

# ABMS GUIDE TO MEDICAL SPECIALTIES 2022



American Board  
of Medical Specialties

*Higher standards. Better care.®*

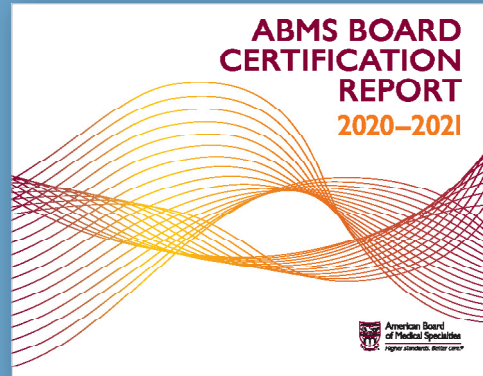


# ABMS PUBLICATIONS

## **ABMS Board Certification Report**

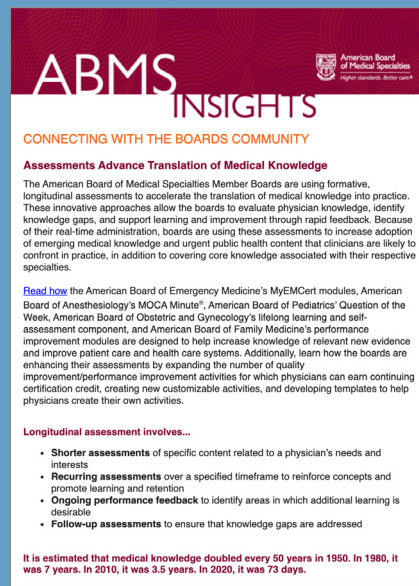
This annual publication provides information about board certification and includes national and state-level data about the specialists certified by the 24 ABMS Member Boards.

[Download a copy from the ABMS website](#)



## **ABMS Insights Newsletter**

Our free quarterly newsletter connects you with the 24 certifying Member Boards of ABMS. Learn about the Member Boards' latest programs, initiatives, and innovations in board certification and hear from guest columnists. [Visit the ABMS website to subscribe.](#)



# ABMS GUIDE TO MEDICAL SPECIALTIES

2022 Edition



**American Board  
of Medical Specialties**

*Higher standards. Better care.®*

353 North Clark Street, Suite 1400  
Chicago, IL 60654 | (312) 436-2600

This booklet offers information about the American Board of Medical Specialties (ABMS) and descriptions of the specialty and subspecialty areas where certification is offered by the ABMS Member Boards.

**A number of links within the booklet help connect to:**

- Particular sections of the booklet
- Specific pages of the ABMS website
- Websites of the ABMS Member Boards and Associate Members

## TABLE OF CONTENTS

A Commitment to Higher Standards for Better Care . . . . .	4
ABMS Member Boards and Associate Members . . . . .	10
<b>Descriptions of the specialties and subspecialties offered by the ABMS Member Boards</b>	
At-a-glance chart . . . . .	12
Allergy and Immunology . . . . .	15
Anesthesiology . . . . .	16
Colon and Rectal Surgery . . . . .	18
Dermatology . . . . .	19
Emergency Medicine . . . . .	20
Family Medicine . . . . .	23
Internal Medicine . . . . .	25
Medical Genetics and Genomics . . . . .	29
Neurological Surgery . . . . .	31
Nuclear Medicine . . . . .	32
Obstetrics and Gynecology . . . . .	33
Ophthalmology . . . . .	35
Orthopaedic Surgery . . . . .	36
Otolaryngology – Head and Neck Surgery . . . . .	38
Pathology . . . . .	40
Pediatrics . . . . .	44
Physical Medicine and Rehabilitation . . . . .	49
Plastic Surgery . . . . .	52
Preventive Medicine . . . . .	53
Psychiatry and Neurology . . . . .	56
Radiology . . . . .	61
Surgery (General Surgery) . . . . .	65
Thoracic Surgery . . . . .	68
Urology . . . . .	69

A commitment to

# HIGHER STANDARDS FOR BETTER CARE



940K+

BOARD CERTIFIED  
SPECIALISTS

88

SUBSPECIALTY  
AREAS

40

SPECIALTY  
AREAS

24

MEMBER  
BOARDS

**1 GOAL:**  
BETTER  
PATIENT CARE

We believe that the best care is provided by physician specialists who are board certified. ABMS is focused on improving the health of individuals, their families, and communities by elevating the discipline of specialty medicine through board certification. Our credential offers verification of a physician's skills and expertise and their commitment to staying up to date in their specialty. It represents a physician's promise to the public for providing high-quality health care.

