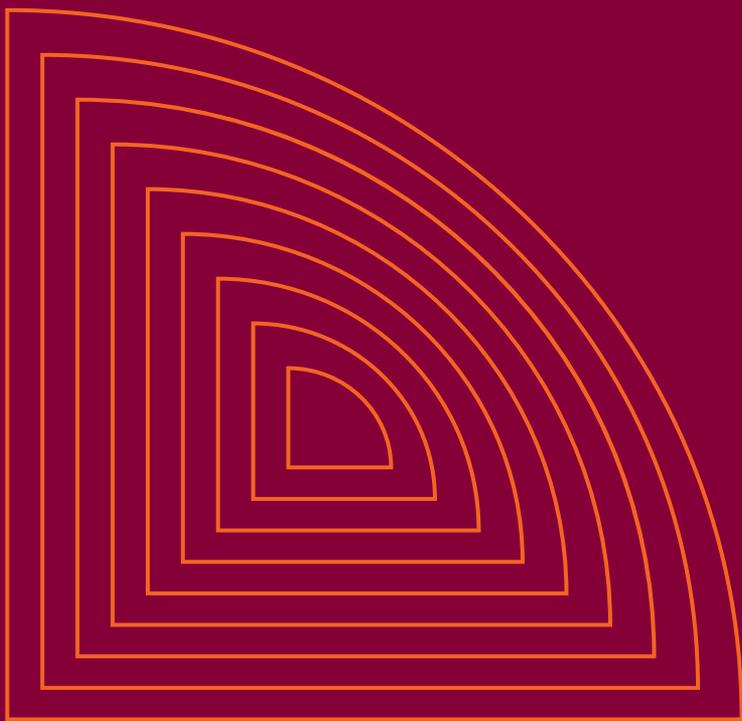


# ABMS GUIDE TO MEDICAL SPECIALTIES



American Board  
of Medical Specialties

*Higher standards. Better care.®*

## ABMS GUIDE TO MEDICAL SPECIALTIES



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Chicago, IL 60654 | (312) 436-2600

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This booklet offers information about American Board of Medical Specialties (ABMS), the process for the Board Certification of physicians and for their continuous professional development through the ABMS Program for Maintenance of Certification (ABMS MOC®). It includes descriptions of each specialty and subspecialty where certification is offered by an ABMS Member Board.

Visit [CertificationMatters.org](http://CertificationMatters.org) to check a physician's Board Certification status and participation in an ABMS Member Board MOC program.

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**HIGHER STANDARDS.**

**BETTER CARE.**

**TRUSTED SOURCE.**

ABMS' role in the medical community is to be a leader and influencer in quality improvement and the continuous professional development of physicians through assessment of their knowledge and skills. We also work with organizations across the continuum of health care to advance activities with existing initiatives such as meaningful use, performance improvement and patient safety, operational efficiency, commitment to care, and practice quality.

## ABOUT ABMS

ABMS works in collaboration with 24 medical specialty boards, also known as ABMS Member Boards, to maintain the standards for specialty certification. Our focus is to improve the quality of health care to patients, their families, and the communities served by supporting the continuing professional development of medical and surgical specialists. We achieve our mission by using professional standards as a framework for helping board certified specialists fulfil their potential as providers of quality care.

Board certification standards originated a century ago by a visionary group of physicians with an innovative idea to establish a national system of requirements for the training and professional development of specialists. This vision led to the creation of medical specialty boards to certify a specialist's knowledge and skills; the development of educational and practice benchmarks to help specialists improve care; and in 1933, the formation of ABMS to guide the process.

The ABMS Member Boards were founded by their respective specialties to assess and certify specialists who demonstrate the clinical judgment, skills, and attitudes essential for the delivery of excellent patient care. Each board represents a distinct and well defined field of medical practice that is based on major concepts in medical science and supported by distinct and accredited training programs. Each board sets the certification requirements for its specialty; determines how performance against those standards will be assessed; and makes tools and services available to support specialists' engagement in continuous professional development and performance improvement.

ABMS works with its Associate Members and other professional organizations and agencies, to elevate the standards for certification and to encourage participation in continuous professional development activities for enhancing the quality of care and improving the health of communities across the nation.

ABMS works with its Member Boards and Associate Members to improve the quality of graduate medical education, the standards of medical practice, and the specialist certification process.

## ABMS MEMBER BOARDS & YEAR APPROVED

- 1933 American Board of Dermatology  
American Board of Obstetrics and Gynecology  
American Board of Ophthalmology  
American Board of Otolaryngology
- 1935 American Board of Orthopaedic Surgery  
American Board of Pediatrics  
American Board of Psychiatry and Neurology  
American Board of Radiology  
American Board of Urology
- 1936 American Board of Internal Medicine  
American Board of Pathology
- 1937 American Board of Surgery
- 1940 American Board of Neurological Surgery
- 1941 American Board of Anesthesiology  
American Board of Plastic Surgery
- 1947 American Board of Physical Medicine and Rehabilitation
- 1949 American Board of Colon and Rectal Surgery  
American Board of Preventive Medicine
- 1969 American Board of Family Medicine
- 1971 American Board of Allergy and Immunology  
American Board of Nuclear Medicine  
American Board of Thoracic Surgery
- 1979 American Board of Emergency Medicine
- 1991 American Board of Medical Genetics and Genomics

## ASSOCIATE MEMBERS OF ABMS

- Accreditation Council for Continuing Medical Education (ACCME)** Evaluates and accredits institutions and organizations offering Continuing Medical Education (CME) in the United States. [accme.org](http://accme.org)
- Accreditation Council for Graduate Medical Education (ACGME)** Evaluates and accredits post-MD medical residency programs in the United States. [acgme.org](http://acgme.org)
- American Hospital Association (AHA)** National membership organization representing members' perspectives and needs in national health policy development, legislative and regulatory debates, and judicial matters. [aha.org](http://aha.org)
- American Medical Association (AMA)** National membership organization uniting physicians in the United States to focus on professional and public health issues. [ama-assn.org](http://ama-assn.org)
- Association of American Medical Colleges (AAMC)** National membership organization for enhancing the effectiveness of academic medicine. [aamc.org](http://aamc.org)
- Council of Medical Specialty Societies (CMSS)** National membership organization providing an independent forum for discussion by medical specialists on issues of national interest and mutual concern. [cmss.org](http://cmss.org)
- Educational Commission for Foreign Medical Graduates (ECFMG)** Organization that evaluates whether international medical graduates (IMGs) are ready to enter United States graduate medical programs. and offers a variety of other programs for IMGs and the entities worldwide that educate, train, register/license, and employ them. [ecfmg.org](http://ecfmg.org)
- Federation of State Medical Boards (FSMB)** Policy-focused organization promoting best practices in medical regulation and encouraging uniformity in how states license and discipline physicians. It collaborates with NBME to provide the United States Medical Licensing Examination (USMLE). [fsmb.org](http://fsmb.org)
- National Board of Medical Examiners (NBME)** Assessment organization and co-sponsor of the USMLE which is accepted by medical licensing authorities as the standard by which to judge candidates for medical licensure. [nbme.org](http://nbme.org)

## OVERVIEW OF CERTIFICATION

The Board Certification program conducted by the ABMS boards is recognized by patients and the health care industry as the highest standard for physician accountability. Our standards emphasize ongoing assessment and learning that is aligned with other professional development expectations and requirements within health care.

### Education Prior to Certification

- 3 to 7 years of medical residency training in an ACGME accredited program

- Medical degree from a qualified medical school (MD, DO)

### State Licensure

- Physicians meet requirements and pass an exam by the state(s) in which they wish to practice
- State medical license must be unrestricted and kept current throughout the physician's career

### Initial Board Certification

- Occurs soon after residency training
- Requires passing an exam of medical knowledge, clinical knowledge, and diagnostic skills created and administered by an ABMS board

### Subspecialty Board Certification

- Requires initial certification from an ABMS board
- Involves additional training or completion of a fellowship program and passing an exam given by the board

### Maintaining Certification

- Engages specialists in continuous, assessment and improvement activities
- Reflects the competency framework of developmental outcomes (knowledge, skills, attitudes, performance) and ABMS standards for certification
- Measures the ABMS-ACGME core competencies
  - Practice-based learning and improvement
  - Patient care and procedural skills
  - Systems-based practice
  - Medical knowledge
  - Interpersonal and communication skills
  - Professionalism

## INITIAL CERTIFICATION

The ABMS Member Boards' certification programs are rooted in the professional and educational standards set by ABMS and the boards for medical specialty certification and practice. The program involves two basic phases of assessment within a continuous process: initial certification and maintaining certification.

Initial certification occurs soon after completion of residency training and is the beginning of a specialist's personal commitment to professional excellence. Each ABMS board has identified what candidates must accomplish in order to be eligible for certification. Generally, this involves:

- finishing four years of premedical education in a college or university;
- earning a medical degree (MD, DO or other credential approved by the ABMS Member Board) from a qualified medical school;
- completing three to five years of full-time experience in a residency training program accredited by the Accreditation Council for Graduate Medical Education (ACGME); and
- obtaining an unrestricted medical license to practice medicine in the United States or Canada.

Candidates for certification must then pass an exam created and administered by their specialty's board. These exams are developed by Board Certified specialists and others who are subject experts in the specific area of medicine. Exams are developed against learning requirements which are extensively tested and refined over time. This is done to assure that the exam is a thorough, relevant, and fair assessment of a specialist's medical knowledge, clinical judgment, and diagnostic skills. Candidates who have passed the exam and completed all other requirements are considered certified as a specialist and a diplomate of their specialty board.

A similar eligibility process is followed for certified specialists seeking subspecialty certification. Candidates must be certified by their specialty board, complete additional training during or after residency, and successfully complete assessments of knowledge and clinical judgment in their subspecialty discipline.

## MAINTAINING CERTIFICATION

ABMS Member Boards support physicians' transition from training to practice through ABMS MOC. It provides physicians a mechanism to maintain their certification through engagement in continuous, specialty-specific assessment and improvement activities.

The activities in ABMS MOC are based on the competency framework, defined by ACGME and ABMS. The competencies are aligned with the principles of the ABMS standards for certification and represent the developmental outcomes (knowledge, skills, attitudes, and performance) that physicians demonstrate throughout their career. They address performance expectations related to the various settings and challenges physicians encounter in practice.

Subject experts at the ABMS boards and related societies actively seek or develop tools and make available learning opportunities to support the MOC requirements. These can include clinical databases and registries, peer evaluations, and practice audits. Physicians complete the activities according to a schedule set by their specialty board.

## THE COMPETENCY FRAMEWORK

Professionalism	Carrying out professional responsibilities safely, ethically, and compassionately.
Patient care and procedural skills	Providing compassionate, appropriate, and effective patient care.
Medical knowledge	Demonstrating medical knowledge and its application to patient care.
Practice-based learning and improvement	Improving medical practice by investigating and evaluating patient care practices and appraising and assimilating scientific evidence.
Interpersonal and communication skills	Facilitating effective information exchange and collaboration with patients, their families, and health professionals.
Systems-based practice	Calling on other system resources to provide optimal patient care.

