

Marshall University
Joan C. Edwards School of Medicine
ACADEMIC BULLETIN
MD and MD/PhD programs
2021-2022



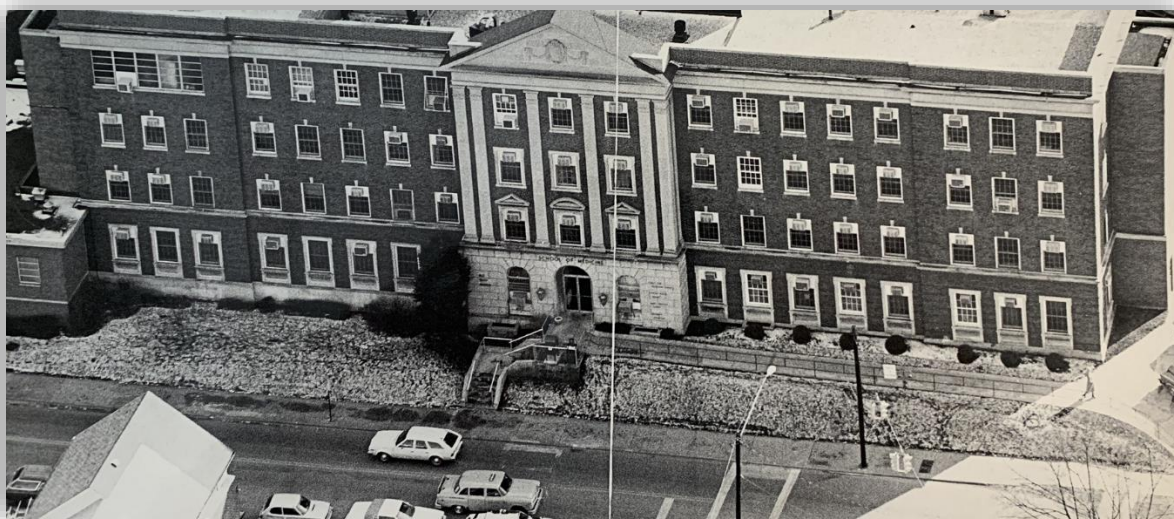
TABLE OF CONTENTS

I. INTRODUCTION AND OVERVIEW	4
About This Academic Bulletin	5
History of the School of Medicine	6
Mission and Vision Statements	8
Diversity Statement	9
Accreditation Statements	10
Academic & Clinical Administration	11
Basic Science Chairs	13
Clinical Department Chairs	13
Degree Programs	14
Medical School Facilities	17
Affiliated Medical Facilities	19
II. ADMISSIONS	21
Admissions Committee	22
Subcommittees/Standing Workgroups	23
Prerequisites	24
Application Requirements	25
Selection Criteria	26
Technical Standards	28
Admissions Committee Review	30
Application & Acceptance Protocols for Applicants	32
Important Deadlines and Timeline for the Admission Cycle	34
Pathway Programs	35
Transfer Students	41
III. FINANCIAL AID	43
Financial Planning	44
Financial Aid Links	46
Financial Literacy & Debt Management Tools	46
Scholarship Links	47
IV. MEDICAL EDUCATION	48
Office of Medical Education	49
Graduation Requirements for the Doctor of Medicine Degree	50
Institutional Learning Objectives	52
General Standards of Professionalism	53
Academic Calendar	54
Curriculum at a Glance	57
MD Curriculum Overview	58
MD Program Grading and Assessment	78
V. MD/PHD PROGRAM	82
Biomedical Research, MD/PhD Program Overview	83
MD/PhD Prerequisites	83
MD/PhD Application	84
MD/PhD Funding	85
MD/PhD Academic Calendar	85
MD/PhD Curriculum Overview	86
MD/PhD Degree Requirements	87
MD/PhD Course Descriptions	89

VI. STUDENT RESOURCES	92
Office of Student Affairs	93
Learning Communities	94
Office of Academic Support	100
Medical Student Career Development	101
MS 1 and MS 2 Student Mentoring Program	102
Study Space	103
Medical Student Health and Wellness	108
Links to General Student Resources	111
VII. POLICIES	113
Policy Links	114

I. INTRODUCTION AND OVERVIEW

- ④ About This Academic Bulletin
- ④ History of the School of Medicine
- ④ Mission & Vision Statement
- ④ Diversity Statement
- ④ Accreditation
- ④ Organizational Chart
- ④ Administration Contacts
- ④ Degree Programs
- ④ Affiliated Hospitals and Facilities



About This Academic Bulletin

The purpose of this academic bulletin is to provide general information for the Doctor of Medicine degree program. The provisions of this document do not constitute a contract, expressed or implied, between any applicant, student or faculty member and the Marshall University Joan C. Edwards School of Medicine (MUJCESOM).

MUJCESOM reserves the right to change any of the provisions, schedules, programs, courses, rules, regulations or fees. Any changes become effective whenever appropriate authorities so determine and may apply to both prospective students and currently enrolled students. All policies are required to be consistent with the policies set forth by the Board of Regents for Marshall University.

Students are individually responsible for meeting all requirements as determined by Marshall University Joan C. Edwards School of Medicine.

This academic bulletin is maintained by the MUJCESOM Office of Admissions in collaboration with the Academic Bulletin Committee.

Academic Bulletin date: March 24, 2021

History of the School of Medicine

THE EARLY YEARS

The Marshall University School of Medicine was established in the 1970s through federal legislation, which authorized the creation of five new medical schools in conjunction with existing VA hospitals. The West Virginia Legislature appropriated funding for the school in 1975, the Liaison Committee on Medical Education granted provisional accreditation in 1977, and the first class entered in January 1978 and graduated in 1981.

In its early years, the school focused its most intense energy on building a strong faculty and a sound academic program, laying a foundation in biomedical research and establishing the partnerships that would be integral to its success as a community-based medical school. The school also developed primary care and rural health programs that would become cornerstones for its growth in the coming years.

THE 1980s AND 1990s

From the mid-1980s to the mid-1990s, the medical school greatly increased the scope and depth of its clinical services as well as saw steady growth in the development of its research program. Marshall's research efforts received a strong boost from the National Science Foundation's Experimental Program to Stimulate Competitive Research (EPSCOR). The EPSCOR grant allowed the school to establish a research program in cell regulatory biology, facilitating interdisciplinary research in the regulation of cellular function and establishing state-of-the-art facilities for molecular biology and cell culture.

Despite having one of the nation's smallest biomedical science (BMS) programs, Marshall's per capita extramural funding for BMS faculty in 1996 ranked above the 30th percentile for all U.S. medical schools.

Marshall received stand-alone Ph.D.-granting status for its Biomedical Sciences Graduate Program in 1992, and it created a graduate program in forensic science that quickly gained national prominence.

In addition, the school developed and piloted several innovative education programs that focused on stimulating students' interest in rural practice as well as an accelerated family practice residency.

NEW FACILITIES WITH ROOM TO GROW

By the mid-1990s, the need for new and expanded clinical space as well as new research and preclinical teaching space became clear. Beginning in 1998 and the decade that followed, Marshall saw the completion of five new clinical, educational and research buildings with an investment of more than \$120 million—the VA Research addition, the Marshall University Medical Center, the Robert C. Byrd Biotechnology Science Center, the Erma Ora Byrd Clinical Center and the Edwards Comprehensive Cancer Center.