The process of ABMS board certification involves ongoing assessment to encourage continuous learning. It calls on physicians to demonstrate their knowledge, skill, and professionalism throughout their careers. Physicians committed to this process are respected by their colleagues and their patients for their service, integrity, and leadership. They continually aim higher—always learning, researching and innovating to enhance the care they provide.





Better care is built on

# HIGHER STANDARDS



The higher standards of **board certification** help physicians maintain up-to-date knowledge, enhance quality clinical outcomes, and promote patient safety. They are linked to better patient care in the most chronic medical conditions patients face today such as diabetes, hypertension, asthma, and opioid abuse.



The best care is built on higher standards of practice, supporting physician specialists in striving for professional excellence. Our standards are developed by physicians to be specialty-specific, going beyond those required for state licensure. Physicians who take the extra step to become certified by an ABMS Member Board benefit from a recognized program to help them practice at the top of their profession.

Our community of Member Boards constantly evaluates the standards of specialty practice, comparing them to advances in technology and science, and changes in regulation and delivery systems — and adapts them accordingly. Based on those standards, the board certification process is rigorous, but is flexible enough to evolve and meet the needs of physicians and their varied practices.



Higher standards encourage

# CONTINUOUS LEARNING



Patients and their families place extraordinary trust in their physician specialists. They expect a level of professional excellence concurrent with the advances in specialty medicine. The career-long process characterized by ABMS board certification exemplifies that level of quality and trust.

Higher standards encourage physicians to continue learning as long as they are working in the profession and serving the public. The board certification process includes continuous assessment and activities to further physicians' professional development. Physicians are supported throughout their careers with innovative programs that help early-career physicians further research, connect physicians with emerging scientific studies and practice-relevant continuing medical education, and recognize the work physicians are doing daily to improve health care safety and quality.

When choosing a physician, patients say that board certification matters. They expect that their physicians stay up to date with advances in their specialty and participate in ongoing learning. Surveys show that patients think board certified doctors demonstrate a higher level of expertise and provide a higher quality of care.



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 AND YEAR APPROVED

- 1933** American Board of Dermatology  
American Board of Obstetrics and Gynecology  
American Board of Ophthalmology  
American Board of Otolaryngology–Head and Neck Surgery
- 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)

National organization that evaluates and accredits institutions and organizations offering Continuing Medical Education (CME) for physicians, [accme.org](https://www.accme.org)

### Accreditation Council for Graduate Medical Education (ACGME)

National organization that reviews and accredits graduate medical education (residency and fellowship) programs, and the institutions that sponsor them, in the United States, [acgme.org](https://www.acgme.org)

### American Hospital Association (AHA)

National membership organization representing hospitals, health care networks and their patients and communities to ensure that members' perspectives and needs are heard and addressed in national health policy development, legislative and regulatory debates, and judicial matters, [aha.org](https://www.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](https://www.ama-assn.org)

### Association of American Medical Colleges (AAMC)

National membership organization serving the academic medicine community dedicated to transforming health care through medical education, patient care, medical research, and community collaborations, [aamc.org](https://www.aamc.org)

### Council of Medical Specialty Societies (CMSS)

National membership organization of medical specialty societies representing physicians board certified by ABMS providing an independent forum for discussing issues of medical education and accreditation, health care quality, and professional identity, [cmss.org](https://www.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 Certification is a requirement for IMGs to take Step 3 of the United States Medical Licensing Examination (USMLE), [ecfm.org](https://www.ecfm.org)

### Federation of State Medical Boards (FSMB)

Organization representing the 71 state medical and osteopathic regulatory boards within the United States, its territories and the District of Columbia. FSMB promotes best practices in medical regulation and encourages uniformity in how states license and discipline physicians. It collaborates with NBME to provide the USMLE assessment, [fsmb.org](https://www.fsmb.org)

### National Board of Medical Examiners (NBME)

Assessment organization that, along with FSMB, co-sponsors the USMLE, which is accepted by medical licensing authorities as the standard by which to judge candidates for medical licensure, [nbme.org](https://www.nbme.org)



## DESCRIPTIONS OF THE ABMS MEMBER BOARD SPECIALTY AND SUBSPECIALTY CERTIFICATES

Following this at-a-glance list are the descriptions of each specialty and subspecialty. [Visit the ABMS website for the most current list of specialties and subspecialties.](#) Contact the particular board to learn about certification requirements.