## DESCRIPTIONS OF THE SPECIALTIES AND SUBSPECIALTIES OFFERED BY THE ABMS MEMBER BOARDS

This section provides a description of each specialty and subspecialty. It is organized alphabetically according to the broad areas of specialty certification overseen by an ABMS Member Board.

## ABMS MEMBER BOARD SPECIALTY AND SUBSPECIALTY CERTIFICATES

For the most current list, please visit [abms.org](http://abms.org).

### Allergy and Immunology †

#### Anesthesiology

##### Subspecialties

Critical Care Medicine  
Hospice and Palliative Medicine  
Pain Medicine  
Pediatric Anesthesiology  
Sleep Medicine

### Colon and Rectal Surgery †

#### Dermatology

##### Subspecialties

Dermatopathology  
Pediatric Dermatology

#### Emergency Medicine

##### Subspecialties

Anesthesiology Critical Care Medicine  
Emergency Medical Services  
Hospice and Palliative Medicine  
Internal Medicine-Critical Care Medicine  
Medical Toxicology  
Pain Medicine  
Pediatric Emergency Medicine  
Sports Medicine  
Undersea and Hyperbaric Medicine

#### Family Medicine

##### Subspecialties

Adolescent Medicine  
Geriatric Medicine  
Hospice and Palliative Medicine  
Pain Medicine  
Sleep Medicine  
Sports Medicine

#### Internal Medicine

Adolescent Medicine  
Adult Congenital Heart Disease  
Advanced Heart Failure and Transplant Cardiology  
Cardiovascular Disease  
Clinical Cardiac Electrophysiology  
Critical Care Medicine  
Endocrinology, Diabetes and Metabolism  
Gastroenterology  
Geriatric Medicine  
Hematology  
Hospice and Palliative Medicine  
Infectious Disease  
Interventional Cardiology  
Medical Oncology  
Nephrology  
Pulmonary Disease  
Rheumatology  
Sleep Medicine  
Sports Medicine  
Transplant Hepatology

#### Medical Genetics and Genomics

##### Primary Specialty Certificates\*

Clinical Biochemical Genetics  
Clinical Cytogenetics and Genomics  
Clinical Genetics and Genomics (MD)  
Clinical Molecular Genetics and Genomics

##### Subspecialty

Medical Biochemical Genetics  
Molecular Genetic Pathology

## Neurological Surgery †

## Nuclear Medicine †

## Obstetrics and Gynecology

### Subspecialties

Critical Care Medicine  
Female Pelvic Medicine and Reconstructive Surgery  
Gynecologic Oncology  
Hospice and Palliative Medicine  
Maternal and Fetal Medicine  
Reproductive Endocrinology/Infertility

## Ophthalmology†

## Orthopaedic Surgery

### Subspecialties

Orthopaedic Sports Medicine  
Surgery of the Hand

## Otolaryngology

### Subspecialties

Neurotology  
Pediatric Otolaryngology  
Plastic Surgery within the Head and Neck  
Sleep Medicine

## Pathology

### Primary Specialty Certificates\*

Pathology-Anatomic/Pathology-Clinical  
Pathology-Anatomic  
Pathology-Clinical

### Subspecialties

Blood Banking/Transfusion Medicine  
Clinical Informatics  
Cytopathology  
Dermatopathology  
Hematopathology  
Neuropathology  
Pathology - Chemical  
Pathology - Forensic  
Pathology - Medical Microbiology  
Pathology - Molecular Genetic  
Pathology - Pediatric

## Pediatrics

### Subspecialties

Adolescent Medicine  
Child Abuse Pediatrics  
Developmental - Behavioral Pediatrics  
Hospice and Palliative Medicine  
Medical Toxicology  
Neonatal - Perinatal Medicine  
Pediatric Cardiology  
Pediatric Critical Care Medicine  
Pediatric Emergency Medicine  
Pediatric Endocrinology  
Pediatric Gastroenterology  
Pediatric Hematology - Oncology  
Pediatric Hospital Medicine  
Pediatric Infectious Diseases  
Pediatric Nephrology  
Pediatric Pulmonology  
Pediatric Rheumatology  
Pediatric Transplant Hepatology  
Sleep Medicine  
Sports Medicine

## Physical Medicine and Rehabilitation

### Subspecialties

Brain Injury Medicine  
Hospice and Palliative Medicine  
Neuromuscular Medicine  
Pain Medicine  
Pediatric Rehabilitation Medicine  
Spinal Cord Injury Medicine  
Sports Medicine

## Plastic Surgery

### Subspecialties

Plastic Surgery within the Head and Neck  
Surgery of the Hand

## Preventive Medicine

### Primary Specialty Certificates\*

Aerospace Medicine  
Occupational Medicine  
Public Health and General Preventive Medicine  
  

### Subspecialties

  
Addiction Medicine  
Clinical Informatics  
Medical Toxicology  
Undersea and Hyperbaric Medicine

## Psychiatry and Neurology

### Primary Specialty Certificates\*

Psychiatry  
Neurology  
Neurology with Special Qualification in Child Neurology

### Subspecialties

Addiction Psychiatry  
Brain Injury Medicine  
Child and Adolescent Psychiatry  
Clinical Neurophysiology  
Epilepsy  
Forensic Psychiatry  
Geriatric Psychiatry  
Hospice and Palliative Medicine  
Neurodevelopmental Disabilities  
Neuromuscular Medicine  
Pain Medicine  
Psychosomatic Medicine  
Sleep Medicine  
Vascular Neurology

## Radiology

### Primary Specialty Certificates\*

Diagnostic Radiology  
Interventional Radiology and Diagnostic Radiology  
Radiation Oncology  
Medical Physics  
  

### Subspecialties

  
Hospice and Palliative Medicine  
Neuroradiology  
Nuclear Radiology  
Pain Medicine  
Pediatric Radiology  
Vascular and Interventional Radiology

## Surgery

### Primary Specialty Certificates\*

Surgery  
Vascular Surgery  
  

### Subspecialties

  
Complex General Surgical Oncology  
Hospice and Palliative Medicine  
Pediatric Surgery  
Surgery of the Hand  
Surgical Critical Care

## Thoracic Surgery

### Primary Specialty Certificate\*

Thoracic and Cardiac Surgery  
  

### Subspecialty

  
Congenital Cardiac Surgery

## Urology

### Subspecialty

Female Pelvic Medicine and Reconstructive Surgery  
Pediatric Urology

† No subspecialties

\* Specific disciplines within the specialty where certification is offered



## AMERICAN BOARD OF ALLERGY AND IMMUNOLOGY

*Approved as an ABMS Member Board in 1971*

1835 Market Street, Suite 1210  
Philadelphia, PA 19103  
(866) 264-5568 or (215) 592-9466  
abai.org

### Allergy and Immunology

An allergist-immunologist diagnoses and manages disorders involving immune system conditions such as asthma, anaphylaxis, rhinitis, and eczema as well as adverse reactions to drugs, foods, and insect stings; also immune deficiency diseases and problems related to autoimmune disease, organ transplantation, or malignancies of the immune system.

No subspecialty certificates in allergy and immunology are offered. However, formal special pathways are available for physicians seeking dual certification in Allergy/Immunology and Pediatric Pulmonology; Allergy and Immunology and Pediatric Rheumatology; and Allergy and Immunology and Adult Rheumatology. Additional information is available from the board.

**Specialty training required prior to certification:** Prior certification in Internal Medicine or Pediatrics; two years in Allergy and Immunology.



## THE AMERICAN BOARD OF ANESTHESIOLOGY

## AMERICAN BOARD OF ANESTHESIOLOGY

*Approved as an ABMS Member Board in 1941*

4208 Six Forks Road, Suite 1500  
Raleigh, NC 27609  
(866) 999-7501  
theaba.org

### Anesthesiology

An anesthesiologist is a physician who provides anesthesia for patients undergoing surgical, obstetric, diagnostic, or therapeutic procedures while monitoring the patient's condition and supporting vital organ functions. The anesthesiologist also diagnoses and treats acute, chronic, and/or cancer pain as well as provide resuscitation and medical management for patients with critical illnesses and severe injuries.

**Specialty training required prior to certification:** Four years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Anesthesiology and complete additional training as specified by the board.

#### Critical Care Medicine

An anesthesiologist who specializes in Critical Care Medicine diagnoses and treats patients with critical illnesses or injuries, particularly trauma victims and patients with multiple organ dysfunction who require care over a period of hours, days, or weeks. These physicians also coordinate patient care among the primary physician, critical care staff, and other specialists and their primary base of operation is the intensive care unit (ICU) of a hospital.

#### Hospice and Palliative Medicine

An anesthesiologist who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to maximize quality of life while addressing the physical, psychological, social, and spiritual needs of both patient and family.

### Pain Medicine

An anesthesiologist who specializes in Pain Medicine provides care for patients with acute, chronic, and/or cancer pain in both inpatient and outpatient settings while coordinating patient care needs with other specialists.

### Pediatric Anesthesiology

An anesthesiologist who specializes in Pediatric Anesthesiology provides anesthesia for neonates, infants, children, and adolescents undergoing surgical, diagnostic, or therapeutic procedures as well as appropriate pre- and post-operative care, advanced life support, and acute pain management.

### Sleep Medicine

An anesthesiologist who specializes in Sleep Medicine has expertise in the diagnosis and management of clinical conditions that occur during sleep, that disturb sleep, or that are affected by disturbances in the wake-sleep cycle. This specialist is skilled in the analysis and interpretation of comprehensive polysomnography, and well versed in emerging research and management of a sleep laboratory.



## AMERICAN BOARD OF COLON AND RECTAL SURGERY

*Approved as an ABMS Member Board in 1949*

20600 Eureka Road, Suite 600  
Taylor, MI 48180  
(734) 282-9400  
abcrcs.org

### Colon and Rectal Surgery

A colon and rectal surgeon diagnoses and treats various diseases of the small intestine, colon, rectum, anal canal, and perianal area including the organs and tissues related with primary intestinal diseases (liver, urinary, and female reproductive system). They treat conditions such as hemorrhoids, fissures (painful tears in the anal lining), abscesses and fistulae (infections located around the anus and rectum). They also diagnose and treat problems of the intestine and colon such as cancer, polyps (precancerous growths), and inflammatory conditions.

**Specialty training required prior to certification:** Five years of General Surgery followed by one year in Colon and Rectal Surgery



## AMERICAN BOARD OF DERMATOLOGY

*Founding Member Board of ABMS*

2 Wells Avenue  
Newton, MA 02459  
(617) 910-6400  
abderm.org

### Dermatology

A dermatologist is a physician with training and expertise in the diagnosis and medical/surgical management of diseases of the skin, hair and nails, and mucous membranes.