The new facilities helped the school respond to new educational requirements, accommodating increased faculty size and a dedicated clinical skills lab. Departments of Orthopaedic Surgery, Neuroscience and Ophthalmology were added. With modern medical advances and the easing of the state's acute shortage of primary care physicians, Marshall's mission broadened to enhancing retention of both primary care and subspecialty physicians as well as improving distribution. The new resources supported the school's maturation process by allowing it to increase its class size.

Two additional facilities were constructed in 2011—the Charles H. McKown, Jr., M.D., Translational Genomic Research Institute and a Rural Health and Clinical Education Center, both of which further increased the school's capacity for research and education. Clinical training opportunities have greatly expanded through the acquisition of several local practices, buildings and most recently, through the purchase of a 51,000 square foot, three-story office building, which is being converted to medical offices.

Under the direction of Joseph I. Shapiro, M.D., the school's fifth dean, Marshall has continued to build on its mission of educating a physician workforce for the Appalachian region. In 2015, the school enrolled its first class into the newly created BS/MD program for West Virginia students, which allows them to complete their bachelor's and medical degrees in just seven years. A new partnership with St George's University of London Medical School was also established, paving the way for global clinical and research opportunities for students at both schools. Graduate Medical Education also expanded in recent years to include residencies in psychiatry and dentistry and fellowships in sports medicine (family and community health), nephrology and hematology-oncology.

Consistency in mission and innovation in execution characterize the medical school's history. Its small size and community integrated structure have helped make the school uncommonly responsive to the region's educational and health care needs.



Mission and Vision Statements

MISSION

The Marshall University Joan C. Edwards School of Medicine is a community-based, Veterans Affairs affiliated medical school dedicated to providing high quality medical education and postgraduate training programs to foster a skilled physician workforce to meet the unique healthcare needs of West Virginia and Central Appalachia. The School of Medicine will admit capable, qualified, and properly motivated applicants who upon graduation possess a high probability of meeting the health care needs of our state and region. Equally important and to add value to our learning environment is the infusion of students from a variety of cultural and ethnic backgrounds to ensure that our students are prepared for life and practice in an expanded environment. Therefore, qualified students from groups currently underrepresented in medicine, students from rural areas and women are especially encouraged to apply.

VISION

To be known for excellence in teaching, patient care and scientific contributions that enhance the health care communities in the region.



Diversity Statement

The Office of Diversity is committed to devising strategies and overseeing initiatives within the School of Medicine that will shape worldviews and foster a mindset open to different perspectives, new ideas and innovative solutions. We work to create a welcoming and inclusive environment where differences are respected and valued.

We will continuously make every effort to provide support and assist students in successfully completing their medical education. We strive for an inclusive, supportive environment, empowering individuals to achieve their academic objectives and increase their intercultural competencies and knowledge of social justice issues.

Everyone has a vital role and an important stake in diversity work, whether it is working together to eliminate health disparities or self-educating to become more culturally competent. We will continue to collaborate within and across different communities to reduce inequalities and to create an environment that will facilitate the academic achievement of racial and ethnic populations that are underrepresented in the medical profession.

More information is available on the webpage for the [Office of Diversity and Inclusion](#).



Accreditation Statements

The programs of the Marshall University Joan C. Edwards School of Medicine are accredited by the following agencies:

Medical Doctor (MD) Degree

Liaison Committee on Medical Education (www.lcme.org)

Master of Science (MS) / Doctor of Philosophy (PhD) in Biomedical Sciences

Higher Learning Commission / North Central Association (www.ncahlc.org)

Residency & Fellowship Programs

Accreditation Council for Graduate Medical Education (www.acgme.org)

- Family Practice Residency
 - Addiction Medicine Fellowship
 - Geriatric Medicine Fellowship
 - Sports Medicine Fellowship
- Internal Medicine Residency
 - Cardiology Fellowship
 - Interventional Cardiology Fellowship
 - Endocrinology Fellowship
 - Hematology-Oncology Fellowship
 - Nephrology Fellowship
 - Pulmonary/Critical Care Fellowship
- Medicine / Pediatrics Residency
- Neurology Residency
- Obstetrics & Gynecology Residency
- Orthopaedic Surgery Residency
- Pediatrics Residency
 - Pediatric Hospital Medicine Fellowship
- Psychiatry Residency
 - Child and Adolescent Psychiatry Fellowship
 - Geriatric Psychiatry Fellowship
- Surgery Residency

Commission on Dental Accreditation (CODA) - (www.ada.org/en/coda)

General Practice Residency - Dental

Continuing Medical Education

Accreditation Council for Continuing Medical Education (www.accme.org)

Forensic Science Program & Laboratory

Master of Science by American Academy of Forensic Sciences (www.aafs.org)

DNA Laboratory by Forensic Quality Services International as [ISO 17025](#)

Animal Resources Facility

Association for the Assessment and Accreditation of Laboratory Animal Care - [AAALAC](#)

Academic & Clinical Administration

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Urology	Lawrence M. Wyner, MD	(304) 691-1900 wyner@marshall.edu

Degree Programs

DOCTOR OF MEDICINE (MD)

Contact: 304-691-1738 | [Website](#)

Marshall offers medical students innovative, hands-on learning in a family-like atmosphere committed to excellence in medical education, research and patient care. Marshall medical students gain valuable experiences outside the realm of the traditional classroom that gives students a broad understanding of medicine and consistently match to high-profile residency programs.

COMBINED DOCTOR OF MEDICINE AND DOCTOR OF PHILOSOPHY (MD/PhD)

Contact: 304-691-1738 or 304-691-1841 | [Website](#)

This program blends the discovery of new knowledge with clinical medicine. Most MD/PhD graduates work as physician-scientists at medical schools, conducting disease-related research and applying the results to the treatment of patients. Students learn a unique perspective on both the basic science and clinical science behind disease.

The curriculum takes seven to eight years to complete. Students first take years one and two of medical school. During that time, they complete research lab rotations. After passing the USMLE Step 1 exam at the end of year two, students begin their PhD coursework and research. This takes three to four years. After completing the PhD requirements, students then complete years three and four of medical school.

Students in this program will be involved in course work, research activities and clinical training for the entire calendar year for the duration of the program. While the first year of medical school begins in August, the MD/PhD program begins the first week of July with orientation followed by a month-long research lab rotation. Students are also required to submit an MD/PhD fellowship application before the end of the third year of the program.

Two applicants will be admitted each academic year; the admission cycle follows that of the traditional MD program.

Applicants who are admitted to the MD/PhD program will earn the following:

- A tuition waiver for the entire length of the program
- A yearly stipend equivalent to the PhD student stipend (currently \$25,000) for all years of the program. The stipend and tuition are considered in-house, no interest educational loans that will be forgiven by completion of the MD/PhD dual degree program. If a student chooses to leave the MD/PhD program, he/she will have to reimburse the School of Medicine for the stipend and tuition benefits received.

COMBINED BACHELOR OF SCIENCE/DOCTOR OF MEDICINE (BS/MD)

Contact: 304-691-1182 | [Website](#)

This program is designed for highly motivated West Virginia high school students who have achieved the following criteria during their high school careers:

- Minimum composite ACT of 30 or an SAT composite equivalent 1390 minimum from a single test date, and a minimum ACT math score of 27 (SAT equivalent 630 minimum), from the same test date as the qualifying composite score.
- Cumulative GPA of 3.75 on a 4.0 scale
- Three letters of reference/recommendation, at least two of which must be from high school teachers (from science, math or AP classes) who have had the applicant in class and are familiar with the applicant's academic performance.
- Situational judgment test results in the format established each year for the program.
- Finalists will be required to participate in interviews.

