School of Medicine

Degrees Offered

- MD, Doctor of Medicine
- MD/PhD, Dual Doctor of Medicine and Doctor of Philosophy
- PhD in Biochemistry and Molecular Medicine
- PhD in Cancer Cell Biology
- PhD in Cellular and Integrative Physiology
- MS, PhD in Clinical and Translational Science
- PhD in Immunology and Microbial Pathogenesis
- PhD in Neuroscience
- MS in Athletic Training
- AuD in Audiology
- MS in Exercise Physiology
- MS in Medical Laboratory Science
- MOT in Occupational Therapy
- OTD in Occupational Therapy
- MHS in Pathologists' Assistant
- PhD in Pathophysiology, Rehabilitation, and Performance
- DPT in Physical Therapy
- MHS in Physician Assistant
- MS in Speech-Language Pathology
- PhD in Pharmaceutical and Pharmacological Sciences
- MS in Biomedical Sciences
- MS in Health Sciences

Introduction

The West Virginia University School of Medicine is a part of the Robert C. Byrd Health Sciences Center, a comprehensive academic health system with three regional campuses in the state, a network of affiliated hospitals and practice plans, and a mission of education, research, clinical care, and service to the state. On the main campus in Morgantown, students have access to a full range of research and clinical facilities, including a relatively new, four-story laboratory building and a wide range of advanced research centers. West Virginia University Hospitals feature sophisticated medical technology, including magnetic resonance imagery, lithotripsy, and laser surgery; the campus includes a large and busy tertiary hospital, a Level 1 trauma center, a children’s hospital, cancer center, a psychiatric hospital, primary care and specialty clinics, a rehabilitation hospital, and many other patient care facilities.

Graduate study in the biomedical sciences is in seven PhD graduate programs: biochemistry and molecular biology; cancer cell biology; cellular and integrative physiology; immunology and microbial pathogenesis; neuroscience; pathophysiology, rehabilitation, and performance; and pharmaceutical and pharmacological sciences (a collaboration with the School of Pharmacy). Biomedical sciences graduate students take a common core curriculum the first semester and match with a faculty mentor and select one of the seven PhD training programs after the first semester or by the end of year one. There is also a M.S. degree in the Biomedical Sciences. Core coursework for this M.S. degree is similar to that of the first semester of PhD training in the biomedical sciences.

There is also a combined MD/PhD dual degree option for students interested in pairing medical and basic science education at the doctoral level.

The Division of Professional and Undergraduate Programs offers graduate degrees in the clinical areas of athletic training, audiology, exercise physiology, medical laboratory science, occupational therapy, pathologists' assistant, physical therapy, physician assistant, and speech-language pathology. All graduate and professional programs in the School of Medicine complement other existing programs in health professions offered through other schools (dentistry, nursing, pharmacy and public health) that are part of the Health Sciences Center.

The MS and PhD programs in Clinical and Translational Science, housed within the West Virginia Clinical and Translational Science Institute, foster the training and career development in clinical and translational research.

The MS in Health Sciences is a 12-month, non-thesis master's program that targets students who desire to enhance their competitiveness for entry into advanced professional or graduate programs or who are interested in more in-depth study in biomedical or public health disciplines.
ADMINISTRATION

DEAN
- Clay Marsh - M.D. (West Virginia University School of Medicine)

VICE DEAN FOR MEDICAL EDUCATION & ACADEMIC AFFAIRS
- Norman D. Ferrari III - M.D. (West Virginia University School of Medicine)
  Chief Academic Officer for Physician Education

VICE DEAN-PROFESSIONAL & UNDERGRADUATE PROGRAMS
- MaryBeth Mandich - Ph.D. (West Virginia University School of Medicine)

VICE DEAN FOR CLINICAL SERVICES & CMO WVU HEALTHCARE
- Michael Edmond, MD, MPH - M.D. (West Virginia University School of Medicine)

ASSOCIATE DEANS
- Scott A. Cottrell - Ed.D. (West Virginia University College of Education and Human Services)
  Student Services and Curriculum
- Julie Green
  Faculty & Practice Plan Affairs
- James P. Griffith - M.D. (West Virginia University School of Medicine)
  Charleston Campus Student Services
- Stephen Hoffmann - MD (University of Cincinnati)
  Clinical Programs
- Rosemarie Cannarella Lorenzetti - M.D. (West Virginia University School of Medicine)
  Eastern Campus Student Services
- Linda Nield - MD (Dartmouth School of Medicine)
  MD Degree Admissions
- Becky Stauffer, CPA
  Finance & Chief Administrative Officer
- Manuel Vallejo, MD, DMD - West Virginia University School of Medicine
  Graduate Medical Education and DIO