### Allergy and Immunology<sup>†</sup>

#### Anesthesiology

##### Subspecialties

Adult Cardiac Anesthesiology  
Critical Care Medicine  
Hospice and Palliative Medicine  
Neurocritical Care  
Pain Medicine  
Pediatric Anesthesiology  
Sleep Medicine

### Colon and Rectal Surgery<sup>†</sup>

#### Dermatology

##### Subspecialties

Dermatopathology  
Micrographic Dermatologic Surgery  
Pediatric Dermatology

#### Emergency Medicine

##### Subspecialties

Anesthesiology Critical Care Medicine  
Emergency Medical Services  
Hospice and Palliative Medicine  
Internal Medicine–Critical Care Medicine  
Medical Toxicology  
Neurocritical Care  
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

#### Subspecialties

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  
Neurocritical Care  
Pulmonary Disease  
Rheumatology  
Sleep Medicine  
Sports Medicine  
Transplant Hepatology

### Medical Genetics and Genomics

#### Primary Specialty Certificates\*

Clinical Biochemical Genetics  
Clinical Genetics and Genomics (MD)  
Laboratory Genetics and Genomics

#### Subspecialties

Medical Biochemical Genetics  
Molecular Genetic Pathology

### Neurological Surgery

Neurocritical Care

### Nuclear Medicine<sup>†</sup>

### Obstetrics and Gynecology

#### Subspecialties

Complex Family Planning  
Critical Care Medicine  
Female Pelvic Medicine and  
Reconstructive Surgery  
Gynecologic Oncology  
Maternal–Fetal Medicine  
Reproductive Endocrinology and  
Infertility

### Ophthalmology<sup>†</sup>

### Orthopaedic Surgery

#### Subspecialties

Orthopaedic Sports Medicine  
Surgery of the Hand

### Otolaryngology–Head and Neck Surgery

#### Subspecialties

Complex Pediatric Otolaryngology  
Neurotology  
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  
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  
Consultation–Liaison Psychiatry  
Epilepsy  
Forensic Psychiatry  
Geriatric Psychiatry  
Neurocritical Care  
Neurodevelopmental Disabilities  
Neuromuscular Medicine  
Pain Medicine  
Sleep Medicine  
Vascular Neurology

## Radiology

### Primary Specialty Certificates\*

Diagnostic Radiology  
Interventional Radiology and Diagnostic  
Radiology

Medical Physics (Diagnostic, Nuclear,  
Therapeutic)

Radiation Oncology

### Subspecialties

Neuroradiology  
Nuclear Radiology  
Pain Medicine  
Pediatric Radiology

## Surgery

### Primary Specialty Certificates\*

General Surgery  
Vascular Surgery

### Subspecialties

Complex General Surgical Oncology  
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



## 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

[abai.org](http://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.

**Training required prior to certification:** Three years training in Internal Medicine or Pediatrics; 2 years specialty training in Allergy and Immunology.

† No subspecialties

\* Specific disciplines within the specialty where certification is offered



## 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](http://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 provides resuscitation and medical management for patients with critical illnesses and severe injuries.

**Training required prior to certification:** Four years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment as specified by the board.

#### Adult Cardiac Anesthesiology

An anesthesiologist who specializes in Adult Cardiac Anesthesiology has expertise in the imaging, diagnosis, physiology, pharmacology and management of adults with advanced cardiac disease. Their practice includes medical and periprocedural care for patients with disease of the heart and great blood vessels, including diagnostic, surgical, minimally invasive and transcatheter procedures that may require cardiopulmonary bypass or other mechanical circulatory assistance.

#### 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.

#### Neurocritical Care

The medical specialty of Neurocritical Care is devoted to the comprehensive multisystem care of the critically ill patient with neurological diseases and conditions.

#### Pain Medicine

An anesthesiologist who specializes in Pain Medicine diagnoses and treats patients experiencing problems with acute or chronic pain, or pain related to cancer, in both hospital and outpatient settings and coordinates 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  
[abcrs.org](http://abcrs.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). This specialist treats conditions such as hemorrhoids, fissures (painful tears in the anal lining), abscesses and fistulae (infections located around the anus and rectum). A colon and rectal surgeon diagnoses and treats problems of the intestine and colon such as cancer, polyps (precancerous growths), and inflammatory conditions.