The program allows students to complete the requirements for both the Bachelor of Science and Doctor of Medicine program in an accelerated seven-year program with:

- No MCAT required
- Guaranteed acceptance into medical school upon successful completion of program requirements
- Tuition waiver for the medical school portion of the program
- Option to participate in honors programs

DOCTOR OF PHILOSOPHY IN BIOMEDICAL RESEARCH (PhD)

Contact: 304-696-7399 | [Website](#)

The PhD Program in Biomedical Sciences takes an interdisciplinary approach to and develops a broad basis in, biomedical research. As part of the interdisciplinary approach, PhD students in the MUJCESOM graduate program will cross departmental boundaries and conduct research with a faculty mentor in one of the following areas:

- | | |
|---|-----------------------------|
| • Obesity related disorders | • Pulmonary disease |
| • Epithelial transport | • Addiction Neurobiology |
| • Regulation of intestinal sodium, glucose, amino acid absorption | • Diabetes |
| • Regulation of renal Na-K-ATPase | • Hypertension |
| • Intestinal inflammation | • Bone growth abnormalities |
| • Intestinal Microbiome | • Lipid homeostasis |
| • Toxicology | • Neurosciences |
| • Breast cancer | • Cardiovascular Disorders |
| | • Cell Biology |

COMBINED BACHELOR OF SCIENCE/DOCTOR OF PHILOSOPHY (BS/PhD)

Contact: 304-696-7399 | [Website](#)

The combined B.S. to Ph.D. Biomedical Research program was developed between Joan C. Edward School of Medicine Office of Research and Graduate Education and Marshall University College of Science to attract the best and brightest high school students interested in a career in biomedical research to Marshall University. In this accelerated format, students have the opportunity to earn both degrees in just seven years, rather than the traditional eight to nine years it takes to complete them separately.

MASTER OF SCIENCE IN CLINICAL AND TRANSLATIONAL SCIENCE (MS)

Contact: 304-696-7279 | [Website](#)

Translational science is the application of the results from the basic research on cells and animals to the treatment of patients. With rapid developments in technology and genomics, this translational science is changing the advancement of medical care so that prevention and treatment of disease is specific to each individual patient. This program in Clinical and Translational Research equips students with the information and training to translate basic advances into improved patient care that will enhance the quality of life for patients in the Appalachian region, particularly southern West Virginia. Graduates of Marshall's CTS MS program will be able to lead all aspects of clinical trials of new drugs and procedures. This program provides an emphasis on conducting clinical trials specific to the rural regions of West Virginia.

MASTER OF SCIENCE IN BIOMEDICAL RESEARCH WITH AN AREA OF EMPHASIS IN MEDICAL SCIENCE (MS)

Contact: 304-696-7322 | [Website](#)

Marshall University Joan C. Edwards School of Medicine (MUJCESOM) provides a rigorous, two-year, non-thesis degree in Biomedical Research that offers the ideal option for students who want to strengthen their academic record and enhance their science foundation prior to medical or other health-related professional schools. Commonly referred to as the Medical Sciences Program, the objective is to build a strong application for medical school to increase the chance of acceptance. The curriculum in the Medical Sciences degree program consists of much of the same material taught to the first- and second-year medical students at MUJCESOM.

MASTER OF SCIENCE IN BIOMEDICAL RESEARCH (MS)

Phone: 304-696-7399 | [Website](#)

Students in the Biomedical Research M.S. program will take an interdisciplinary approach to, and develop a broad basis in, biomedical research. Students will focus on biomedical and translational research that is important for the health care of West Virginia and Central Appalachia. This region has one of the highest rates in the nation of obesity, heart disease, smoking, diabetes, and death from drugs, prematurity, cardiovascular, cancer, and from an environmental standpoint, pollution. These concerns, such as obesity and its many complications, are also relevant to global health issues.

PHYSICIAN ASSISTANT PROGRAM (MMS)

Phone: 304-696-6035 | [Website](#)

The Physician Assistant Program in the Marshall University Joan C. Edwards School of Medicine offers a Master of Medical Science Physician Assistant Degree. This program will prepare students to practice as Physician Assistants in primary and specialty care across the life span, to patients in culturally diverse and rural settings. The program will provide students with the tools and skills to support lifelong learning, to apply evidence-based medicine in practice and to work in inter-professional teams.

Medical School Facilities

MARSHALL UNIVERSITY MEDICAL CENTER

1600 Medical Center Drive
Huntington, WV 25701
Phone: (304) 691-1600
Fax: (304) 691-1726

A technologically advanced focal point for the clinical teaching, outreach and service programs of the Joan C. Edwards School of Medicine.



ROBERT W. COON EDUCATION BUILDING

1542 Spring Valley Drive
Huntington, WV 25704
Phone: (304) 696-7300
Fax: (304) 696-7272

School of Medicine Department of Anatomy classrooms and facilities, faculty and research laboratories, Human Gift Registry and the Physician Assistant Program.



EDWARDS COMPREHENSIVE CANCER CENTER

1400 Hal Greer Boulevard
Huntington, WV 25701
Phone: (304) 399-6500

A joint project of the School of Medicine, Cabell Huntington Hospital and the Edwards Foundation, this three-story, 70,000-square-foot center offers the specialized expertise and equipment needed to provide advanced diagnostic and treatment services for a wide range of cancers.



ERMA ORA BYRD CLINICAL CENTER

1249 15th Street
Huntington, WV 25701

A \$22.5 million, 80,000 square foot facility located at the former Fairfield Stadium site housing major new medical student teaching facilities and clinical education patient care clinics.



FORENSIC SCIENCE CENTER

1401 Forensic Science Drive
Huntington, WV 25701
Phone: (304) 691-8930
Fax: (304) 696-4360

The Marshall University Forensic Science Center is a nationally recognized leader in forensic science graduate education; dedicated to providing the highest quality forensic analysis services and training for the promotion of truth and justice.



ROBERT C. BYRD BIOTECHNOLOGY SCIENCES CENTER

1700 3rd Avenue
Huntington, WV 25703

A \$40 million, 144,000 square foot, state-of-the-art biomedical and biotechnology research and development center on the Huntington campus of Marshall University.



Affiliated Medical Facilities

The Marshall University Joan C. Edwards School of Medicine is a community-based medical school, and hence its strong ties to local, affiliated health care facilities are crucial to its success.



CABELL

HUNTINGTON HOSPITAL

1340 Hal Greer Boulevard, Huntington, WV 25701

Phone: (304) 526-2000

Website: <https://cabellhuntington.org/>

Opened in 1956, Cabell Huntington Hospital is a 303-bed hospital located in Huntington, West Virginia. In 2012, Cabell joined Marshall University Joan C. Edwards School of Medicine and its practice plan, Marshall Health, to form an academic medical center. Cabell Huntington Hospital is home to the Hoops Family Children's Hospital and the Edwards Comprehensive Cancer Center and cares for patients throughout West Virginia, eastern Kentucky and southern Ohio.