ASSISTANT DEANS
- Melanie Fisher - MD (Pennsylvania State University)
  Continuing Medical Education
- Azalea Hulbert - PhD (Pennsylvania State University)
  Student Services, Professional & Undergraduate Programs
- Kathy Moffett, MD - (Pennsylvania State University)
  Faculty Affairs
- Dorian Williams - M.D. (West Virginia University School of Medicine)
  Technology & Simulation

ASSOCIATE VICE PRESIDENT FOR HEALTH SCIENCES
- John Linton - PhD. (Kent State University)
  Dean, Charleston Campus
- Richard Thomas - MD (West Virginia University School of Medicine)
  Dean, Eastern Campus

Doctoral Degrees

Policies for the Doctor of Medicine (MD) degree may be found in the MD Degree Student Handbook. This includes but is not limited to policies for evaluation and advancement as outlined in the Policy on Academic and Professional Standards Governing the MD Degree program.

The policies for the Doctor of Philosophy degree in the School of Medicine include program specific requirements, School of Medicine specific requirements and University wide requirements. Students should become familiar with the WVU graduate catalog and the handbooks provided to them by their graduate program and upon entry into graduate school.
Required Research Participation

Because the Doctor of Philosophy is a research degree, students will be expected to be involved in research from the beginning of their programs. Doctoral students participate in research rotations with faculty during the first, and if necessary, the second semester of enrollment. Students may choose a dissertation advisor in the first semester of study or by the end of year one. With the aid of the student’s advisor a dissertation committee is chosen in the second year of enrollment. Students should work with their dissertation advisor to design appropriate pilot studies and with the data identify a dissertation project and appropriate research questions/hypothesis to be tested by the proposed research. All approved research projects must be hypothesis-based, and whenever possible, the research questions should address mechanistic questions that explain biological phenomenon relevant to the field of study.

Research is conducted throughout the doctoral program with the requirement that one manuscript, based on the student’s dissertation research, is accepted for publication in a peer-reviewed scientific journal before defense of PhD dissertation research. Students should strive to present their research findings at a minimum of one national/international meeting annually beginning in the second year of enrollment in the doctoral program.

Directed Research

All preliminary research must be collected under the supervision and approval of the dissertation chair, which is most graduate programs is the student's advisor. The student is expected to engage in directed research under the supervision of the dissertation advisor to learn techniques and collect pilot data that will be the basis of a future dissertation project. Studies to obtain pilot data should be presented to the dissertation committee to demonstrate the student’s competency in research skills and that his/her research ideas and hypotheses are appropriate and justified. This process facilitates progression through the program in a timely and efficient manner. Nevertheless, the dissertation committee may require the student to obtain additional pilot data or research skills prior to approving the research proposal as a dissertation topic. The student’s directed research efforts should be progressing towards approval of a dissertation topic from the members of the dissertation committee, once they have been identified (before the end of the first semester of year two). This research training will provide the student background data/information from which to base a pre-doctoral grant proposal and dissertation topic as part of the requirements for completing the defense of the Dissertation Proposal.

Comprehensive/Qualifying Examination

The comprehensive (qualifying/candidacy) examination is usually given after most formal coursework has been completed and, in general, will test the scientific knowledge pertinent to the student’s chosen Ph.D. training program. The individual graduate programs conduct these examinations at different times and use different formats. Depending on the graduate program, the qualifying exam is scheduled either at the end of year one or year two or in association with the proposal defense.

Requirements of the Dissertation Proposal/Candidacy Examination

Graduate students are admitted to Ph.D. candidacy after successfully defending the Dissertation Proposal. The candidacy examination consists of writing a grant proposal, formatted similar to a National Institutes of Health pre-doctoral grant, and orally defending the dissertation proposal to the student’s dissertation committee. Advancement to candidacy means that in the judgment of the faculty, the doctoral student has an adequate knowledge of their research area, knows how to use academic resources, and has potential to do original independent research. In other words, the student is qualified to complete the doctoral dissertation. No student with a grade point average of less than 3.0 will be eligible to take this examination.