**Specialty training required prior to certification:** Four years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Dermatology and complete additional training as specified by the board.

#### Dermatopathology

A dermatopathologist is expert in diagnosing and monitoring diseases of the skin, including infectious, immunologic, degenerative, and neoplastic diseases. This entails the examination and interpretation of specially prepared tissue sections, cellular scrapings, and smears of skin lesions by means of light microscopy, electron microscopy, and fluorescence microscopy.

#### Pediatric Dermatology

A pediatric dermatologist is a physician with training and expertise in the diagnosis and medical/surgical management of diseases of the skin, hair and nails, and mucous membranes of infants, children, and adolescents.



## AMERICAN BOARD OF EMERGENCY MEDICINE

*Approved as an ABMS Member Board in 1979*

3000 Coolidge Road  
East Lansing, MI 48823  
(517) 332-4800  
abem.org

### Emergency Medicine

A physician who specializes in Emergency Medicine focuses on the immediate decision making and action necessary to prevent death or any further disability both in the pre-hospital setting by directing emergency medical technicians and in the emergency department. This specialist provides immediate recognition, evaluation, care, stabilization, and disposition of a generally diversified population of adult and pediatric patients in response to acute illness and injury.

**Specialty training required prior to certification:** Three years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Emergency Medicine and complete additional training as specified by the board.

#### Anesthesiology Critical Care Medicine

An emergency medicine physician who specializes in Critical Care Medicine diagnoses and treats patients with critical illnesses or injuries, particularly trauma victims and patients with multiple organ dysfunction who require care over a period of hours, days, or weeks. These physicians also coordinate patient care among the primary physician, critical care staff, and other specialists and their primary base of operation is the intensive care unit (ICU) of a hospital.

### Emergency Medical Services

An emergency medicine physician specializing in Emergency Medical Services has special knowledge and skills for the delivery of medical care of the acutely ill or injured patient in the pre-hospital setting. This care includes the initial patient treatment, stabilization, and transportation in specially equipped ambulances and medical helicopters. The initial care for conditions such as heart attack or stroke may occur in patient homes, public places, and wilderness settings. These medical specialists perform life-saving procedures outside the hospital setting, sometimes when people are still trapped in cars or buildings.

### Hospice and Palliative Medicine

An emergency medicine physician who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to optimize quality of life while addressing the physical, psychological, social, and spiritual needs of both patient and family.

### Internal Medicine-Critical Care Medicine

An emergency medicine physician trained in Critical Care Medicine has expertise in the diagnosis, treatment and support of critically ill and injured patients, particularly trauma victims, and patients with multiple organ dysfunction. This physician also coordinates patient care among the primary physician, critical care staff, and other specialists.

### Medical Toxicology

Medical toxicologists are physicians who specialize in the prevention, evaluation, treatment, and monitoring of injury and illness from exposures to drugs and chemicals, as well as biological and radiological agents. These specialists care for people in clinical, academic, governmental, and public health settings, and provide poison control center leadership. Important areas of Medical Toxicology include acute drug poisoning; adverse drug events; drug abuse, addiction and withdrawal; chemicals and hazardous materials; terrorism preparedness; venomous bites and stings; and environmental and workplace exposures.

### Pain Medicine

An emergency medicine physician who specializes in Pain Medicine provides care for patients with acute, chronic, and/or cancer pain in an emergency department setting while coordinating patient care needs with other specialists.

### Pediatric Emergency Medicine

An emergency medicine physician who specializes in Pediatric Emergency Medicine has special qualifications to manage emergency treatments in acutely ill or injured infants and children.

### Sports Medicine

An emergency medicine physician who specializes in preventing, diagnosing, and treating injuries related to participating in sports and/or exercise. In addition to the study of those fields that focus on prevention, diagnosis, treatment, and management of injuries, Sports Medicine also deals with illnesses and diseases that might have effects on health and physical performance.

### Undersea and Hyperbaric Medicine

An emergency medicine physician who specializes in Undersea and Hyperbaric Medicine treats decompression illness and diving accident cases and uses hyperbaric oxygen therapy to treat such conditions as carbon monoxide poisoning, gas gangrene, non-healing wounds, tissue damage from radiation and burns, and bone infections. This specialist also serves as a consultant to other physicians in all aspects of hyperbaric chamber operations, and assesses risks and applies appropriate standards to prevent disease and disability in divers and other persons working in altered atmospheric conditions.



## AMERICAN BOARD OF FAMILY MEDICINE

*Approved as an ABMS Member Board in 1969*

1648 McGrathiana Parkway, Suite 550  
Lexington, KY 40511  
(859) 269-5626 or (888) 995-5700  
theabfm.org

### Family Medicine

Family physicians deliver a range of acute, chronic, and preventive medical care services. In addition to diagnosing and treating illness, they also provide preventive care, including routine checkups, health-risk assessments, immunization and screening tests, and personalized counseling on maintaining a healthy lifestyle. Family physicians also manage chronic illness, often coordinating care provided by other subspecialists.

**Specialty training required prior to certification:** Three years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Family Medicine and complete additional training as specified by the board.

#### Adolescent Medicine

A family physician who specializes in Adolescent Medicine is a multidisciplinary health care specialist trained in the unique physical, psychological and social characteristics of adolescents and their health care problems and needs.

#### Geriatric Medicine

A family physician with special knowledge of the aging process and special skills in the diagnostic, therapeutic, preventive, and rehabilitative aspects of illness in the elderly. This specialist cares for geriatric patients in the patient's home, the office, long-term care settings such as nursing homes, and the hospital.

#### Hospice and Palliative Medicine

A family physician who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to optimize quality of life while addressing the physical, psychological, social, and spiritual needs of both patient and family.

#### Pain Medicine

A family physician who specializes in Pain Medicine provides care for patients with acute, chronic and/or cancer pain in both inpatient and outpatient settings while coordinating patient care needs with other specialists.

#### Sleep Medicine

A family physician with demonstrated expertise in the diagnosis and management of clinical conditions that occur during sleep, that disturb sleep, or that are affected by disturbances in the wake-sleep cycle. This specialist is skilled in the analysis and interpretation of comprehensive polysomnography, and well-versed in emerging research and management of a sleep laboratory.

#### Sports Medicine

A family physician who specializes in preventing, diagnosing and treating injuries related to participating in sports and/or exercise. In addition to the study of those fields that focus on prevention, diagnosis, treatment and management of injuries, Sports Medicine also deals with illnesses and diseases that might have effects on health and physical performance.



## AMERICAN BOARD OF INTERNAL MEDICINE

*Approved as an ABMS Member Board in 1936*

510 Walnut Street, Suite 1700  
Philadelphia, PA 19106  
(800) 441-2246  
abim.org

### Internal Medicine

An internist is a personal physician who provides long-term, comprehensive care in the office and in the hospital, managing both common and complex illnesses of adolescents, adults, and the elderly. Internists are trained in the diagnosis and treatment of cancer, infections, and diseases affecting the heart, blood, kidneys, joints, and the digestive, respiratory, and vascular systems. They are also trained in the essentials of primary care internal medicine, which incorporates an understanding of disease prevention, wellness, substance abuse, mental health, and effective treatment of common problems of the eyes, ears, skin, nervous system, and reproductive organs.

**Specialty training required prior to certification:** Three years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Internal Medicine and complete additional training as specified by the board.

#### Adolescent Medicine

An internist who specializes in Adolescent Medicine is a multidisciplinary health care specialist trained in the unique physical, psychological, and social characteristics of adolescents, their health care problems and needs.

#### Adult Congenital Heart Disease

An internist or pediatrician who specializes in Adult Congenital Heart Disease has the unique knowledge, skills, and practice required of a cardiologist for evaluating and delivering high quality lifelong care for a wide range of adult patients with heart disease diagnosed at birth.

#### Advanced Heart Failure and Transplant Cardiology

An internist who specializes in Heart Failure and Transplant Cardiology has the special knowledge and skills required of cardiologists for evaluating and optimally managing patients with heart failure, particularly those with advanced heart failure, those with devices, including ventricular assist devices, and those who have undergone or are awaiting transplantation.

#### Cardiovascular Disease

An internist who specializes in diseases of the heart and blood vessels and manages complex cardiac conditions, such as heart attacks and life-threatening, abnormal heartbeat rhythms.

#### Clinical Cardiac Electrophysiology

A field of special interest within the subspecialty of Cardiovascular Disease, which involves intricate technical procedures to evaluate heart rhythms and determine appropriate treatment.

#### Critical Care Medicine

An internist trained in Critical Care Medicine has expertise in the diagnosis, treatment, and support of critically ill and injured patients, particularly trauma victims and patients with multiple organ dysfunction. This physician also coordinates patient care among the primary physician, critical care staff, and other specialists.

#### Endocrinology, Diabetes and Metabolism

An internist (endocrinologist) specializes in the diagnosis and management of disorders of hormones and their actions, metabolic disorders, and neoplasia of the endocrine glands. This specialist cares for patients with diabetes mellitus, thyroid disorders, disorders of calcium and bone, hyperlipidemia, obesity and nutritional disorders, pituitary disorders, reproductive and gonadal disorders, adrenal diseases, and endocrine hypertension.

#### Gastroenterology

An internist (gastroenterologist) who specializes in diagnosis and treatment of diseases of the digestive organs including the stomach, bowels, liver, and gallbladder. This specialist treats conditions such as abdominal pain, ulcers, diarrhea, cancer, and jaundice and performs complex diagnostic and therapeutic procedures using endoscopes to visualize internal organs.

### Geriatric Medicine

An internist who has special knowledge of the aging process and special skills in the diagnostic, therapeutic, preventive, and rehabilitative aspects of illness in the elderly. This specialist cares for geriatric patients in the patient's home, the office, and long-term care settings such as nursing homes and the hospital.

### Hematology

An internist (hematologist) who specializes in diseases of the blood, spleen, and lymph. This specialist treats conditions such as anemia, clotting disorders, sickle cell disease, hemophilia, leukemia, and lymphoma.

### Hospice and Palliative Medicine

An internist who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to optimize quality of life while addressing the physical, psychological, social, and spiritual needs of both patient and family.

### Infectious Disease

An internist who deals with infectious diseases of all types and in all organ systems. Conditions requiring selective use of antibiotics call for this special skill. This physician often diagnoses and treats AIDS patients and patients with fevers which have not been explained. Infectious disease specialists may also have expertise in preventive medicine and travel medicine.

### Interventional Cardiology

An area of medicine within the subspecialty of Cardiology, which uses specialized imaging and other diagnostic techniques to evaluate blood flow and pressure in the coronary arteries and chambers of the heart, and uses technical procedures and medications to treat abnormalities that impair the function of the cardiovascular system.