ST. MARY'S

MEDICAL CENTER

2900 First Avenue, Huntington, WV 25703

Phone: (304) 526-1234

Website: <http://www.st-marys.org/>

St. Mary's Medical Center is the largest medical facility in Huntington, Cabell County's largest private employer (2600+ employees) and, at 393 beds, is among the largest healthcare facilities in West Virginia. As a teaching facility associated with the Joan C. Edwards Marshall University School of Medicine, St. Mary's trains medical residents in several specialties. The hospital campus is home to the St. Mary's School of Nursing, the St. Mary's School of Medical Imaging and the St. Mary's School of Respiratory Care. All three programs are associated with Marshall University.

HERSHAL WOODY WILLIAMS VA MEDICAL CENTER

Since 1932, VAMC Huntington has been improving the health of the men and women who have so proudly served our nation. Services are available to veterans living in southwestern West Virginia, southern Ohio and eastern Kentucky. The Huntington VAMC is primarily affiliated with the [Marshall University Joan C. Edwards School of Medicine](#), and has over 30 training programs in more the 20 healthcare fields, including the medical residency program with Marshall. Allied Health Training programs include dental, optometry, medical lab technology, physician assistant, and social work.



1540 Spring Valley Dr. Huntington, WV 25704

Phone: 304-429-6741

Website: <https://www.huntington.va.gov/>

II. ADMISSIONS INFORMATION

- ④ Admissions Committee
- ④ Subcommittees/Standing Workgroups
- ④ Prerequisites
- ④ Selection Criteria
- ④ Admissions Committee Review
- ④ Acceptance Protocols
- ④ Admissions Timeline
- ④ Pathway Programs
- ④ Transfer Students



Admissions Committee

The Admissions Committee has final authority for the selection of regular MD applicants and applicants for joint programs such as the MD/PhD program, accelerated BS/MD program and the Early Assurance Program. The Admissions Committee is an independent body and acts free of external influence.

GOVERNANCE

The governance of the Admissions Committee consists of the Chair, Vice Chair and the Executive Committee. The Dean appoints the Chair and Vice Chair of the Admissions Committee. The Executive Committee of the Admissions Committee includes the Chair, Vice Chair and all the Vice Deans, Assistant and Associate Deans serving at that time on the Admissions Committee.

The Executive Committee is responsible for reviewing recommendations for new membership to the Admissions Committee and the Interview Selection Workgroup, among other duties. The Executive Committee is also responsible for designating ad hoc workgroups to evaluate and study admissions related issues. The final approval of new members to the Admissions Committee is made by Faculty Council of the Medical School.

MEMBERSHIP

The Admissions Committee may be composed of full-time basic science and clinical faculty, community physicians, medical residents, medical school administrators, undergraduate faculty members from the main Marshall University campus, community representatives, and medical students. As a matter of standard practice the Executive Committee ensures faculty representation of at least fifty-one percent on the Admissions Committee. Excluding medical student members, the duration of appointment to the committee is for three (3) years, but may be extended at the discretion of the Chair of the Admissions Committee. New medical student members will be expected to serve until graduation unless otherwise determined by the Chair.

New members – Excluding new medical student members, recommendations for new members are taken from current and former members of the Admissions Committee, and from departmental chairs. Each new member is asked to serve a three-year term, although members may remain on the Admissions Committee for multiple terms at the discretion of the Chair. New medical student members are selected as follows: two student members are elected annually by their class and two student members are members of the Student National Medical Association and appointed by the organization's Chapter Advisor. New medical student members will be expected to serve until graduation unless otherwise determined by the Chair.

DUTIES

The duties of this committee are to develop and recommend criteria for admissibility of applicants, to determine methods and procedures for evaluating applicants and to select from among applicants those to be accepted. The authority for the final decision on applicants to the medical school, to include traditional applicants, applicants to a combined program such as the MD/PhD program, and the accelerated BS/MD program, rests with the full Admissions Committee. The Admissions Committee has developed policies and procedures to ensure compliance with non-discrimination laws and regulations, training for the holistic approach to admissions and decisions free from political and/or financial conflicts of interest.

Subcommittees/Standing Workgroups

EXECUTIVE COMMITTEE

The Executive Committee is responsible for forming a variety of ad hoc workgroups to study and analyze the admissions process and related issues from time to time as circumstances warrant. The members of these workgroups shall be determined by simple majority vote of the Executive Committee, and shall be dissolved upon completion of the task assigned.

The Executive Committee has the formal delegated authority from the Admissions Committee to move applicants from the waitlist to the accepted list.

INTERVIEW SELECTION WORKGROUP

A standing workgroup titled the Interview Selection Workgroup is a workgroup of the Admissions Committee with a specific charge as delineated herein.

CHARGE

The Interview Selection Workgroup shall be responsible for the evaluation of applications after the admissions staff has determined which applicants meet minimum qualifications. The Interview Selection Workgroup will then forward recommendations for applicants to be interviewed directly to admissions staff for interview scheduling.

MEMBERSHIP

The Interview Selection Workgroup shall be composed of representatives from the Office of Diversity & Inclusion, the Basic Sciences Department, the Executive Committee, and clinical faculty and all shall be members of the Admissions Committee. The members of this workgroup shall be determined by a simple majority vote of the Executive Committee and shall be dissolved upon completion of the task assigned.

Members serve at the will and pleasure of the Chair, with no defined term limits. Interview Selection Workgroup members shall undergo training along with the rest of the Admissions Committee to ensure compliance with all applicable laws, regulations and policies surrounding the admissions process, and the concept of the holistic admissions approach as well as the use of personal characteristics for effective decision-making. Interview Selection Workgroup meetings will be facilitated by the Chair of the Admissions Committee.

Prerequisites

Marshall selects students from a variety of academic, socioeconomic and personal backgrounds. Although most applicants are science majors, Marshall encourages its applicants to pursue their personal educational interests and abilities. Once the basic sciences requirements are met, Marshall welcomes majors from a variety of academic pursuits. The Admissions Committee considers the quality of the work more important than the field in which it is taken. Recruitment pipeline and outreach programs are in place that will introduce our medical school to qualified students from rural communities, students who are first generation college graduates, women, students who have little or no family financial support, and students from underrepresented minorities in the field of medicine. Extensive efforts are made by Admissions staff to ensure that applicant requirements are made available to potential applicants by means of information on the website, in handouts, during meetings with potential applicants at colleges and universities and consultation with faculty premed advisors, among other methods.

As a state-assisted medical school, Marshall gives preference to West Virginia residents. A limited number of well-qualified nonresidents from states adjoining West Virginia, nonresidents who have strong ties to West Virginia or to students who are introduced to our school through our out-of-state recruitment pipeline and outreach programs will be considered. Applicants are considered only if they are U.S. citizens or have permanent resident visas. Entrants should have a bachelor's degree from an accredited college or university. Exceptionally well-qualified students may be considered after ninety semester hours of academic work if other requirements are met. Minimum course requirements are:

REQUIRED COURSES	SEMESTER Hours
GENERAL BIOLOGY OR ZOOLOGY WITH LAB	8
GENERAL CHEMISTRY WITH LAB	8
ORGANIC CHEMISTRY WITH LAB	8
BIOCHEMISTRY	3
PHYSICS WITH LAB	8
ENGLISH	6
SOCIAL OR BEHAVIORAL SCIENCE	6
HIGHLY RECOMMENDED COURSES	SEMESTER
STATISTICS/BIOSTATISTICS OR EPIDEMIOLOGY	3
CELLULAR AND MOLECULAR BIOLOGY	3

All required prerequisites must be completed at an accredited college or university in the U.S. or Canada and must be passed with a grade of "C" or better by June 15 of the year of matriculation. The level of these required courses should be equal to courses for those majoring in these respective fields. If Advanced Placement or College Level Examination Program credits are on the college transcript, these may be accepted as a fulfillment of a prerequisite providing there is evidence of proficiency in the subject: examples of proficiency may be successful completion of a more advanced course in that field or a strong Medical College Admission Test (MCAT) score. With the exception of 2020-2021 and 2021-2022 academic years, online courses may not be used to fulfill science prerequisites.