Failure to successfully complete the Comprehensive Examination or the Dissertation Proposal by the end of the third year in graduate school is grounds for dismissal. A student has two attempts to pass the exam. Failure on the first attempt requires the student petition and receive approval from the dissertation committee to retake either exam a second time.

General Dissertation Requirements

The student must complete a dissertation in which they have obtained original data that makes a novel and important contribution to knowledge in the field of study and submit all manuscripts containing these data to peer-reviewed journals. At least one manuscript with the student as first author must be accepted for publication prior to defense of the dissertation. The dissertation must be constructed in a format suitable to the graduate school and the advisor. Preferable formats will include writing the data chapters as if they have been submitted to peer-reviewed journals (including abstract, introduction, methods and materials, results, discussion, and literature cited in each chapter). In addition, the final one to two chapters of the dissertation should include an integrative discussion concerning the total research project and evaluation of hypotheses that were tested.

Completion of the PhD degree requires a written dissertation that is presented orally in front of a public forum and defended in private to the student’s dissertation committee. To pass, the student must receive the approval of 4 of the 5 members on the dissertation committee.

Student Evaluations

Students are formerly evaluated annually by the dissertation committee and the program faculty with respect to courses, research, teaching, professional development, and progress through the program. The student also annually completes an Individual Development Plan that is reviewed by the student’s advisor.
Professional Programs

Policies that apply to graduate programs under the purview of Professional and Undergraduate Programs (MS in Athletic Training, AuD in Audiology, MS in Exercise Physiology, MS in Medical Laboratory Science, MOT and OTD in Occupational Therapy, MHS in Pathologists' Assistant, MHS in Physician Assistant, DPT in Physical Therapy, and MS in Speech-Language Pathology) can be found in the respective program handbook.

Certificate Program

- Clinical and Translational Science (http://catalog.wvu.edu/graduate/graduatecertificates/clinicalandtranslationalscience/)

Accreditation

The MD program within the School of Medicine has specialized accreditation through the Liaison Committee on Medical Education (LCME).

The following list are Residency specialty training programs for MD degree holders include:

Addiction Medicine and Addiction Psychiatry within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and the Residency Review Committee for Psychiatry.

Anesthesiology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Anesthesiology.

Adult cardiothoracic anesthesiology has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and the Residency Review Committee for Anesthesiology.

Allergy/Immunology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and the Residency Review Committee for Allergy/Immunology.

Child and Adolescent Psychiatry within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Psychiatry.

Dermatology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Dermatology.

Emergency Medicine within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Emergency Medicine.

Family Medicine within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with Residency Review Committee for Family Medicine.

Forensic Psychiatry within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Psychiatry.

Hematopathology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Pathology.

Neonatology/Perinatal Medicine Fellowship within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Pediatrics.

Neurology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Neurology.

Neuroradiology Fellowship within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Radiology.

Neurosurgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with Residency Review Committee for Neurological Surgery.

Obstetrics and Gynecology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Obstetrics and Gynecology.

Ophthalmology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Ophthalmology.

Ophthalmic Plastic and Reconstructive Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Ophthalmology.
Orthopedic Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Orthopedic Surgery.

Otolaryngology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Otolaryngology.

Pathology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review for Pathology. In addition there are accredited fellowships in Hematopathology and Cytopathology linked to this core program also accredited by the ACGME.

Pediatrics within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Pediatrics.

Plastic Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Plastic Surgery.

Psychiatry within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Psychiatry.

Radiation Oncology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Radiation Oncology.

Radiology Diagnostic within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Radiology.

Rural Family Medicine (Harper’s Ferry) within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with Residency Review Committee for Family Medicine.

Regional anesthesiology and acute pain medicine within the School of Medicine has accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with the Residency Review Committee for Anesthesiology.

Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Surgery.

Sports Medicine within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Emergency Medicine.

Transitional Year within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with Residency Review Committee for Transitional Year.

Urology within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) with Residency Review Committee for Urology.

Vascular Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Surgery.

Thoracic Surgery within the School of Medicine has specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Thoracic Surgery.

The following programs within the School of Medicine have specialized accreditation through the Accreditation Council for Graduate Medical Education (ACGME) and Residency Review Committee for Internal Medicine: Core Internal Medicine, Cardiovascular Disease, Critical Care Medicine, Gastroenterology, Geriatrics, Endocrinology, Hematology/Oncology, Hospice/Palliative Care, Infectious Diseases, Interventional Cardiology, Nephrology, Pulmonary/Critical Care Medicine, Sleep Medicine and Rheumatology.