### Medical Oncology

An internist (medical oncologist) who specializes in the diagnosis and treatment of all types of cancer and other benign and malignant tumors. This specialist decides on and administers therapy for these malignancies, as well as consults with surgeons and radiotherapists on other treatments for cancer.

### Nephrology

An internist (nephrologist) who treats disorders of the kidney, high blood pressure, fluid and mineral balance, and dialysis of body wastes when the kidneys do not function. This specialist consults with surgeons about kidney transplantation.

### Pulmonary Disease

An internist (pulmonologist) who treats diseases of the lungs and airways. This specialist diagnoses and treats cancer, pneumonia, pleurisy, asthma, occupational and environmental diseases, bronchitis, sleep disorders, emphysema, and other complex disorders of the lungs.

### Rheumatology

An internist (rheumatologist) who treats diseases of joints, muscle, bones, and tendons. This specialist diagnoses and treats arthritis, back pain, muscle strains, common athletic injuries, and collagen diseases.

### Sleep Medicine

An internist who specializes in the diagnosis and management of clinical conditions that occur during sleep, that disturb sleep, or that are affected by disturbances in the wake-sleep cycle. This specialist is skilled in the analysis and interpretation of comprehensive polysomnography, and well-versed in emerging research and management of a sleep laboratory.

### Sports Medicine

An internist who specializes in preventing, diagnosing, and treating injuries related to participating in sports and/or exercise. In addition to the study of those fields that focus on prevention, diagnosis, treatment, and management of injuries, Sports Medicine also deals with illnesses and diseases that might have effects on health and physical performance.

### Transplant Hepatology

An internist with special knowledge and the skill required of a gastroenterologist to care for patients prior to and following hepatic transplantation that spans all phases of liver transplantation. Selection of appropriate recipients requires assessment by a team having experience in evaluating the severity and prognosis of patients with liver disease.



## AMERICAN BOARD OF MEDICAL GENETICS AND GENOMICS

*Approved as an ABMS Member Board in 1991*

9650 Rockville Pike  
Bethesda, MD 20814  
(301) 634-7315  
abmgg.org

### Medical Genetics and Genomics

Medical geneticists specialize in medicine that involves the interaction between genes and health. They are trained to evaluate, diagnose, manage, treat, and counsel individuals of all ages with hereditary disorders. This specialist uses modern cytogenetic, molecular, genomic, and biochemical genetic testing to assist in specialized diagnostic evaluations, implement needed therapeutic interventions, and provide genetic counseling and prevention through prenatal and preimplantation diagnosis. The medical geneticist plans and coordinates screening for genetic diseases involving single gene and chromosomal disorders, congenital anomalies, inborn errors of metabolism, multifactorial conditions, and common disorders with hereditary factors.

**Specialty training required prior to certification:** Two years

To become certified in a particular area of Medical Genetics and Genomics, a physician must complete additional training before residency as specified by the board.

### Primary Specialty Certificates

#### Clinical Biochemical Genetics

A clinical biochemical geneticist demonstrates competence in performing and interpreting a wide range of specialized, laboratory biochemical genetic analyses relevant to the diagnosis and management of inherited metabolic disorders. The specialist acts as a consultant regarding laboratory diagnosis on a broad range of inborn errors of metabolism.

#### Clinical Cytogenetics and Genomics

A clinical cytogeneticist demonstrates competence in performing and interpreting laboratory diagnostic tests involving the relationship between the structure and number of chromosomes associated with inherited and acquired disorders, including cancer. This specialist is a consultant regarding laboratory diagnosis of this broad range of disorders.

#### Clinical Genetics and Genomics (MD)

A clinical geneticist demonstrates competence in providing comprehensive diagnostic, treatment, management, and counseling services for individuals and families at risk for clinical disorders with a genetic basis. This specialist is trained to evaluate individuals of all ages who are at risk for hereditary conditions.

#### Clinical Molecular Genetics and Genomics

A clinical molecular geneticist demonstrates competence in performing and interpreting molecular analyses relevant to the diagnosis and management of human genetic diseases, and is a consultant regarding laboratory diagnosis of a broad range of inherited disorders.

### Subspecialties

To become certified in a particular subspecialty, a physician must complete additional training as specified by the board.

#### Medical Biochemical Genetics

A medical biochemical geneticist demonstrates competence in the diagnosis, medical treatment, and management of individuals with inherited metabolic conditions presenting clinically from infancy through adulthood, including via newborn screening. The subspecialist provides direct care and consultative care for individuals of all ages who are diagnosed with inborn errors of metabolism.

#### Molecular Genetic Pathology

A molecular genetic pathologist is expert in the principles, theory, and technologies of molecular biology and molecular genetics. This expertise is used to make or confirm diagnoses of Mendelian genetic disorders, of human development, infectious diseases, and malignancies and to assess the natural history of those disorders. A molecular genetic pathologist provides information about gene structure, function, and alteration and applies laboratory techniques for diagnosis, treatment, and prognosis for individuals with related disorders.



## AMERICAN BOARD OF NEUROLOGICAL SURGERY

*Approved as an ABMS Member Board in 1940*

245 Amity Road, Suite 208  
Woodbridge, CT 06525  
(203) 397-2267  
abns.org

### Neurological Surgery

Neurological Surgery constitutes a medical discipline and surgical specialty that provides care for adult and pediatric patients in the treatment of pain or pathological processes that may modify the function or activity of the central nervous system (e.g., brain, hypophysis, and spinal cord), the peripheral nervous system (e.g., cranial, spinal, and peripheral nerves), the autonomic nervous system, the supporting structures of these systems (e.g., meninges, skull and skull base, and vertebral column), and their vascular supply (e.g., intracranial, extracranial, and spinal vasculature).

Treatment encompasses both non-operative management (e.g., prevention, diagnosis—including image interpretation—and treatments such as, but not limited to, neurocritical intensive care and rehabilitation) and operative management with its associated image use and interpretation (e.g., endovascular surgery, functional and restorative surgery, stereotactic radiosurgery, and spinal fusion—including its instrumentation).

Specialty training required prior to certification: Seven years of neurosurgical residency training. At minimum, this time must consist of 4 1/2 years of core clinical surgery, including:

- Twelve months as chief resident;
- Three months of basic neuroscience;
- Three months of critical care relevant to neurosurgery patients, and
- Six months of structured education in general patient care (e.g., trauma, general surgery, orthopaedic surgery, otolaryngology, plastic surgery, etc.)

An additional 2 1/2 years of electives are required such as neuropathy, neuroradiology, research, and/or more neurosurgery, possibly in areas of special interest such as complex spine surgery, endovascular, or pediatric neurosurgery, and/or clinical and non-clinical neurosciences.



## AMERICAN BOARD OF PSYCHIATRY AND NEUROLOGY

*Approved as an ABMS Member Board in 1935*

2150 E. Lake Cook Road, Suite 900  
Buffalo Grove, IL 60089  
(847) 229-6500  
abpn.com

### Neurology

Descriptions for Psychiatry and related subspecialties can be found on page 62.

A neurologist specializes in the evaluation and treatment of all types of disease or impaired function of the brain, spinal cord, peripheral nerves, muscles, and autonomic nervous system, as well as the blood vessels that relate to these structures. These disorders include: stroke, brain and spinal tumors, muscular dystrophy, headache and other pain, meningitis, encephalitis, epilepsy, Parkinson's disease, Alzheimer's disease and other memory disorders, multiple sclerosis, and effects of systemic diseases, like high blood pressure and diabetes, on the nervous system.

**Specialty training required prior to certification:** Four years

#### Primary Specialty Certificate

##### Neurology with Special Qualification in Child Neurology

Child neurologists diagnose and treat similar disorders in infants, children, and adolescents. They also have special competence in genetic and metabolic problems, malformation, retardation, and other neurodevelopmental problems of childhood.

**Specialty training required prior to certification:** Five years

#### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Psychiatry and Neurology and complete additional training as specified by the board.

### Brain Injury Medicine

Brain Injury Medicine is a subspecialty focused on the prevention, evaluation, treatment, and rehabilitation of individuals with acquired brain injury. These physicians provide a high level of care for patients with brain injury and their families in hospital and post-acute settings, and over the continuum of care to facilitate the process of recovery and improve medical and functional outcomes.

### Clinical Neurophysiology

A neurologist, child neurologist, or psychiatrist who focuses on the evaluation and treatment of central, peripheral, and autonomic nervous system disorders using a combination of clinical evaluation and electrophysiologic testing such as electroencephalography (EEG), electromyography (EMG), and nerve conduction studies (NCS), among others.

### Epilepsy

A neurologist or child neurologist who focuses on the evaluation and treatment of adults and children with recurrent seizure activity and seizure disorders. Specialists in Epilepsy (epileptologists) possess specialized knowledge in the science, clinical evaluation, and management of these disorders.

### Hospice and Palliative Medicine

A neurologist, child neurologist, or psychiatrist who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to optimize quality of life while addressing the physical, psychological, social, and spiritual needs of both patient and family.

### Neurodevelopmental Disabilities

A child neurologist or pediatrician who focuses on the evaluation and treatment of chronic conditions that affect the developing and mature nervous system such as cerebral palsy, mental retardation, and chronic behavioral syndromes or neurologic conditions.

### Neuromuscular Medicine

A neurologist, child neurologist, or physiatrist who focuses on the evaluation and treatment of disorders of nerve, muscle or neuromuscular junction, including amyotrophic lateral sclerosis (ALS), peripheral neuropathies (e.g., diabetic), various muscular dystrophies, congenital and acquired myopathies, inflammatory myopathies (e.g., polymyositis), and neuromuscular transmission disorders (e.g., myasthenia gravis).

### Pain Medicine

A neurologist or child neurologist who specializes in Pain Medicine diagnoses and treats patients experiencing problems with acute, chronic and/or cancer pain in both hospital and outpatient settings and coordinates patient care needs with other specialists.

### Sleep Medicine

A neurologist or child neurologist with demonstrated expertise in the diagnosis and management of clinical conditions that occur during sleep, that disturb sleep, or that are affected by disturbances in the wake-sleep cycle. This specialist is skilled in the analysis and interpretation of comprehensive polysomnography, and well-versed in emerging research and management of a sleep laboratory.

### Vascular Neurology

A neurologist or child neurologist who focuses on the evaluation and treatment of vascular events affecting the brain or spinal cord, such as ischemic stroke, intracranial hemorrhage, spinal cord ischemia, and spinal cord hemorrhage.