Application Requirements

The first step in the formal application process is submitting an on-line application with AMCAS, the American Medical College Application Service, which allows students to apply to any participating medical school with only one application and set of transcripts. Transcripts should be sent to AMCAS as directed. Applications for admission are accepted by AMCAS from June 1 to November 1 of the year prior to enrollment. Since Marshall has a rolling admissions process, it is extremely important that applicants submit their application and supplemental materials as quickly as possible to enhance their chances of being accepted.

We utilize the WebAdMIT program to process AMCAS applications and our Supplemental Application. Through WebAdMIT the AMCAS applications will become available to us around the first of July. We will take no action on applications until verified by AMCAS. Verification generally takes four to six weeks from the date of submission of the AMCAS application.

Invitation to complete the Supplemental Application and Prerequisite Activity will be extended via the WebAdMIT gateway to applicants with a verified AMCAS application who are residents of West Virginia or an adjoining state. Nonresident applicants from non-bordering states will be emailed an inquiry for ties to West Virginia or to the School of Medicine. Invitation to complete the Supplemental Application and Prerequisite Activity will only be extended to those applicants who can demonstrate a strong tie to the state of West Virginia, such as previous residency, family currently residing in the state, attending a West Virginia college/university, etc.

There is a nonrefundable supplemental application fee of \$75 for West Virginia residents and \$100 for nonresidents. If the applicant has received a fee waiver from AMCAS, there will be no fee for application to Marshall.

Once an application package is complete, it will be reviewed by admissions staff. A complete application package includes the following:

- Verified AMCAS application
- Completed Supplemental Application and Prerequisite Activity
- Payment of the Supplemental Application Fee (Fee is waived for applicants eligible for the AAMC Financial Assistance Program)
- Letters of Recommendation (must meet requirements defined below)
- MCAT score (must be within the last three years)
- Situational Judgment Test Score (for more information go to [MUJCESOM requirement for SJT](#))

Admissions staff will identify completed applications that meet minimum qualifications and those applications will be reviewed holistically by the Interview Selection Workgroup. The Interview Selection Workgroup will select applicants to be invited for interview.

Selection Criteria

Applicants must exhibit attributes that the medical school considers pertinent to the admissions decision. Applicants are evaluated based on four criteria: scholastic records, MCAT scores, academic references and interviews. Embedded within these criteria is the consideration of personal characteristics, which include communication skills, work ethic, community service, honesty/ethics and resilience. Additional attributes assessed include leadership and teamwork.

MCAT

The Medical College Admission Test (MCAT) is required and is used along with other data to predict success in preclinical course work.

Certain exclusions apply for the MCAT requirement. Applicants from the BS/MD program who meet specific program criteria are exempt from the MCAT requirement.

The MCAT must be taken within three calendar years prior to matriculation. Applicants are encouraged to review the [Profile of Entering Students](#) to determine competitiveness for acceptance.

GPA

A minimum overall GPA of 3.0 is preferred.

Students participating in a pathway program that has minimum GPA requirements must maintain the GPA requirements defined for that program.

LETTERS OF RECOMMENDATION

Letters of recommendation must be provided from a premedical committee or from three faculty members who have taught the applicant. If three individual letters are provided, two of these recommendations must be from science professors and one of the three must be from the applicant's major department. Letters of recommendation from other persons of the applicant's choosing are welcomed.

We participate in the AMCAS Letter Service and receive letters electronically. All letters must be submitted to AMCAS by December 15 of the year prior to matriculation.

INTERVIEWS

Interviews are arranged only by invitation and upon recommendation by the Interview Selection Workgroup. The purpose of the interview is to assess personal characteristics that are pertinent to the admissions decision. The interview experience allows the applicant an opportunity to become acquainted with the medical campus in a general way, and at the same time provide the Admissions Committee better insight into his/her personal interests and attitudes.

Each candidate is evaluated holistically and while the reviewers/interviewers seek a balance of the attributes defined below, this list is neither exclusive nor exhaustive:

Personal Attributes	Experience	Metrics
Resilience	Community Service	GPA \geq 3.0 (Preferred but not required)
Honesty/Ethics	Distance Traveled/Life Experience	Competitive MCAT score
Work Ethic	Research	Situational Judgment Test Score
Communication Skills	Teaching	
Rural Background		

VIRTUAL INTERVIEW FORMAT

- Applicants selected for interviews will be invited to two live virtual interviews with different interviewers.
- Interviews will be conducted via secure Zoom during the weekday as scheduled by the Admissions Office.
- Each interview may last up to 45 minutes.
 - Information on how to prepare for the virtual live interview can be found in the AAMC publication: [Virtual Interviews: Tips for Medical School Applicants](#)
- In addition to the interview session, applicants will be required to meet with current medical students via Zoom for discussion. This will be scheduled separately from the interviews and will include a student-guided video tour of the campus.
- An optional session will be offered bimonthly to provide applicants with a chance to discover more about the curriculum, outreach programs, and research opportunities. This meeting will be hosted by the chair of the admissions committee who will be joined by the Dean of the medical school, a few basic science and clinical faculty as well as a selection of administrators from the offices of Admissions, Medical Education, Diversity & Inclusion and Student Affairs.
- In advance of interviews, invited applicants will be required to sign and submit the following forms:
 - Interviewee Agreement Form – An agreement to the terms and conditions for virtual interviews at Marshall University Joan C. Edwards School of Medicine
 - Technical Standards Form --- acknowledgement that applicants have read and understand the Technical Standards (fully described below) and certify that are able to meet the standards with or without reasonable accommodations.

Technical Standards

These technical standards for admission are set forth by the Marshall University Joan C. Edwards School of Medicine (MUJCESOM) to establish the expectations and requisite abilities considered essential for students admitted to its educational and training programs to achieve the levels of competency stipulated by MUJCESOM, its accrediting agency (the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association), and the Higher Educational Policy Commission of the State of West Virginia.

A practicing physician must possess the physical, mental, behavioral and social competencies to function in a variety of clinical situations and to render a broad spectrum of patient care in multiple and varied settings.

Accepted students must be able to perform the academic and clinical competencies to meet the full requirements of the school's curriculum.

Accepted students with disabilities which may compromise their educational process and their ability to practice medicine or which might compromise the educational process of their classmates may be required to undergo appropriate evaluation to assess their ability to meet the school's competencies and/or continue in the program.

The academic and clinical competencies of the school's curriculum include the capacity to observe and communicate and demonstrate sufficient motor ability to perform physical examinations and basic laboratory and diagnostic procedures. Students must demonstrate emotional stability, exercise sound judgment, work effectively in stressful situations and have the intellectual ability to synthesize data and solve problems.

Applicants for admission to MUJCESOM who are invited for an on campus interview are required to certify on the day of their interview that they understand and are able to meet the Technical Standards described herein with or without reasonable accommodations. A description of the actual disability and the need for accommodations should not be disclosed at this time.