**Training required prior to certification:** Five years training in General Surgery; 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](http://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.

**Training required prior to certification:** Four years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment as specified by the board.

#### Dermatopathology

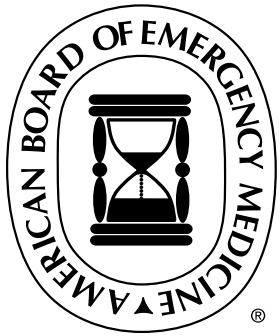
A dermatopathologist is expert in diagnosing and monitoring diseases of the skin, including infectious, immunologic, degenerative, and neoplastic diseases. This entails the examination and interpretation of specially prepared tissue sections, cellular scrapings, and smears of skin lesions by means of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

#### Micrographic Dermatologic Surgery

A dermatologist who specializes in Micrographic Dermatologic Surgery is expert in the management of patients with specific types of high-risk and complex skin cancers that are best suited to treatment with micrographic surgery. The procedure involves the progressive removal and examination of the cancer-containing tissue until only cancer-free tissue remains. This specialist also has expertise in reconstructive procedures to repair the surgical defects after the cancer has been removed.

#### 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](http://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.

**Training required prior to certification:** Three to four years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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.

#### Neurocritical Care

The medical specialty of Neurocritical Care is devoted to the comprehensive multisystem care of the critically ill patient with neurological diseases and conditions.

#### Pain Medicine

An emergency medicine physician who specializes in Pain Medicine diagnoses and treats patients experiencing problems with acute or chronic pain, or pain related to cancer, in both hospital and outpatient settings and coordinates 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

(877) 223-7437

[theabfm.org](http://theabfm.org)

### Family Medicine

Family physicians provide front-line health care that is accessible, high quality, comprehensive and continuous over time for people of all ages, life stages, backgrounds and conditions. They care for individuals and for entire families, from birth through the end of life, including a broad range of preventive care; healthy lifestyle counseling; mental health care; care of acute illnesses; management of chronic diseases, including patients with multi-morbidity. When needed, they also provide referral and coordination of care with other specialists.

**Training required prior to certification:** Three years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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 diagnoses and treats patients experiencing problems with acute or chronic pain, or pain related to cancer; in both hospital and outpatient settings and coordinates 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

## 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](http://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.

**Training required prior to certification:** Three years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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.

### Neurocritical Care

The medical specialty of Neurocritical Care is devoted to the comprehensive multisystem care of the critically ill patient with neurological diseases and conditions.

### 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*

6120 Executive Blvd., Suite 525  
Rockville, MD 20852  
(301) 634-7315  
[abmgg.org](http://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.

**Training required prior to certification:** Two to three years

Certification in one of the following areas of Medical Genetics requires specialized training and assessment as specified by the board.

### Primary Specialty Certificates

#### Clinical Biochemical Genetics

A clinical biochemical geneticist demonstrates competence in directing 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 Genetics and Genomics (MD)

A clinical geneticist demonstrates competence in providing comprehensive diagnostic, management, therapeutic, 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 for hereditary conditions.

## Laboratory Genetics and Genomics

A specialist certified in Laboratory Genetics and Genomics demonstrates competence in directing and interpreting both clinical cytogenetic and molecular genetic analyses relevant to the diagnosis and management of human genetic disease. This specialist acts as a consultant in laboratory diagnoses for a broad range of molecular and chromosomal-based disorders, including both inherited and acquired conditions.

## Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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*

2766 Commerce Drive, NW  
Suite B  
Rochester, MN 55901  
(507) 322-0400  
[abns.org](http://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).

**Training required prior to certification:** Seven years

## Subspecialty

Certification in the following subspecialty requires additional training and assessment as specified by the board.

### Neurocritical Care

The medical specialty of Neurocritical Care is devoted to the comprehensive multisystem care of the critically ill patient with neurological diseases and conditions.



## AMERICAN BOARD OF NUCLEAR MEDICINE

*Approved as an ABMS Member Board in 1971*

1030 Highlands Plaza Drive, Suite 511E  
St. Louis, MO 63110  
(314) 367-2225  
[abnm.org](http://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.

**Training required prior to certification:** Four years



## AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

*Founding Member Board of ABMS*

2828 Routh Street, Suite 700  
Dallas, TX 75201  
(214) 871-1619  
[abog.org](http://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.

**Training required prior to certification:** Four years

#### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment as specified by the board.