## AMERICAN BOARD OF NUCLEAR MEDICINE

*Approved as an ABMS Member Board in 1971*

4555 Forest Park Blvd., Suite 119  
St. Louis, MO 63108  
(314) 367-2225  
abnm.org

### Nuclear Medicine

A specialist in Nuclear Medicine uses molecular tracers (usually labeled with radioactive atoms) for diagnosis and therapy. These labeled tracers are most often used to produce images that provide information about organ function, as well as cellular function on a molecular level (molecular imaging). Molecular imaging can be combined with anatomical imaging by using specialized cameras. The most common diagnostic applications of Nuclear Medicine include the early detection of coronary artery disease, cancer diagnosis and staging, and the evaluation of the effect of cancer treatment. The fusion of molecular and anatomical information increases diagnostic accuracy and changes medical management. Radioactive materials are also used to treat a variety of health problems, including thyroid disorders and cancer.

**Specialty training required prior to certification:** Sixteen months to three years, depending on prior training in other specialties



## AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

*Founding Member Board of ABMS*

2915 Vine Street  
Dallas, TX 75204-1069  
(214) 871-1619  
abog.org

### Obstetrics and Gynecology

An obstetrician/gynecologist focuses on the health of women before, during, and after childbearing years, diagnosing and treating conditions of the reproductive system and associated disorders.

**Specialty training required prior to certification:** Four years plus two years in clinical practice before certification is complete.

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Obstetrics and Gynecology and complete additional training as specified by the board.

#### Critical Care Medicine

An obstetrician/gynecologist who specializes in Critical Care Medicine has expertise in the diagnosis, treatment, and support of critically ill and injured patients, particularly trauma victims and patients with multiple organ dysfunction.

#### Female Pelvic Medicine and Reconstructive Surgery

A subspecialist in Female Pelvic Medicine and Reconstructive Surgery is a physician in Obstetrics and Gynecology or Urology who, by virtue of education and training, is prepared to provide consultation and comprehensive management of women with complex benign pelvic conditions, lower urinary tract disorders, and pelvic floor dysfunction. Comprehensive management includes those diagnostic and therapeutic procedures necessary for the total care of the patient with these conditions and complications resulting from them.

### Gynecologic Oncology

The gynecologic oncologist provides consultation and comprehensive management, including those diagnostic and therapeutic procedures of patients with gynecologic cancer and resulting complications.

### Hospice and Palliative Medicine

An obstetrician/gynecologist who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to optimize quality of life while addressing the physical, psychological, social, and spiritual needs of both patient and family.

### Maternal and Fetal Medicine

An obstetrician/gynecologist with specialization in Maternal and Fetal Medicine focuses on patients with complications of pregnancy and their effect on both the mother and the fetus.

### Reproductive Endocrinology/Infertility

The reproductive endocrinologist concentrates on hormonal functioning as it pertains to reproduction as well as the issue of infertility. They also are trained to evaluate and treat hormonal dysfunctions in females outside of infertility.



## AMERICAN BOARD OF OPHTHALMOLOGY

*Founding Member Board of ABMS*

111 Presidential Blvd, Suite 241  
Bala Cynwyd, PA 19004  
(610) 664-1175  
abop.org

### Ophthalmology

Ophthalmology is a specialty focused on the medical and surgical care of the eyes. Ophthalmologists are the only physicians medically trained to manage the complete range of eye and vision care. They can prescribe glasses and contact lenses, dispense medications, diagnose and treat eye conditions and diseases, and perform surgeries.

**Specialty training required prior to certification:** Four years



## AMERICAN BOARD OF ORTHOPAEDIC SURGERY

*Approved as an ABMS Member Board in 1935*

400 Silver Cedar Court  
Chapel Hill, NC 27514  
(919) 929-7103  
abos.org

### Orthopaedic Surgery

An orthopaedic surgeon is educated in the preservation, investigation, and restoration of the form and function of the extremities, spine, and associated structures by medical, surgical, and physical means. This specialist is involved with the care of patients whose musculoskeletal problems include congenital deformities, trauma, infections, tumors, metabolic disturbances of the musculoskeletal system, deformities, injuries, and degenerative diseases of the spine, hands, feet, knee, hip, shoulder, and elbow in children and adults. An orthopaedic surgeon is also concerned with primary and secondary muscular problems and the effects of central or peripheral nervous system lesions of the musculoskeletal system.

**Specialty training required prior to certification:** A minimum of five years (including Surgery training) plus two years in clinical practice before final certification is achieved.

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Orthopaedic Surgery and complete additional training as specified by the board.

### Orthopaedic Sports Medicine

An orthopaedic surgeon educated in Sports Medicine has expertise in the surgical and medical care for all structures of the musculoskeletal system directly affected by participation in a sporting activity. This specialist is proficient in areas including conditioning, training and fitness, athletic performance, the impact of dietary supplements, pharmaceuticals, and nutrition on performance and health, coordination of care within the team setting utilizing other health care professionals, field evaluation and management, soft tissue biomechanics, and injury healing and repair. Knowledge and understanding of the principles and techniques of rehabilitation, athletic equipment, and orthotic devices enables the specialist to prevent and manage athletic injuries.

### Surgery of the Hand

A surgeon trained in Surgery of the Hand has expertise in the surgical, medical, and rehabilitative care of patients with diseases, injuries, and disorders affecting the hand, wrist, and forearm. Common conditions treated by a hand surgeon include carpal tunnel syndrome, trigger fingers, ganglia (lumps), sports injuries to the hand and wrist, and hand injuries involving fractures, dislocations, lacerated tendons, nerves, and arteries. Hand surgeons may be general surgeons, orthopaedic surgeons, or plastic surgeons who have received additional training in this area.



## AMERICAN BOARD OF OTOLARYNGOLOGY

*Founding Member Board of ABMS*

5615 Kirby Drive, Suite 600  
Houston, TX 77005  
(713) 850-0399  
aboto.org

### Otolaryngology

An otolaryngologist-head and neck surgeon provides medical and/or surgical therapy for the prevention of diseases, allergies, neoplasms, deformities, disorders, and/or injuries of the ears, nose, sinuses, throat, respiratory, and upper alimentary systems, face, jaws, and the other head and neck systems. Head and neck oncology, facial, plastic, and reconstructive surgery and the treatment of disorders of hearing and voice are fundamental areas of expertise.

**Specialty training required prior to certification:** Five years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Otolaryngology and complete additional training as specified by the board.

#### Neurotology

The neurotologist has special expertise in the management of diseases of the inner ear, temporal bone, and skull base, including tumors and other conditions.

#### Pediatric Otolaryngology

A pediatric otolaryngologist has special expertise in the management of infants and children with disorders that include congenital and acquired conditions involving the aerodigestive tract, nose and paranasal sinuses, the ear and other areas of the head and neck, and in the diagnosis, treatment, and management of childhood disorders of voice, speech, language, and hearing.

#### Plastic Surgery Within the Head and Neck

An otolaryngologist trained in this area has additional expertise in plastic and reconstructive procedures within the head, face, neck, and associated structures, including cutaneous head and neck oncology and reconstruction, management of maxillofacial trauma, soft tissue repair, and cosmetic surgery.

#### Sleep Medicine

An otolaryngologist with demonstrated expertise in the diagnosis and management of clinical conditions that occur during sleep, that disturb sleep, or that are affected by disturbances in the wake-sleep cycle. This specialist is skilled in the analysis and interpretation of comprehensive polysomnography, and well-versed in emerging research and management of a sleep laboratory.



## AMERICAN BOARD OF PATHOLOGY

*Approved as an ABMS Member Board in 1936*

4830 Kennedy Blvd., Suite 690  
Tampa, FL 33609  
(813) 286-2444  
abpath.org

### Pathology

A pathologist deals with the causes and nature of disease and contributes to diagnosis, prognosis, and treatment through knowledge gained by the laboratory application of the biologic, chemical, and physical sciences. This specialist uses information gathered from the microscopic examination of tissue specimens, cells and body fluids, and from clinical laboratory tests on body fluids and secretions for the diagnosis, exclusion, and monitoring of disease.

To acknowledge the diverse activities in the practice of Pathology and to accommodate the interests of individuals wanting to enter the field, the American Board of Pathology offers primary certification through the following three routes: combined Anatomic Pathology and Clinical Pathology, Anatomic Pathology only and Clinical Pathology only. A variety of subspecialty certificates are offered. Primary certification in Anatomic Pathology or Clinical Pathology may be combined with some of the subspecialty certifications.

**Specialty training required prior to Board Certification:** Three to four years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Pathology and complete additional training as specified by the board.

### Blood Banking/Transfusion Medicine

A pathologist who specializes in Blood Banking/Transfusion Medicine is responsible for the maintenance of an adequate blood supply, blood donor and patient-recipient safety, and appropriate blood utilization. Pre-transfusion compatibility testing and antibody testing assure that blood transfusions, when indicated, are as safe as possible. This specialist directs the preparation and safe use of specially prepared blood components, including red blood cells, white blood cells, platelets and plasma constituents, and marrow or stem cells for transplantation.

### Clinical Informatics

Physicians who practice Clinical Informatics collaborate with other health care and information technology professionals to analyze, design, implement, and evaluate information and communication systems that enhance individual and population health outcomes, improve patient care, and strengthen the clinician-patient relationship. Clinical informaticians use their knowledge of patient care combined with their understanding of informatics concepts, methods, and tools to: assess information and knowledge needs of health care professionals and patients; characterize, evaluate, and refine clinical processes; develop, implement, and refine clinical decision support systems; and lead or participate in the procurement, customization, development, implementation, management, evaluation, and continuous improvement of clinical information systems.

### Cytopathology

A cytopathologist is an anatomic pathologist trained in the diagnosis of human disease by means of the study of cells obtained from body secretions and fluids; by scraping, washing, or sponging the surface of a lesion; or by the aspiration of a tumor mass or body organ with a fine needle. A major aspect of a cytopathologist's practice is the interpretation of Papanicolaou-stained smears of cells from the female reproductive systems (the "Pap" test). However, the cytopathologist's expertise is applied to the diagnosis of cells from all systems and areas of the body and in consultation to all medical specialists.

### Dermatopathology

A dermatopathologist is expert in diagnosing and monitoring diseases of the skin, including infectious, immunologic, degenerative, and neoplastic diseases. This entails the examination and interpretation of specially prepared tissue sections, cellular scrapings and smears of skin lesions by means of light microscopy, electron microscopy, and fluorescence microscopy.

### Hematopathology

A hematopathologist is expert in diseases that affect blood cells, blood clotting mechanisms, bone marrow, and lymph nodes. This specialist has the knowledge and technical skills essential for the laboratory diagnosis of anemias, leukemias, lymphomas, bleeding disorders, and blood clotting disorders.

### Neuropathology

A neuropathologist is expert in the diagnosis of diseases of the nervous system and skeletal muscles and functions as a consultant primarily to neurologists and neurosurgeons. This specialist is knowledgeable in the infirmities of humans as they affect the nervous and neuromuscular systems, be they degenerative, infectious, metabolic, immunologic, neoplastic, vascular, or physical in nature.

### Pathology - Chemical

A chemical pathologist has expertise in the biochemistry of the human body as it applies to the understanding of the cause and progress of disease. This specialist functions as a clinical consultant in the diagnosis and treatment of human disease. Chemical pathology entails the application of biochemical data to the detection, confirmation, or monitoring of disease.