Reasonable accommodations can be made for accepted students with appropriately documented disabilities. An accommodation is not reasonable if it poses a direct threat to the health or safety of self and/or others, if making it requires a substantial modification in an essential element of the curriculum, if it lowers academic standards, or poses an undue administrative or financial burden. Except in rare circumstances, the use by the candidate of a third party (e.g., an intermediary) to perform any of the functions described in the Technical Standards set forth would constitute an unacceptable modification.

An accepted student who has a disability and needs accommodations should initiate discussions with the MUJCESOM Office of Medical Education as soon as the offer of admissions is received and accepted. It is the responsibility of an accepted student to provide sufficient current information documenting the general nature and extent of his/her disability and the functional limitations proposed to be accommodated. The student must recertify that he/she is able to meet the Technical Standards with their specific accommodations. The School of Medicine reserves the right to request new or additional information.

Candidates for admission to the Marshall University Joan C. Edwards School of Medicine must meet the following Technical Standards:

- Must be able to obtain, process and learn information presented in classroom, laboratory and clinical experiences, including but not limited to lecture, anatomical dissection, and simulated and real treatment situations;
- Must be able to acquire information from a variety of sources, including but not limited to texts, journals, written documentation, videotapes, films, slides and advanced media resources;
- Must have the mental capacity to, in a timely manner, assimilate, learn and communicate large volumes of complex, technically detailed information, to perform clinical problem-solving, and synthesize and apply concepts and information from different disciplines to formulate evaluative and therapeutic judgments;
- Must be able to measure, calculate, analyze, synthesize and evaluate information;
- Must be able to comprehend three-dimensional relationships and understand spatial relationships of structures;
- Must be able to process information in a timely manner;
- Must be able to solve clinical problems in a timely manner;
- Must be able to observe simulated and real patients accurately close at hand and at a distance;
- Must be able to assess verbal and non-verbal communication from others;
- Must be able to demonstrate effective, efficient, and sensitive verbal, non-verbal, and written communication skills with faculty, peers, patients and other members of the health care team from different cultural and social backgrounds;
- Must be able to consistently perform a complete history and physical exam on any patient regardless of the patient's race, religion, ethnicity, socioeconomic status, gender, age or sexual orientation.
- Must be able to tolerate long periods of sitting as well as long periods of physical activity;
- Must be able to manipulate parts of, or whole bodies of, simulated and real patients;
- Must be able to tolerate close physical contact with patients for instructional purposes while maintaining professional deportment;
- Must possess the emotional health necessary for the full use of intellectual abilities, the exercise of sound judgment, and the effective completion of all responsibilities attendant to the educational expectations, assessment and treatment of patients, and the development of mature, sensitive, and effective relationships with patients, family members, colleagues and others;
- Must be able to endure physically and mentally stressful workloads and function effectively and professionally under stress;
- Must be able to adapt to changing environments and expectations;
- Must be able to prioritize activities effectively;
- Must possess adequate sensory function to fulfill the minimum competency objectives for auscultation, percussion, and other physical assessment and treatment procedures commonly used in the medical practice;
- Must have the capacity to learn, model and abide by the professional competencies of the profession;
- Must have the ability to record examination and diagnostic results clearly, accurately and efficiently, and communicate them effectively to the patient and colleagues.

Admissions Committee Review

Following interviews, each interviewer will present the candidate to the committee. At least one of the interviewers must be present to discuss the candidate before the entire committee.

Following initial presentation by the interviewers, the applicant is discussed by the committee and one of three recommendations is made:

- 1) **ACCEPT:** Committee action of acceptance is immediately forwarded to the Admissions Office with the committee vote included.
- 2) **HOLD:** Applicants in this category present qualifications that are less competitive than applicants in the ACCEPT category. Applicants in the HOLD category will be reevaluated and are considered to remain in an active category. Applicants may also be placed in Hold by the committee in anticipation of the receipt of additional information.
- 3) **REJECT:** A rejected applicant's application is immediately forwarded to the Admissions Office with the committee vote included.

A majority vote of those present will be necessary to designate the application as accepted or rejected. If a majority vote for acceptance or rejection is not reached, then the application shall remain on active status as a HOLD. Following committee recommendation of either ACCEPT or REJECT, Admissions Committee activity regarding the applicant ceases unless important additional information is received that should be reviewed and considered by the Admissions Committee.

Those applicants remaining in the HOLD category will undergo a second discussion and vote by the Admissions Committee. This process is defined as second-round evaluation. Those applicants typically will not undergo second-round evaluation until all applicants have undergone the initial first-round discussion and voting procedure, although an interviewer may request recall of an applicant prior to this timeframe based on additional information received.

At the second-round evaluation of applicants in the HOLD category, the applicant must be recommended as either an ACCEPT or REJECT. Second-round evaluations are conducted in a similar manner to the first-round process including presentation by interviewers; one interviewer should be present. Once the class is filled, applicants deemed acceptable by vote of the Admissions Committee will be placed on the waitlist.

An applicant's application can be "recalled" for a second or additional review due to receipt of additional information and/or at the request of any member of the Admissions Committee. A request that a candidate be re-interviewed must receive a majority consensus of the Admissions Committee members attending that meeting. This request would be considered only if the member could provide specific cause for such action.

The Admissions Committee will extend acceptances to approximately 85 applicants. Once all slots have been filled, the remainder of the applicants acceptable for admission will go on the waitlist. In addition, the Admissions Committee will finalize decisions about applicants who have previously been placed on HOLD, and those will either be REJECTED or will be moved from HOLD to the waitlist. The waitlist is not ranked. The Executive Committee has the formal delegated authority from the Admissions Committee to move applicants from the waitlist to the accepted list. The Executive Committee will use the following criteria to move a student from the waitlist to the accepted list:

- West Virginia residents
- Underrepresented Minorities in Medicine
- Applicants from rural communities
- Applicants who have had experiences or indicate interest in serving in a rural community

Review of Admissions Committee activities prior to forwarding letters of final disposition to applicants will be made by the Assistant Dean of Admissions, who will ensure that all documentation regarding entrance requirements, residency determination and other process compliance areas have been evaluated and verified.

Once a final decision has been made, applicants are notified in writing regarding their status. Applicants who are placed on the waitlist are encouraged to provide updated grades and information. The Executive Committee will make a selection from the waitlist to fill any openings per admissions policy and procedures.

Accepted applicants may request delayed/deferred matriculation into the school of medicine for a period of one year. To request delayed/deferred matriculation, the applicant must forward a letter addressed to the Admissions Committee describing the reason for the request. The request must be received by June 1 prior to matriculation. It is the responsibility of the Admissions Committee to review and approve all requests. Requests for delayed/deferred matriculation received after June 1 prior to matriculation, will be considered for medical reasons only. Deferred applicants are directed to contact the Office of Admissions for instructions on this process.

The Admissions Office will provide the Admissions Committee a report of the finalized class which will include how many waitlist individuals were admitted and on what general basis the admission decisions were made.

Application & Acceptance Protocols for Applicants

TRAFFIC RULES

MUJCESOM has adopted the recommendations provided in the [AAMC Application and Acceptance Protocols](#) to ensure timely notification to applicants regarding the outcome of their AMCAS application.