##### Complex Family Planning

A subspecialist in Complex Family Planning is a physician who diagnoses and treats women with medically- and surgically-complex conditions. These physicians consult with obstetrics and gynecology specialists and other clinicians to provide an advanced level of care for improving the reproductive health of women facing medically challenging situations.

##### 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

This subspecialist provides consultation and comprehensive management in cases involving 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

A gynecologic oncologist is a subspecialist who provides consultation and comprehensive case management for patients with gynecologic cancer, including overseeing diagnostic and therapeutic procedures, and any resulting complications.

### Maternal-Fetal Medicine

This subspecialist provides consultation and comprehensive case management expertise for patients with pregnancy complications, including the effects of those complications on both the mother and the fetus.

### Reproductive Endocrinology and Infertility

These subspecialists also are trained to evaluate and treat hormonal dysfunctions in females outside of infertility.



## AMERICAN BOARD OF OPHTHALMOLOGY

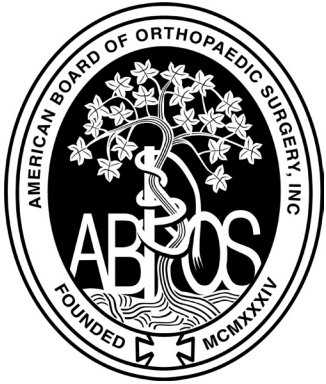
*Founding Member Board of ABMS*

P.O. Box 1887  
Doylestown, PA 18901  
(610) 664-1175  
[abop.org](http://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.

**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](http://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.

**Training required prior to certification:** Five years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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- HEAD AND NECK SURGERY

*Founding Member Board of ABMS*

5615 Kirby Drive, Suite 600  
Houston, TX 77005  
(713) 850-0399  
[aboto.org](http://aboto.org)

### Otolaryngology – Head and Neck Surgery

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.

**Training required prior to certification:** Five years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment as specified by the board.

### Complex Pediatric Otolaryngology

A pediatric otolaryngologist trained in this area has special expertise in caring for infants and children with complex otolaryngologic disorders and/or common otolaryngologic disorders in otherwise complex children. Most practice in pediatric-specific institutions where they are members of interdisciplinary teams to provide optimal care to the patient. Some of the complex problems this specialist evaluates include congenital abnormalities, infectious and inflammatory disorders and inherited and acquired conditions of the head and neck, including hearing loss and other communication impairments. They diagnose and provide both medical and surgical treatment of complex disorders of the aerodigestive tract, ear, nose, sinus, throat, voice, and speech and head and neck.

### 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.

### 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 W. Kennedy Blvd., Suite 690  
Tampa, FL 33609  
(813) 286-2444  
[abpath.org](http://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.

**Training required prior to certification:** Three to four years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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](http://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.

**Training required prior to certification:** Three years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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](http://abpmr.org)

### Physical Medicine and Rehabilitation

A specialist in Physical Medicine and Rehabilitation, also called a physiatrist, evaluates and treats patients with disorders or disabilities in the muscles, bones, and nervous system, including neck or back pain, sports and work injuries, stroke, brain injury, spinal cord injury, spasticity, and any other disability or disorder that affects function. A physiatrist may lead a team of medical professionals to help patients improve their physical, psychological, social, and vocational function, and are dedicated to the whole person, including treating pain, restoring function, and improving quality of life. Treatment modalities may include medications, injections, therapeutic exercise, electrodiagnosis, and any equipment required for daily activities.

**Training required prior to certification:** Four years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment as specified by the board.

#### Brain Injury Medicine

A physiatrist who specializes in Brain Injury Medicine focuses on the prevention of brain injury as well as the 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.

### 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 or chronic pain, or pain related to cancer; 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; manages medical conditions such as pressure ulcers, pain, spasticity, bladder and bowel dysfunction, respiratory health, and mood disorders; and works to help patients return to their communities and vocations.

### Sports Medicine

A physiatrist who specializes in 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](http://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.

**Training required prior to certification:** Six to eight years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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 head and neck cancer and reconstruction, management of maxillofacial trauma, soft tissue repair, and neural surgery. Plastic surgeons also provide all aspects of head, neck and facial aesthetic 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](http://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.

**Training required prior to certification:** Four years

## Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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*

7 Parkway North  
Deerfield, IL 60015  
(847) 229-6500  
[abpn.com](http://abpn.com)

Descriptions for Neurology and related subspecialties  
can be found on page 58.

### Psychiatry

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.