### Pathology - Forensic

A forensic pathologist is expert in investigating and evaluating cases of sudden, unexpected, suspicious, and violent death as well as other specific classes of death defined by law. The forensic pathologist serves the public as coroner or medical examiner, or by performing medicolegal autopsies for such officials.

### Pathology - Medical Microbiology

A medical microbiologist is expert in the isolation and identification of microbial agents that cause infectious disease. Viruses, bacteria, and fungi, as well as parasites are identified and, where possible, tested for susceptibility to appropriate antimicrobial agents.

### Pathology - Molecular Genetic

A molecular genetic pathologist is expert in the principles, theory and technologies of molecular biology and molecular genetics. This expertise is used to make or confirm diagnoses of Mendelian genetic disorders and disorders of human development, infectious diseases, and malignancies and to assess the natural history of those disorders. The molecular genetic pathologist provides information about gene structure, function, and alteration and applies laboratory techniques for diagnosis, treatment, and prognosis for individuals with related disorders.

### Pathology - Pediatric

A pediatric pathologist is expert in the laboratory diagnosis of diseases that occur during fetal growth, infancy, and child development. The practice requires a strong foundation in general pathology and substantial understanding of normal growth and development, along with extensive knowledge of pediatric medicine.



## AMERICAN BOARD OF PEDIATRICS

*Approved as an ABMS Member Board in 1935*

111 Silver Cedar Court  
Chapel Hill, NC 27514  
(919) 929-0461  
abp.org

### Pediatrics

Pediatricians practice the specialty of medical science concerned with the physical, emotional, and social health of children from birth to young adulthood. Pediatric care encompasses a broad spectrum of health services ranging from preventive health care to the diagnosis and treatment of acute and chronic diseases. Pediatricians understand the many factors that affect the growth and development of children. They understand that children are not simply small adults. Children change rapidly, and they must be approached with an appreciation for their stage of physical and mental development.

**Specialty training required prior to certification:** Three years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Pediatrics and complete additional training as specified by the board.

### Adolescent Medicine

A pediatrician who specializes in Adolescent Medicine is a multidisciplinary health care specialist trained in the unique physical, psychological, and social characteristics of adolescents, their health care problems and needs.

### Child Abuse Pediatrics

A pediatrician who specializes in Child Abuse Pediatrics serves as a resource to children, families, and communities by accurately diagnosing abuse; consulting with community agencies on child safety; providing expertise in courts of law; treating consequences of abuse and neglect; directing child abuse and neglect prevention programs; and participating on multidisciplinary teams investigating and managing child abuse cases.

### Developmental - Behavioral Pediatrics

A pediatrician who specializes in Developmental-Behavioral Pediatrics possesses special skills, training, and experience to foster understanding and promotion of optimal development of children and families through research, education, clinical care, and advocacy efforts. This physician assists in the prevention, diagnosis, and management of developmental difficulties and problematic behaviors in children and in the family dysfunctions that compromise children's development.

### Hospice and Palliative Medicine

A pediatrician who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to optimize quality of life while addressing the physical, psychological, social, and spiritual needs of both patient and family.

### Medical Toxicology

Medical toxicologists are physicians who specialize in the prevention, evaluation, treatment, and monitoring of injury and illness from exposures to drugs and chemicals, as well as biological and radiological agents. These specialists care for people in clinical, academic, governmental, and public health settings, and provide poison control center leadership. Important areas of Medical Toxicology include acute drug poisoning; adverse drug events; drug abuse, addiction and withdrawal; chemicals and hazardous materials; terrorism preparedness; venomous bites and stings; and environmental and workplace exposures.

### Neonatal-Perinatal Medicine

A pediatrician specializing in Neonatal-Perinatal Medicine acts as the principal care provider for sick newborn infants. This specialist's clinical expertise is used for direct patient care and for consulting with obstetrical colleagues to plan for the care of mothers who have high-risk pregnancies.

### Pediatric Cardiology

A pediatric cardiologist provides comprehensive care to patients with cardiovascular problems. This specialist is skilled in selecting, performing, and evaluating the structural and functional assessment of the heart and blood vessels, and the clinical evaluation of cardiovascular disease.

### Pediatric Critical Care Medicine

A pediatrician who specializes in Pediatric Critical Care Medicine is expert in advanced life support for children from the term or near-term neonate to the adolescent. This competence extends to the critical care management of life-threatening organ system failure from any cause in both medical and surgical patients, and to the support of vital physiological functions. This specialist may have administrative responsibilities for intensive care units and also facilitates patient care among other specialists.

### Pediatric Emergency Medicine

A pediatrician specializing in Pediatric Emergency Medicine has special qualifications to manage emergency treatments in acutely ill or injured infants and children.

### Pediatric Endocrinology

A pediatrician with specialization in Pediatric Endocrinology provides expert care to infants, children and adolescents who have diseases that result from an abnormality in the endocrine glands (glands which secrete hormones). These diseases include diabetes mellitus, growth failure, unusual size for age, early or late pubertal development, birth defects, the genital region, and disorders of the thyroid and the adrenal and pituitary glands.

### Pediatric Gastroenterology

A pediatrician specializing in Pediatric Gastroenterology specializes in the diagnosis and treatment of diseases of the digestive systems of infants, children, and adolescents. The pediatric gastroenterologist treats conditions such as abdominal pain, ulcers, diarrhea, cancer, and jaundice and performs complex diagnostic and therapeutic procedures using lighted scopes to see internal organs.

### Pediatric Hematology -Oncology

A pediatrician who specializes in Pediatric Hematology-Oncology is trained in the combination of pediatrics, hematology, and oncology to recognize and manage pediatric blood disorders and cancerous diseases.

### Pediatric Hospital Medicine

A pediatrician who specializes in Pediatric Hospital Medicine has expertise in the care of children with a variety of illnesses and medical needs that require hospital care. Pediatric hospitalists provide leadership in the care of pediatric patients throughout the hospital including the pediatric ward, labor and delivery, the newborn nursery, the emergency department, the neonatal intensive care unit, and the pediatric intensive care unit.

### Pediatric Infectious Diseases

A pediatrician who specializes in Pediatric Infectious Diseases cares for children through the diagnosis, treatment, and prevention of infectious diseases. This specialist can apply specific knowledge to affect a better outcome for pediatric infections with complicated courses, underlying diseases that predispose to unusual or severe infections, unclear diagnoses, uncommon diseases, and complex or investigational treatments.

### Pediatric Nephrology

A pediatrician with special expertise in Pediatric Nephrology deals with the normal and abnormal development and maturation of the kidney and urinary tract; the mechanisms by which the kidney can be damaged; the evaluation and treatment of renal diseases; fluid and electrolyte abnormalities; hypertension; and renal replacement therapy.

### Pediatric Pulmonology

A pediatrician specializing in Pediatric Pulmonology is dedicated to the prevention and treatment of all respiratory diseases affecting infants, children, and young adults. This specialist is knowledgeable about the growth and development of the lung, assessment of respiratory function in infants and children, and experienced in a variety of invasive and noninvasive diagnostic techniques.

### Pediatric Rheumatology

A pediatrician who specializes in Pediatric Rheumatology treats diseases of joints, muscle, bones, and tendons. A pediatric rheumatologist diagnoses and treats arthritis, back pain, muscle strains, common athletic injuries, and collagen diseases.

### Pediatric Transplant Hepatology

The pediatrician who specializes in Transplant Hepatology possesses the special knowledge, skill and expertise required of pediatric gastroenterologists to care for patients prior to and following hepatic transplantation. Selection of appropriate recipients requires assessment by a team having experience in evaluating the severity and prognosis of patients with liver disease.

### Sleep Medicine

A pediatrician with demonstrated expertise in the diagnosis and management of clinical conditions that occur during sleep, that disturb sleep, or that are affected by disturbances in the wake-sleep cycle. This specialist is skilled in the analysis and interpretation of comprehensive polysomnography, and well-versed in emerging research and management of a sleep laboratory.

### Sports Medicine

A pediatrician who specializes in preventing, diagnosing, and treating injuries related to participating in sports and/or exercise. In addition to the study of those fields that focus on prevention, diagnosis, treatment, and management of injuries, sports medicine also deals with illnesses and diseases that might have effects on health and physical performance.



## AMERICAN BOARD OF PHYSICAL MEDICINE AND REHABILITATION

*Approved as an ABMS Member Board in 1947*

3015 Allegro Park Lane, SW  
Rochester, MN 55902  
(507) 282-1776  
abpmr.org

### Physical Medicine and Rehabilitation

A specialist in Physical Medicine and Rehabilitation, also called a physiatrist, evaluates and treats patients with physical and/or cognitive impairments and disabilities that result from musculoskeletal conditions (such as neck or back pain, or sports or work injuries), neurological conditions (such as stroke, brain injury, or spinal cord injury), or other medical conditions. Physiatrists have expertise in therapeutic exercise, medications, and injections for management of pain and spasticity; electrodiagnosis; prostheses (artificial limbs); orthoses (braces); and other equipment to assist daily activities, and coordinate treatment to help patients improve their physical, psychological, social, and vocational function.

**Specialty training required prior to certification:** Four years plus one year clinical practice.

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Physical Medicine and Rehabilitation and complete additional training as specified by board.

### Brain Injury Medicine

A physiatrist who specializes in Brain Injury Medicine focuses on the prevention, evaluation, treatment, and rehabilitation of individuals aged 15 or older with acquired brain injury. This specialist addresses a range of injury-related disorders that have psychosocial, educational, and vocational consequences, as well as related injuries of the central nervous system. He or she also works with an interdisciplinary team to facilitate recovery and improve patients' health and function.

### Hospice and Palliative Medicine

A physiatrist who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to optimize quality of life while addressing the physical, psychological, social, and spiritual needs of both patient and family.

### Neuromuscular Medicine

A physiatrist who specializes in Neuromuscular Medicine focuses on the evaluation and treatment of disorders of nerve, muscle, or neuromuscular junction, including amyotrophic lateral sclerosis (ALS), peripheral neuropathies (e.g., diabetic), various muscular dystrophies, congenital and acquired myopathies, inflammatory myopathies (e.g., polymyositis) and neuromuscular transmission disorders (e.g., myasthenia gravis).

### Pain Medicine

A physiatrist who specializes in Pain Medicine diagnoses and treats patients experiencing problems with acute, chronic, and/or cancer pain in both hospital and outpatient settings and coordinates patient care needs with other specialists.

### Pediatric Rehabilitation Medicine

A physiatrist who specializes in Pediatric Rehabilitation Medicine diagnoses and manages congenital and childhood-onset impairments and disability, such as cerebral palsy, spina bifida, acquired brain or spinal cord injury, amputation, sports injuries, and muscle and nerve diseases. This specialist works with an interdisciplinary team to improve a child's mobility and daily function at home, in the community, and at school by prescribing equipment and therapies and managing medical conditions such as spasticity, pain, bladder or bowel dysfunction, and nutrition.