In accordance with the AAMC Application and Acceptance Protocols, often referred to as “Traffic Rules”, MUJCESOM will communicate admission decisions as follows:

- Notify all Regular MD program applicants of their acceptance on or after October 15 of each admission cycle, but no earlier. Schools and programs may notify applicants of admissions decisions other than acceptance prior to October 15.
- From October 15 to March 15, notify AMCAS within five business days of all admission actions, either written or verbal, that have been communicated to an applicant.
- From March 16 to April 30, notify AMCAS within two business days of all admissions acceptance, withdrawal, or deferral actions, either written or verbal, that have been communicated to an applicant. All admission actions are listed and defined on the AAMC website.
- From May 1 to the first day of class, notify AMCAS of all admissions actions within 24 hours.
- Notify AMCAS of each student’s matriculation within 24 hours.

CHOOSE YOUR MEDICAL SCHOOL TOOL

The Ad Hoc Working Group on Admissions Tools and Resources in partnership with the AAMC created the [“Choose Your Medical School Tool”](#) to help applicants communicate their decisions about which schools they plan to attend

MUJCESOM has adopted the following guidelines for the “Choose Your Medical School Tool”:

February 19th through April 29th: Applicants holding one or more acceptance offers are requested to use the tool to select the school where they “Plan to Enroll”.

- During this time period, applicants who select “Plan to Enroll” can continue to hold other acceptances, remain on alternate lists and continue to interview at other schools.
- If applicants receive new offers, they can update this selection at any time, but they can select only one school at a time.
- Admissions staff will be able to see the aggregate number of applicants who have selected “Plan to Enroll” at our school or another school. However, we will not be able to see the name of the other school.

On or before April 15th: Applicants holding multiple acceptance offers, should narrow selection(s) to no more than three schools or programs, and withdraw acceptance(s) from all other schools or programs.

- This communication needs to be made by the applicant directly to the program. Notification to our program should be via email to Cindy Warren (warren@marshall.edu).

April 30th: Applicants need to choose the school or program to which he/she plans to matriculate and promptly withdraw acceptances from all other schools or programs.

- If an applicant receives additional acceptances following April 30th it is his/her responsibility to promptly notify any school(s) he/she has decided to not attend.

Beginning on April 30th: Applicants may use the CYMS tool to indicate one of two options: “Plan to Enroll” or “Commit to Enroll”. We expect that the “Plan to Enroll” option would only be selected by applicants who remain on a waitlist/alternate list for another school.

Selecting “Commit to Enroll” indicates that the applicant has made a final selection and has withdrawn all other applications.

- This selection does not automatically withdraw you from other programs. Applicants must communicate directly with all schools about their final decision according to each school’s specific policy. Notification to our program should be via email to Cindy Warren (warren@marshall.edu).

If an applicant selects “Commit to Enroll”, then all other schools where the applicant has an acceptance or alternate list offer will be notified of their selection. However, those schools will not know the name of the school that the applicant has selected.

How to Access the AMCAS Choose Your Medical School Tool

The screenshot displays the AMCAS application portal for Santanu Das. The top navigation bar includes 'Application Service' and '2022 Application'. A blue banner at the top right contains 'Back to Dashboard' and 'My AAMC'. Below the banner, a yellow notification box is circled in red, containing the text: 'Access the Choose Your Medical School Tool and Admissions Decisions'. To the right of this box are buttons for 'WITHDRAW APPLICATION' and 'RESUBMIT APPLICATION'. The main content area is divided into several sections:

- Profile Information:** Santanu Das, AAMC ID: 21256798, Sex: Male, Date of Birth: 01/01/1980, Country of Birth: IND, Email: aneruddhas@gmail.com, Birth City: bala. A note states: 'Some information is centrally managed by AAMC and cannot be edited on this page. To edit your legal name, preferred name, birth, and sex, go to My AAMC Profile.' An 'EDIT MY PROFILE' button is located below.
- Application Status:** A table lists various application components, all marked as 'Completed' with a green checkmark. A blue notification says 'AMCAS Processing is Complete'. Buttons for 'PRINT TRANSCRIPT REQUEST FORMS', 'PRINT LETTER REQUEST FORMS', and 'PRINT APPLICATION' are on the right. A 'VIEW APPLICATION STATUS HISTORY' button is at the bottom.
- Quick Links:** Includes 'ACADEMIC CHANGE REQUEST', 'UPDATE ADVISOR RELEASE', and 'CHOOSE YOUR MEDICAL SCHOOL' (circled in red). A link to 'Learn more about the AAMC Fee Assistance Program' is also present.
- My Document Statuses:** Shows 'Transcripts (1)' for 'University of Virginia (Charlottesville)' with a status of 'Received'.

Important Deadlines and Timeline for the Admission Cycle:

Activity	2020-21 Cycle for Class Entering 2021	2021-22 Cycle for Class Entering 2022
Submit AMCAS application	June 1, 2020 – Nov 1, 2020	June 1, 2021 – Nov 1, 2021
Situational Judgment Test Dates - CASPer	N/A	May 4, 2021 – Nov 16, 2021
Letters of Recommendation Deadline	December 15, 2020	December 15, 2021
Supplemental Application Deadline	December 15, 2020	December 15, 2021
MCAT Deadline for last administration of exam to be considered for the cycle.	Last available test date of September, 2020	Last available test date of September, 2021
Interview season for In-State applicants	September through December, 2020	September through December, 2021
Interview season for Out-of-State applicants	December 2020 through January 2021	December 2021 through January 2022
Letters of Acceptance	Sent by mail - as accepted by Committee beginning October 15th	Sent by mail - as accepted by Committee beginning October 15th
Response to Letters of Acceptance	Can be emailed or mailed – Must be provided within 2 weeks of receipt of letter	Can be emailed or mailed – Must be provided within 2 weeks of receipt of letter
Accepted students should indicate “Plan to Enroll” via AMCAS Choose Your Medical School Tool.	Begins February 19, 2021	Begins February 19, 2022
Students with multiple offers of acceptance should narrow offers to no more than 3 medical schools	Begins April 15, 2021	Begins April 15, 2022
Students can use the “Commit to Enroll” option via AMCAS Choose Your Medical School Tool	April 30, 2021	April 30, 2022
Orientation	August 2, 2021	
Start Date of Classes	August 9, 2021	TBD

Once You've Been Accepted

ALL students accepted to the MD program including regular MD, MD/PhD, BS/MD, and students accepted through the MD Early Assurance program must meet the following entrance requirements:

- AMCAS Check Criminal Background
- Immunization Requirements
- Physical Exam
- Health Insurance
- American Heart Association's HeartCode BLS for Healthcare Providers
- Illicit Drug and Alcohol Screening

For current details regarding each of these requirements please visit the webpage for "[Once You've Been Accepted](#)".

Pathway Programs

BS/MD PROGRAM

PROGRAM OVERVIEW

The Marshall University BS/MD program allows students to complete the requirements for both the Bachelor of Science and Doctor of Medicine program in an accelerated seven-year program with:

- No MCAT required
- Guaranteed acceptance into medical school upon successful completion of program requirements
- Tuition waiver for the medical school portion of the program
- Option to participate in honors programs

ADMISSION REQUIREMENTS

This program is designed for highly motivated West Virginia high school students who have achieved the following criteria during their high school careers:

- Applicant must be a West Virginia resident. Residency status will be determined by the Marshall University Office of Admissions.
- Minimum composite ACT of 30 or an SAT composite equivalent 1390 minimum from a single test date, and a minimum ACT math score of 27 (SAT equivalent 630 minimum), from the same test date as the qualifying composite score.
- Applicants must have a minimum unweighted high school grade point average of 3.75 on a 4.0 scale at the end of their junior year of high school with the expectation that the applicant maintain academic success through their high school graduation.
- Applicants must take a situational judgment test in the format as established each year for the program, and prior to the deadline as required by the program.