**Training required prior to certification:** Four years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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.

#### Consultation-Liaison Psychiatry

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.

#### 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.

#### Pain Medicine

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

#### 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.

## Neurology

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. The 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.

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.

Training required prior to certification: Five years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment as specified by the board.

#### Brain Injury Medicine

Brain Injury Medicine is a subspecialty focused on the prevention of brain injury, as well as the 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.

#### Neurocritical Care

The medical specialty of Neurocritical Care is devoted to the comprehensive multisystem care of the critically ill patient with neurological diseases and conditions.

#### 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 or chronic pain, or pain related to cancer; in both hospital and outpatient settings and coordinates 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 RADIOLOGY

*Approved as an ABMS Member Board in 1935*

5441 E. Williams Circle  
Tucson, AZ 85711  
(520) 790-2900  
[theabr.org](http://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 areas listed below must first certify in Diagnostic Radiology.

- Neuroradiology
- Nuclear Radiology
- Pain Medicine
- Pediatric 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.

- 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 Pain Medicine.

## Subspecialty Descriptions

### 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 for certification.

### 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 for certification.

### Pain Medicine

A specialist in Pain Medicine diagnoses and treats patients experiencing problems with acute or chronic pain, or pain related to cancer; in both hospital and outpatient settings and coordinates care needs with other specialists.

### 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 for certification.

#### 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](http://absurgery.org)

##### Surgery

A Surgeon uses operative measures to treat disease, injuries, and disorders or repair tissues or organs. Surgeons are responsible for the diagnosis and preoperative, operative, and postoperative management of patient care. During the course of the operation, the surgeon makes important decisions about the patient's health, safety, and welfare, working in cooperation with other members of the surgical team. To acknowledge the specialized activities and interests of individuals wanting to become surgeons, the American Board of Surgery offers primary certification in Surgery and Vascular Surgery. A variety of subspecialty certificates are offered.

##### Primary Specialty Certificates

##### 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.

Training required prior to certification: Five years



### 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.

**Training required prior to certification:** Five to seven years

### Subspecialties

Certification in one of the following subspecialties requires additional training and assessment 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.

#### Pediatric Surgery

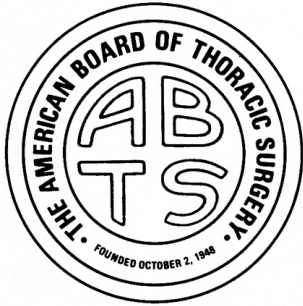
A pediatric surgeon is a general surgeon who has expertise in the diagnosis and care of premature and newborn infants, children, and adolescents. This care includes the detection and correction of fetal abnormalities, repair of birth defects, treatment of injuries in children and adolescents, and the 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, orthopaedic 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 North St. Clair Street, Suite 2150  
Chicago, IL 60611  
(312) 202-5900  
[abts.org](http://abts.org)

### Thoracic Surgery (Thoracic and Cardiac Surgery)

Thoracic surgery encompasses the operative, perioperative, and surgical critical care of patients with 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.

**Training required prior to certification:** Six to nine years

#### Subspecialty

Certification in the following subspecialty requires additional training and assessment 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](http://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.

**Training required prior to certification:** Five years

#### Subspecialties

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

This subspecialist provides consultation and comprehensive management in cases involving 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 genitourinary tract, underdeveloped genitalia, and difficulties with urination.



## American Board of Medical Specialties

*Higher standards. Better care.®*

353 North Clark Street  
Suite 1400, Chicago, IL 60654  
(312) 436-2600 | [abms.org](http://abms.org)

### ABMS MEMBER BOARDS

American Board of Allergy and Immunology

American Board of Anesthesiology

American Board of Colon and Rectal Surgery

American Board of Dermatology

American Board of Emergency Medicine

American Board of Family Medicine

American Board of Internal Medicine

American Board of Medical Genetics and  
Genomics

American Board of Neurological Surgery

American Board of Nuclear Medicine

American Board of Obstetrics and Gynecology

American Board of Ophthalmology

American Board of Orthopaedic Surgery

American Board of Otolaryngology – Head and  
Neck Surgery

American Board of Pathology

American Board of Pediatrics

American Board of Physical Medicine and  
Rehabilitation

American Board of Plastic Surgery

American Board of Preventive Medicine

American Board of Psychiatry and Neurology

American Board of Radiology

American Board of Surgery

American Board of Thoracic Surgery

American Board of Urology