### Spinal Cord Injury Medicine

A physiatrist who specializes in Spinal Cord Injury Medicine evaluates and manages patients with spinal cord injuries caused by trauma or from medical conditions, such as multiple sclerosis, Guillain Barré syndrome, arthritis, infection, transverse myelitis, cancer, and spina bifida. This specialist works with an interdisciplinary team and prescribes equipment and therapies to enhance mobility and self care skills; manage medical conditions such as pressure ulcers, pain, spasticity, bladder and bowel dysfunction, respiratory health, and mood disorders; and work to help patients return to their community and vocation.

### Sports Medicine

A physiatrist who specializes Sports Medicine focuses on the prevention, diagnosis, and treatment of injuries related to participation in sports and exercise. This specialist also treats illnesses and diseases that might have effects on health and physical performance.



## AMERICAN BOARD OF PLASTIC SURGERY

*Approved as an ABMS Member Board in 1941*

Seven Penn Center  
1635 Market Street, Suite 400  
Philadelphia, PA 19103  
(215) 587-9322  
abplasticsurgery.org

### Plastic Surgery

A plastic surgeon deals with the repair, reconstruction, or replacement of physical defects of form or function involving the skin, musculoskeletal system, craniomaxillofacial structures, hand, extremities, breast and trunk, and external genitalia or cosmetic enhancement of these areas of the body. Cosmetic surgery is an essential component of plastic surgery. The plastic surgeon uses cosmetic surgical principles to both improve overall appearance and to optimize the outcome of reconstructive procedures.

**Specialty training required prior to certification:** Six years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Plastic Surgery and complete additional training as specified by the board.

#### Plastic Surgery Within the Head and Neck

A plastic surgeon trained in this area has additional expertise in plastic and reconstructive procedures within the head, face, neck, and associated structures, including cutaneous head and neck cancer and reconstruction, management of maxillofacial trauma, soft tissue repair, and neural surgery.

#### Surgery of the Hand

A surgeon trained in Surgery of the Hand has expertise in the surgical, medical, and rehabilitative care of patients with diseases, injuries, and disorders affecting the hand, wrist, and forearm. Common conditions treated by a hand surgeon include carpal tunnel syndrome, trigger fingers, ganglia (lumps), sports injuries to the hand and wrist, and hand injuries involving fractures, dislocations, lacerated tendons, nerves, and arteries. hand surgeons may be general surgeons, orthopedic surgeons or plastic surgeons who have received additional training in this area.



## AMERICAN BOARD OF PREVENTIVE MEDICINE

*Approved as an ABMS Member Board in 1949*

111 W. Jackson Blvd, Suite 1340  
Chicago, IL 60604  
(312) 939-2276  
theabpm.org

### Preventive Medicine

A specialist in Preventive Medicine focuses on the health of individuals and defined populations in order to protect, promote, and maintain health and well-being, and to prevent disease, disability, and premature death. They may be a specialist in Public Health and General Preventive Medicine, Occupational Medicine, or Aerospace Medicine. The distinctive components of Preventive Medicine include:

- Biostatistics and the application of biostatistical principles and methodology;
- Epidemiology and its application to population-based medicine and research;
- Health services management and administration including: developing, assessing, and assuring health policies; planning, implementing, directing, budgeting, and evaluating population health and disease management programs; and utilizing legislative and regulatory processes to enhance health;
- Control of environmental factors that may adversely affect health;
- Control and prevention of occupational factors that may adversely affect health safety;
- Clinical preventive medicine activities, including measures to promote health and prevent the occurrence, progression, and disabling effects of disease and injury; and
- Assessment of social, cultural, and behavioral influences on health.

**Specialty training required prior to certification:** Three years

## Subspecialties

To become certified in a particular subspecialty, a physician must be certified by The American Board of Preventive Medicine and complete additional training as specified by the board.

### Addiction Medicine

A preventive medicine physician who specializes in Addiction Medicine is concerned with the prevention, evaluation, diagnosis, and treatment of persons with the disease of addiction, of those with substance-related health conditions, and of people who show unhealthy use of substances including nicotine, alcohol, prescription medications, and other licit and illicit drugs. Physicians in this specialty also help family members whose health and functioning are affected by a loved one's substance use or addiction.

### Clinical Informatics

Physicians who practice Clinical Informatics collaborate with other health care and information technology professionals to analyze, design, implement, and evaluate information and communication systems that enhance individual and population health outcomes, improve patient care, and strengthen the clinician-patient relationship. Clinical informaticians use their knowledge of patient care combined with their understanding of informatics concepts, methods, and tools to: assess information and knowledge needs of health care professionals and patients; characterize, evaluate, and refine clinical processes; develop, implement, and refine clinical decision support systems; and lead or participate in the procurement, customization, development, implementation, management, evaluation, and continuous improvement of clinical information systems.

### Medical Toxicology

Medical toxicologists are physicians who specialize in the prevention, evaluation, treatment, and monitoring of injury and illness from exposures to drugs and chemicals, as well as biological and radiological agents. These specialists care for people in clinical, academic, governmental, and public health settings, and provide poison control center leadership. Important areas of Medical Toxicology include acute drug poisoning; adverse drug events; drug abuse, addiction and withdrawal; chemicals and hazardous materials; terrorism preparedness; venomous bites and stings; and environmental and workplace exposures.

### Undersea and Hyperbaric Medicine

A preventive medicine physician who specializes in Undersea and Hyperbaric Medicine treats decompression illness and diving accident cases and uses hyperbaric oxygen therapy to treat such conditions as carbon monoxide poisoning, gas gangrene, non-healing wounds, tissue damage from radiation and burns, and bone infections. This specialist also serves as consultant to other physicians in all aspects of hyperbaric chamber operations, and assesses risks and applies appropriate standards to prevent disease and disability in divers and other persons working in altered atmospheric conditions.



## AMERICAN BOARD OF PSYCHIATRY AND NEUROLOGY

*Approved as an ABMS Member Board in 1935*

2150 E. Lake Cook Road, Suite 900  
Buffalo Grove, IL 60089  
(847) 229-6500  
abpn.com

**Psychiatry** Descriptions for Neurology and related subspecialties can be found on page 35.

A psychiatrist specializes in the evaluation and treatment of mental, addictive, and emotional disorders such as schizophrenia and other psychotic disorders, mood disorders, anxiety disorders, substance-related disorders, sexual and gender identity disorders, and adjustment disorders.

**Specialty training required prior to certification:** Four years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by The American Board of Psychiatry and Neurology and complete additional training as specified by the board.

#### Addiction Psychiatry

A psychiatrist who focuses on the evaluation and treatment of individuals with alcohol, drug, or other substance-related disorders and of individuals with the dual diagnosis of substance-related and other psychiatric disorders.

#### Child and Adolescent Psychiatry

A psychiatrist who focuses on the evaluation and treatment of developmental, behavioral, emotional, and mental disorders of childhood and adolescence.

#### Clinical Neurophysiology

A psychiatrist, neurologist, or child neurologist who focuses on the evaluation and treatment of central, peripheral, and autonomic nervous system disorders using a combination of clinical evaluation and electrophysiologic testing such as electroencephalography (EEG), electromyography (EMG) and nerve conduction studies (NCS), among others.

#### Forensic Psychiatry

A psychiatrist who focuses on the interrelationships between psychiatry and civil, criminal, and administrative law. This specialist evaluates individuals involved with the legal system and provides specialized treatment to those incarcerated in jails, prisons, and forensic psychiatry hospitals.

#### Geriatric Psychiatry

A psychiatrist who focuses on the evaluation and treatment of mental and emotional disorders in the elderly.

#### Hospice and Palliative Medicine

A psychiatrist who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to optimize quality of life while addressing the physical, psychological, social, and spiritual needs of both patient and family.

#### Pain Medicine

A psychiatrist who specializes in Pain Medicine diagnoses and treats patients experiencing problems with acute, chronic, and/or cancer pain in both hospital and outpatient settings and coordinates patient care needs with other specialists.

#### Psychosomatic Medicine

A psychiatrist who specializes in the diagnosis and treatment of psychiatric disorders and symptoms in complex medically ill patients. This subspecialty includes treatment of patients with acute or chronic medical, neurological, obstetrical, or surgical illness in which psychiatric illness is affecting their medical care and/or quality of life; such as HIV infection, organ transplantation, heart disease, renal failure, cancer, stroke, traumatic brain injury, high-risk pregnancy, and COPD, among others. Patients also may be those who have a psychiatric disorder that is the direct consequence of a primary medical condition, or a somatoform disorder or psychological factors affecting a general medical condition.

#### Sleep Medicine

A psychiatrist with demonstrated expertise in the diagnosis and management of clinical conditions that occur during sleep, that disturb sleep, or that are affected by disturbances in the wake-sleep cycle. This specialist is skilled in the analysis and interpretation of comprehensive polysomnography, and well-versed in emerging research and management of a sleep laboratory.



## AMERICAN BOARD OF RADIOLOGY

*Approved as an ABMS Member Board in 1935*

5441 E. Williams Circle  
Tucson, AZ 85711  
(520) 790-2900  
theabr.org

### Radiology

A radiologist is a physician who uses imaging methodologies to diagnose and manage patients and provide therapeutic options. Physicians practicing in the field of Radiology specialize in Diagnostic Radiology, Interventional Radiology, or Radiation Oncology. They may certify in a number of subspecialties. The board also certifies in Medical Physics and issues specific certificates within each discipline.

### Disciplines

#### I. Diagnostic Radiology

A diagnostic radiologist uses X-rays, radionuclides, ultrasound, and electromagnetic radiation to diagnose and treat disease. Training required is five years: one year of clinical training, followed by four years of Radiology training. The majority of trainees complete an additional year of training during a fellowship. A diagnostic radiologist who wishes to specialize in one of the six areas listed below must first certify in Diagnostic Radiology.

- Hospice and Palliative Medicine
- Neuroradiology
- Nuclear Radiology
- Pain Medicine
- Pediatric Radiology
- Vascular and Interventional Radiology

#### II. Interventional Radiology and Diagnostic Radiology

An interventional radiologist combines competence in imaging, image-guided minimally invasive procedures and periprocedural patient care to diagnose and treat benign and malignant conditions of the thorax, abdomen, pelvis, and extremities. Therapies include embolization, angioplasty, stent placement, thrombus management, drainage, and ablation, among others. Training includes a minimum of three years of Diagnostic Radiology and two years of Interventional Radiology, leading to primary certification in Interventional Radiology/Diagnostic Radiology. An interventional radiologist also may specialize in one of the subspecialty areas listed below.