Athletic Training (MS)

West Virginia University’s Master of Science in Athletic Training degree program was awarded accreditation by the Commission on Accreditation of Athletic Training Education (CAATE) in April 2020 and will undergo its next comprehensive review in the 2028-2029 academic year. CAATE accreditation allows students to be eligible to sit for the national Board of Certification (BOC) exam and earn the credential of certified athletic trainer.

Audiology (AuD) and Speech-Language Pathology (MS)

The Master of Science (M.S.) in speech-language pathology (residential, distance education) and the Doctor of Audiology (Au.D.) (residential) at West Virginia University is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2200 Research Boulevard, #310, Rockville, MD 20850, 800-498-2071 or 301-296-5700.

Exercise Physiology
The Master of Science (Clinical) program in Exercise Physiology is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) ([https://www.caahep.org/](https://www.caahep.org/)). NAACLS is the premier international agency for accreditation and approval of education programs in the clinical laboratory sciences and related health care professions. (Adapted from www.naacls.org).

**Occupational Therapy (MOT)**

WVU's Master of Occupational Therapy Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 616 EXECUTIVE BOULEVARD, SUITE 200, NORTH BETHSDA MARYLAND 20852-4929. ACOTE’s telephone number c/o AOTA is (301) 652-4414 and its web address is www.acotheonline.org ([https://www.acotheonline.org](https://www.acotheonline.org)). AOTA's Accreditation Review Program, interested parties can obtain information from that Board on their website at: www.acotheonline.org ([https://www.acotheonline.org](https://www.acotheonline.org)). More information about accreditation and approval of education programs in the clinical laboratory sciences and related health care professions can also be found at the AOTA website: [http://www.aota.org](http://www.aota.org) ([https://www.aota.org](https://www.aota.org)).

**Note:** A felony conviction may impact a graduate’s ability to take the NBCOT (National Board for Certification in Occupational Therapy, Inc.) examination and/or obtain a state license. For further information on NBCOT’s Character Review Program, interested parties can obtain information from that Board on their website at: [http://www.nbcot.org](http://www.nbcot.org).

**Occupational Therapy (OTD)**

The entry-level occupational therapy doctoral degree program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (ACOTE), located at 616 EXECUTIVE BOULEVARD, SUITE 200, NORTH BETHSDA MARYLAND 20852-4929. ACOTE’s telephone number c/o AOTA is (301) 652-AOTA and its web address is www.acotheonline.org ([https://www.acotheonline.org](https://www.acotheonline.org)). Graduates of the program will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). In addition, all states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT Certification Examination. Note that a felony conviction may interfere with a graduate’s eligibility to sit for the NBCOT certification examination or attain state licensure.

**Pathologists' Assistant (MHS)**

The West Virginia University Pathologists' Assistant Program is accredited through October 31, 2031 by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 River Road, Suite 720, Rosemont, IL 60018, (773) 714-8880, www.naacls.org ([https://www.naacls.org](https://www.naacls.org)). NAACLS is the premier international agency for accreditation of Allied Health Education Programs (CAAHEP) ([https://www.caahep.org](https://www.caahep.org)).
accreditation and approval of education programs in the clinical laboratory sciences and related health care professions. (Adapted from www.naacls.org)

Physical Therapy (DPT)
The Doctor of Physical Therapy Program at West Virginia University is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave. Suite 100, Alexandria, Virginia 22305-3085; telephone 703-706-3245; email accreditation@apta.org; website: http://capteonline.org (https://www.naacls.org).

Physician Assistant (MHS)
The ARC-PA has granted Accreditation-Provisional status to the West Virginia University Physician Assistant Program sponsored by West Virginia University. Accreditation-Provisional is an accreditation status granted when the plans and resource allocation, if fully implemented as planned, of a proposed program that has not yet enrolled students appear to demonstrate the program's ability to meet the ARC-PA Standards or when a program holding Accreditation-Provisional status appears to demonstrate continued progress in complying with the Standards as it prepares for the graduation of the first class (cohort) of students. Accreditation-Provisional does not ensure any subsequent accreditation status. It is limited to no more than five years from matriculation of the first class. The program’s accreditation history can be viewed on the ARC-PA website (https://www.arc-pa.org/accreditation-history-wv-university%2F&data=05%7C7C01%7Cazalea.hulbert@hsc.wvu.edu).