

School of Medicine

Degrees Offered

- B.A. in Human Performance and Health
- B.S. in Biomedical Laboratory Diagnostics
- B.S. in Communication Sciences and Disorders
- B.S. in Exercise Physiology
- B.S. in Health Informatics and Information Management
- B.S. in Immunology and Medical Microbiology

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 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 Morgantown campus, students have access to a full range of research and clinical facilities, including a new laboratory building and a wide range of advanced research centers. West Virginia University Hospitals includes sophisticated medical technology, including magnetic resonance imagery, lithotripsy, and laser surgery; the campus includes a large and busy tertiary hospital, a trauma center, children's hospital, cancer center, a psychiatric hospital, primary care and specialty clinics, a rehabilitation hospital and many other patient care facilities.

The undergraduate degrees in the School of Medicine are in the Professional Programs division of the school. At the undergraduate level, BS degrees are offered in Biomedical Laboratory Diagnostics, with tracks in Medical Laboratory Science and Histotechnology; Communication Sciences and Disorders; Exercise Physiology; Health Informatics and Information Management; and Immunology and Medical Microbiology. Minors are also offered in Communication Sciences; Healthcare Data Analytics; and Molecular Medicine. The undergraduate experience is enhanced by the academic health sciences environment as described above and in most cases involves practical work in a health care setting in addition to classroom and laboratory experiences. Many students also have the opportunity to pursue undergraduate research experiences.

The undergraduate degree programs in the School of Medicine are enhanced by the presence of robust biomedical sciences graduate programs and other graduate and professional programs, including the MD degree program. The Professional Programs division offers the following Master's degrees: Athletic Training (MS); Exercise Physiology (MS); Medical Laboratory Science (MS); Occupational Therapy (MOT); Pathologists' Assistant (MHS); Physician Assistant Studies (MHS); and Speech-Language Pathology. The division also offers the following doctoral degrees: Audiology (AuD); Occupational Therapy (OTD); Pathophysiology, Rehabilitation, and Performance (PhD); and Physical Therapy (DPT).

Undergraduate students may choose to enter the workforce or to continue their study in a graduate or professional program. These programs often have competitive admission requirements for which the undergraduate degree programs provide an excellent foundation.

ADMINISTRATION

DEAN

- Clay Marsh - MD (West Virginia University School of Medicine)

VICE DEAN-MEDICAL EDUCATION/ACADEMIC AFFAIRS

- Norman D. Ferrari III - MD (West Virginia University School of Medicine)
Chief Academic Officer for Physician Education

VICE DEAN FOR PROFESSIONAL & UNDERGRADUATE PROGRAMS

- MaryBeth Mandich - PhD (West Virginia University)

VICE DEAN FOR CLINICAL SERVICES & CMO, WVU HEALTHCARE

- Michael Edmond - MD (West Virginia University School of Medicine), MPH

ASSOCIATE DEANS

- Scott A. Cottrell - EdD (West Virginia University, College of Education & Human Services)
Student Services & Curriculum, Medical Education
- Julie Green
Faculty & Practice Plan Affairs
- James P. Griffith - MD (West Virginia University School of Medicine)
Charleston Campus Student Services
- Stephen Hoffmann - MD (University of Cincinnati)

Clinical Programs

- Rosemarie Cannarella Lorenzetti - MD (West Virginia University School of Medicine)
Eastern Campus Student Services
- Kathy Moffett - MD (West Virginia University School of Medicine)
Faculty 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
- Dorian Williams - MD (West Virginia University School of Medicine)
Technology & Simulation

ASSOCIATE VICE PRESIDENT FOR HEALTH SCIENCE

- John Linton - PhD (Kent State University)
Dean, Charleston Campus
- Richard Thomas - MD (West Virginia University School of Medicine)
Dean, Eastern Campus

Major Learning Outcomes

BACHELOR OF SCIENCE (BS) IN BIOMEDICAL LABORATORY DIAGNOSTICS

Upon graduation, students will:

- Demonstrate entry level knowledge for a laboratory medicine professional.
- Perform accurate and reliable qualitative and quantitative test procedures using sophisticated instrumentation.
- Model the professional traits of a laboratory medicine practitioner in a workplace setting (e.g., during clinical rotations).
- Communicate effectively in written and oral forms appropriate to a laboratory medicine professional.

BACHELOR OF SCIENCE (BS) IN COMMUNICATION SCIENCES AND DISORDERS

The Department of Communication Sciences and Disorders is committed to the preparation of students interested in working with individuals with communication disorders. Upon completion of the Bachelor of Science in Communication Sciences and Disorders at West Virginia University, the student will be able to:

- Explain acoustic, psychoacoustic, and neurological principles of speech, language, and hearing as they relate to the anatomy of the speech, language, and hearing systems.
- Transcribe and analyze speech, language, and hearing across the lifespan to classify capabilities as typical or atypical.
- Identify basic concepts related to evaluation and treatment of communication and swallowing disorders during clinical observations.
- Communicate information regarding communication disorders in oral and written format while incorporating principles of evidence-based practice.