- Hospice and Palliative Medicine
- Neuroradiology
- Nuclear Radiology
- Pain Medicine
- Pediatric Radiology

#### III. Radiation Oncology

A radiation oncologist uses ionizing radiation and other modalities to treat malignant and some benign diseases. Radiation oncologists also may use computed tomography (CT) scans, magnetic resonance imaging (MRI), ultrasound, and hyperthermia (heat) as additional interventions to aid in treatment planning and delivery. Training required is five years: one year of general clinical work, followed by four years of dedicated Radiation Oncology training. A radiation oncologist also may specialize in one of the subspecialty areas listed below.

- Hospice and Palliative Medicine
- Pain Medicine

## Subspecialty Descriptions

### Hospice and Palliative Medicine

A radiologist who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to optimize quality of life while addressing the physical, psychological, social, and spiritual needs of both patients and families. One year of fellowship training is required.

### Neuroradiology

A specialist in Neuroradiology diagnoses and treats disorders of the brain, sinuses, spine, spinal cord, neck, and the central nervous system, such as aging and degenerative diseases, seizure disorders, cancer, stroke, cerebrovascular diseases, and trauma. Imaging commonly used in Neuroradiology includes angiography, myelography, interventional techniques, and magnetic resonance imaging (MRI). Two additional years - one year of a fellowship and one year of practice or additional approved training - are required.

### Nuclear Radiology

A specialist in Nuclear Radiology uses the administration of trace amounts of radioactive substances (radionuclides) to provide images and information for making a diagnosis. Imaging that can involve Nuclear Radiology includes positron emission tomography (PET) and single photon emission computed tomography (SPECT) scans. One additional year of fellowship training is required.

### Pain Medicine

A specialist in Pain Medicine provides care for patients with acute, chronic, and/or cancer pain in both inpatient and outpatient settings while coordinating patient care needs with other specialists. One additional year of fellowship training is required.

### Pediatric Radiology

A specialist in Pediatric Radiology uses imaging and interventional procedures related to the diagnosis, care, and management of congenital abnormalities (those present at birth) and diseases particular to infants and children. A pediatric radiologist also treats diseases that begin in childhood and can cause impairments in adulthood. Two additional years - one year of a fellowship and one year of practice or additional approved training - are required.

### Vascular and Interventional Radiology

A specialist in Vascular and Interventional Radiology diagnoses and treats diseases with use of various radiologic imaging technologies, including fluoroscopy, digital radiography, computed tomography (CT), sonography, and magnetic resonance imaging (MRI). Therapies include angioplasty, stent placement, thrombolysis, embolization, biliary, and genitourinary drainages, abscess drainages, and others. Two additional years - one year of a fellowship and one year of practice or additional approved training - are required.

## IV. Medical Physics

The discipline of Medical Physics includes Diagnostic Medical Physics, Nuclear Medical Physics, and Therapeutic Medical Physics. Medical physicists support the diagnosis and treatment of disease through their understanding of the underlying scientific principles of imaging and therapeutic processes. They use this knowledge to perform or supervise technical aspects of procedures to ensure safe and effective delivery of radiation for diagnostic or therapeutic purposes. The type of training varies per specialty area.

### Specialty Areas in Medical Physics

A certified Medical Physicist must specialize in at least one of the following, but may hold separate primary certification in two areas or all three.

#### Diagnostic Medical Physics

A specialist in Diagnostic Medical Physics (1) facilitates appropriate use of X-rays, ultrasound, and magnetic resonance in diagnostic procedures; (2) monitors performance of the equipment associated with diagnostic procedures; and (3) applies standards for the safe use of radiation.

#### Nuclear Medical Physics

A specialist in Nuclear Medical Physics (1) facilitates appropriate use of radionuclides (except those used in sealed sources for therapeutic purposes) for diagnosing and treating disease; (2) monitors performance of the equipment associated with use of radionuclides in diagnosing and treating disease; and (3) applies standards for the safe use of radiation.

#### Therapeutic Medical Physics

A specialist in Therapeutic Medical Physics (1) facilitates the appropriate use of X-rays, gamma rays, electrons and other charged particle beams in the treatment of disease; (2) monitors performance of the equipment associated with therapeutic procedures; and (3) applies standards for the safe use of radiation.



## AMERICAN BOARD OF SURGERY

Approved as an ABMS Member Board in 1937

1617 John F. Kennedy Blvd., Suite 860  
Philadelphia, PA 19103  
(215) 568-4000  
absurgery.org

### Surgery (General Surgery)

A general surgeon has principal expertise in the diagnosis and care of patients with diseases and disorders affecting the abdomen, digestive tract, endocrine system, breast, skin, and blood vessels. A general surgeon is also trained in the treatment of patients who are injured or critically ill, and in the care of pediatric and cancer patients. General surgeons are skilled in the use of minimally invasive techniques and endoscopies. Common conditions treated by general surgeons include hernias, gallstones, appendicitis, breast tumors, thyroid disorders, pancreatitis, bowel obstructions, colon inflammation, and colon cancer. Some general surgeons pursue additional training and specialize in the fields of Pediatric Surgery, Surgical Oncology, Vascular Surgery, Trauma Surgery, Hospice and Palliative Medicine, Transplant Surgery, and others.

**Specialty training required prior to certification:** Five years

### Primary Specialty Certificate

#### Vascular Surgery

A vascular surgeon has expertise in the diagnosis and management of patients with disorders of the arterial, venous, and lymphatic systems, excluding vessels of the brain and the heart. Certified vascular surgeons have significant experience in providing comprehensive care to patients with all types of vascular disease, including diagnosis, medical treatment, and reconstructive vascular surgical and endovascular techniques. Common interventions performed by vascular surgeons include the opening of blocked arteries, repair of veins to improve circulation, treatment of aneurysms (bulges) in the aorta and other blood vessels, and treatment of vascular injuries.

**Specialty training required prior to certification:** Five to seven years

### Subspecialties

To become certified in a particular subspecialty, a physician must be certified by the American Board of Surgery and complete additional training as specified by the board.

#### Complex General Surgical Oncology

A surgeon trained in Complex General Surgical Oncology has expertise in the diagnosis, treatment, and rehabilitation of patients with cancer, especially those with rare, unusual, and/or complex cancers. These surgeons typically work in cancer centers or academic institutions and coordinate patient care with other cancer specialists. They also provide community outreach in cancer prevention and education, as well as lead cancer studies.

#### Hospice and Palliative Medicine

A surgeon who specializes in Hospice and Palliative Medicine provides care to prevent and relieve the suffering experienced by patients with life-limiting illnesses. This specialist works with an interdisciplinary hospice or palliative care team to optimize quality of life while addressing the physical, psychological, social, and spiritual needs of both patient and family.

#### Pediatric Surgery

A pediatric surgeon is a general surgeon who has expertise in the diagnosis and care of premature and newborn infants, children, and adolescents. This care includes the detection and correction of fetal abnormalities, repair of birth defects, treatment of injuries in children and adolescents, and the treatment of pediatric cancer patients, as well as conditions treated in adults by general surgeons, such as appendicitis, hernias, acid reflux, and bowel obstructions.

#### Surgery of the Hand

A surgeon trained in Surgery of the Hand has expertise in the surgical, medical, and rehabilitative care of patients with diseases, injuries, and disorders affecting the hand, wrist, and forearm. Common conditions treated by a hand surgeon include carpal tunnel syndrome, trigger fingers, ganglia (lumps), sports injuries to the hand and wrist, and hand injuries involving fractures, dislocations, and lacerated tendons, nerves and arteries. Hand surgeons may be general surgeons, orthopedic surgeons, or plastic surgeons who have received additional training in this area.

#### Surgical Critical Care

A surgeon trained in Surgical Critical Care has expertise in the diagnosis, treatment, and support of critically ill and injured patients, particularly trauma victims and patients with serious infections and organ failure. In addition, these surgeons coordinate patient care among the patient's primary physician, critical care staff, and other specialists.



## AMERICAN BOARD OF THORACIC SURGERY

*Approved as an ABMS Member Board in 1971*

633 N. Saint Clair Street, Suite 2320  
Chicago, IL 60611  
(312) 202-5900  
abts.org

### Thoracic Surgery (Thoracic and Cardiac Surgery)

Thoracic surgery encompasses the operative, perioperative, and surgical critical care of patients who acquired and congenital pathologic conditions within the chest. Thoracic surgeons treat diseased or injured organs in the chest, including the esophagus (muscular tube that passes food to the stomach), trachea (windpipe), pleura (membranes that cover and protect the lung), mediastinum (area separating the left and right lungs that contains the heart), chest wall, diaphragm (separates the chest from the abdomen), pericardium (membrane covering the heart), heart (including the pericardium, coronary arteries, valves and myocardium), and lungs. The most common diseases requiring thoracic surgery include heart lesions, such as coronary artery disease and valve problems, lung cancer, chest trauma, esophageal cancer, emphysema, and heart and lung transplantation.

**Specialty training required prior to certification:** Six to eight years

#### Subspecialty

To become certified in the following subspecialty, a physician must be certified by the American Board of Thoracic Surgery and complete additional training as specified by the board.

#### Congenital Cardiac Surgery

Congenital Cardiac Surgery refers to the procedures that are performed to repair the many types of heart defects that may be present at birth and can occasionally go undiagnosed into adulthood. These may include patching holes between chambers of the heart, improving blood flow to the lungs, or heart and lung transplantation.



## AMERICAN BOARD OF UROLOGY

*Approved as an ABMS Member Board in 1935*

600 Peter Jefferson Parkway, Suite 150  
Charlottesville, VA 22911  
(434) 979-0059  
abu.org

### Urology

A urologist, also known as a genitourinary surgeon, focuses on diagnosing and treating disorders of the urinary tracts of males and females, and on the reproductive system of males. This specialist manages non-surgical problems such as urinary tract infections and benign prostatic hyperplasia, as well as surgical problems such as the surgical management of cancers, the correction of congenital abnormalities, and correcting stress incontinence.

**Specialty training required prior to certification:** Five years

#### Subspecialty

To become certified in the following subspecialty, a physician must be certified by the American Board of Urology and complete additional training as specified by the board.

#### Female Pelvic Medicine and Reconstructive Surgery

A subspecialist in Female Pelvic Medicine and Reconstructive Surgery is a physician in Obstetrics and Gynecology or Urology who, by virtue of education and training, is prepared to provide consultation and comprehensive management of women with complex benign pelvic conditions, lower urinary tract disorders, and pelvic floor dysfunction. Comprehensive management includes those diagnostic and therapeutic procedures necessary for the total care of the patient with these conditions and complications resulting from them.

#### Pediatric Urology

A pediatric urologist is trained to diagnose, manage, treat, and prevent urologic disorders in children. Such disorders include undescended testes, congenital abnormalities of the genito-urinary tract, underdeveloped genitalia, and difficulties with urination.

## ABMS MEMBER BOARDS

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