BACHELOR OF SCIENCE (BS) IN EXERCISE PHYSIOLOGY

The Bachelor of Science program in exercise physiology is a preparatory program for graduate or professional school in areas such as exercise physiology, physical therapy, or medicine. The undergraduate program includes courses in science, anatomy, physiology, nutrition, and business, and hands-on laboratories in exercise physiology, and exercise instruction. Students will also complete a 180 hr. clinical internship or research in their senior year. Select senior students can take a hands-on cadaver dissection gross anatomy laboratory to further enhance their ability to compete for admission to Physician Assistant, Physical Therapy, Medicine or other Rehabilitative Science graduate programs.

Students will be able to:

- Critically evaluate scientific information and apply to exercise physiology related concepts.
- Integrate foundational science coursework and its application in exercise physiology.

- Use critical reasoning and evidence to methodically and systematically problem solve and develop interventions in exercise physiology.
- Perform and clinically apply health and fitness screening as well as exercise testing and prescription for healthy and chronic disease populations.
- Perform laboratory techniques, analysis and interpretation of data, and application to practice within the discipline.
- Apply professional competencies to discipline related practice, including effectively communicating scientific and clinical information to lay audiences.

BACHELOR OF SCIENCE (BS) IN HEALTH INFORMATICS AND INFORMATION MANAGEMENT

Students completing the degree will be able to:

Data Structure, Content, and Information Governance

- Ensure data integrity, privacy, and security of health record content.

Information Protection: Access, Disclosure, Archival, Privacy and Security

- Recommend privacy and security strategies for health information.

Informatics, Analytics, and Data Use

- Conduct research and perform data analysis on healthcare issues.
- Present findings using data visualization for decision-making.

Revenue Cycle Management

- Code health records using ICD-10-CM, ICD-10-PCS, and CPT classifications in accordance with official guidelines and policies.
- Verify that documentation in the health record supports the diagnosis and reflects the patient's prognosis, clinical findings, and discharge status.
- Evaluate revenue cycle processes and reimbursement methodologies.

Health Law and Compliance

- Comply with healthcare legal processes, policy, and compliance, using an ethical perspective.
- Analyze components of risk management, quality improvement, and health policy.

Organizational Management and Leadership

- Oversee fundamental and change leadership activities, such as performance improvement, financial processes, training needs, and project management.

Professional Preparedness

- Engage in 400 hours of unique, customized, professional practice experience.
- Create a professional portfolio.

BACHELOR OF SCIENCE (BS) IN IMMUNOLOGY AND MEDICAL MICROBIOLOGY

The Bachelor of Science degree in Immunology and Medical Microbiology will prepare students from diverse backgrounds to serve as professionals that are knowledgeable about the immune system of humans and other mammals, how the immune system functions, and the consequences of its malfunction on the health of the host. Knowledge of the immune system will be fully integrated with an excellent understanding of the diversity of microorganisms that cause disease in humans and other mammals and mechanisms of disease pathogenesis. Graduates will possess the laboratory skills and knowledge needed to assess the functional status of the immune system and to safely cultivate and identify microorganisms that cause disease in mammals. Graduates will be qualified to pursue several professional career paths in private industry, state and federal government, and academic institutions. The degree can also provide a strong foundation to progress to advanced studies including medical school, dental school, and graduate school.

Students will:

- Summarize and apply the basic concepts of microbiology and microbial pathogenesis.
- Summarize and apply the basic concepts of immunology and immunological disorders.
- Demonstrate expertise in the laboratory skills and knowledge needed to assess the functional status of the immune system.
- Demonstrate expertise in the laboratory skills and knowledge needed to safely cultivate and identify microorganisms that cause disease in mammals.
- Critically interpret microbiological and immunological assay data.
- Discuss, critique, and interpret primary literature in microbiology, microbial pathogenesis, and immunology.

- Demonstrate oral, written, and visual communication skills that result in clear and organized dissemination of material at a level appropriate for the audience.

School of Medicine Minors

- Communication Sciences (http://catalog.wvu.edu/undergraduate/minors/communication_sciences/)
- Disability Studies (http://catalog.wvu.edu/undergraduate/minors/disability_studies/)
- Healthcare Data Analytics (http://catalog.wvu.edu/undergraduate/minors/healthcare_data_analytics/)
- Molecular Medicine (http://catalog.wvu.edu/undergraduate/minors/molecular_medicine/)

Accreditation

BIOMEDICAL LABORATORY DIAGNOSTICS

The WVU Biomedical Laboratory Diagnostics tracks in Medical Laboratory Science and Histotechnology are accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018, and (773) 714-8880. Graduates of the Medical Laboratory Science and Histotechnology programs are eligible for certification by the Board of Certification of the American Society for Clinical Pathology (ASCP).

EXERCISE PHYSIOLOGY

The Bachelor of Science and Master of Science (Clinical) programs in Exercise Physiology are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

HEALTH INFORMATICS AND INFORMATION MANAGEMENT

The Health Information Management accreditor of West Virginia University is the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). The College's accreditation for Baccalaureate degree in Health Informatics and Information Management has been reaffirmed through 2029-2030. All inquiries about the program's accreditation status should be directed by mail to CAHIIM, 200 East Randolph Street, Suite 5100, Chicago, IL, 60601; by phone at (312) 235-3255; or by email at info@cahiim.org.