- Three letters of recommendation are required to be submitted by the deadline, at least two of which must be from high school teachers who have had the candidates in class (math, science or an AP class) and are familiar with their academic performance.

CONTINUING REQUIREMENTS

- Students must declare a biology major
- Students must achieve an overall cumulative college GPA 3.50 by the end of the three years of the undergraduate portion of the program.
- Students must successfully complete at least 26 credit hours during each academic undergraduate year and remain in good academic standing.
- Students participate in enrichment programs offered during the three years of the undergraduate program.

CURRICULUM

Students will follow an accelerated undergraduate program in biological sciences. Students successfully completing their first year of medical school will receive their bachelor's degree.

Students must meet all admissions requirements established by the medical school in accordance with the BS/MD program.

FINANCING YOUR EDUCATION

Students will receive a tuition waiver for four years of medical school. Undergraduate tuition, fees and other medical school expenses (books, etc.) are the responsibility of the student. Students are encouraged to explore financial aid resources available through these websites:

- <http://www.marshall.edu/sfa/>
- <http://jcesom.marshall.edu/students/financial-assistance/>

CONTACT US

Email: BSMDProgram@marshall.edu



MD EARLY ASSURANCE PROGRAM

The MD Early Assurance Program at Marshall University and the Marshall University Joan C. Edwards School of Medicine is a program with the goal of preparing undergraduate students for success in the MD program. The Program will admit applicants who are Marshall University students, both in-state and out-of-state, who are capable, qualified, and motivated to succeed in basic science and clinical studies and who upon graduation possess a high probability of meeting the health care needs of our state and region. Benefits of the program include:

- Students successfully completing the undergraduate portion of the MD Early Assurance Program will not be required to take the Medical College Admissions Test (MCAT).
- Students successfully meeting all requirements of the MD Early Assurance Program will be accepted into the Marshall University Joan C. Edwards School of Medicine upon completion of matriculation requirements.

This program is a unique opportunity with specific eligibility and application requirements and continuing obligations once a student is accepted into the program. Please see the tabs below for further information.

ELIGIBILITY REQUIREMENTS

This program is for students currently enrolled in Marshall University who have demonstrated a particular interest in a medical career, and the academic strength to excel in a demanding premedical curriculum. Applicants must:

- Be U.S. citizens or have permanent resident visas
- Apply during the spring semester of their second undergraduate year at Marshall University
- Have successfully completed two years of full-time study at Marshall University at the time of acceptance into the program, and be currently enrolled as a degree-seeking student
- Have completed the following MD prerequisites by the end of summer semester of their second undergraduate year at Marshall University: one year each of general biology or zoology, general chemistry and organic chemistry, and all associated labs.
- Have a minimum composite ACT of 24 or composite SAT of 1160
- Have a minimum 3.5 overall Biology, Chemistry, Physics, Math (BCPM) GPA and 3.5 overall cumulative undergraduate GPA at the conclusion of the summer semester of their application year

APPLICATION REQUIREMENTS

- Applicants must complete the online application.
- Applicants must obtain four letters of reference. Letters must include two college academic letters (at least one from science faculty), a letter from an employer or volunteer supervisor, and one from a professional in the community.
- Applicants must complete an online situational judgment test which may involve a minimal cost to the applicant. More details will be forthcoming on the MD Early Assurance portion of the Marshall University Joan C. Edwards School of Medicine website. It is the responsibility of the applicant to check the website and their contact email frequently for updates on requirements.
- Applicants must complete interviews with School of Medicine Admissions Committee members.

CONTINUING REQUIREMENTS

- Participants must achieve an overall cumulative undergraduate GPA of 3.5 and a 3.5 Biology, Chemistry, Physics, Math (BCPM) GPA by the end of the undergraduate portion of the program.
- Participants must have completed all required premedical courses and must remain in good academic and institutional standing at Marshall University throughout the program.
- Participants must successfully complete a selection of 30 credit hours of 300-400 level courses during the undergraduate portion of the program. Participants must select from the courses identified on the list of courses in the tab below.
- Participants must complete shadowing and volunteering requirements for the program as well as a professionalism course as directed by the Program Director.
- Participants must meet all admissions requirements established by the medical school in accordance with the MD Early Assurance Program.
- Participants will be expected to remain in the undergraduate portion of the MD Early Assurance Program for the two academic years immediately following acceptance into the program in order to complete all advanced required coursework, volunteering, shadowing and professionalism requirements prior to matriculation into medical school.

RECOMMENDED COURSE LIST FOR UPPER LEVEL REQUIREMENT

300 LEVEL BIOLOGY COURSES

- BSC 302 – Principles of Microbiology (3 CR, Fall/Spring)
- BSC 304 – Microbiology Lab (2 CR, Fall/Spring)
- BSC 322 – Principles of Cell Biology (4 CR, Fall/Spring)
- BSC 324 – Principles of Genetics (4 CR, Fall/Spring)

400 LEVEL BIOLOGY COURSES

- BSC 417 – Biostatistics (3 CR, Fall/Spring)
- BSC 422 – Animal Physiology (4 CR Fall/Spring)
- BSC 428 – Neuroscience (3 CR, Spring)
- BSC 438 – Emerging Infectious Diseases (3 CR, Fall)
- BSC 448 – Introductory Immunology (3 CR, Spring)
- BSC 450 – Molecular Biology (3 CR, Fall)
- BSC 456 – Genes and Development (3 CR, Fall)

300 LEVEL CHEMISTRY COURSES

- CHM 365 – Introductory Biochemistry (3 CR, Fall/Spring)
- CHM 366 – Introductory Biochemistry Lab (2 CR, Spring)

400 LEVEL CHEMISTRY COURSES

- CHM 467 – Intermediate Biochemistry (3 CR, Spring)

*COURSE OFFERINGS ARE SUBJECT TO CHANGE. APPLICANTS MUST WORK WITH THEIR ACADEMIC ADVISOR TO ENSURE TIMELY COMPLETION OF REQUIREMENTS.

PROGRAM POLICIES AND PROCEDURES:

- [MD Early Assurance Program Policy](#)
- [MD Early Assurance Procedural Document](#)

FOR MORE INFORMATION, CONTACT THE EARLY ASSURANCE PROGRAM
at MDEarlyAssurance@marshall.edu.



PROJECT PREMED

Project P.R.E.M.E.D., which stands for Providing Real-World Experiences for Marshall-Educated Doctors, was established in 2011 by faculty and students, to create opportunities for future doctors of color and implement additional efforts to address barriers for students who are underrepresented in the health professions. This program provides early exposure to the processes and preparation required for applying to and attending medical school.

SELECTION CRITERIA

- Completed application form
- A minimum grade point average of 3.0
- Students must be a college freshman, sophomore, junior or senior
- A letter of recommendation from a faculty member or university administrator
- A resume and personal statement
- Official Transcript
- US Citizenship or Permanent Residency required

PROJECT P.R.E.M.E.D. STUDENTS WILL:

- Participate in a five day visit on the Marshall University Joan C. Edwards School of Medicine campus
- Tour the Joan C. Edwards School of Medicine
- Attend medical school classes
- MCAT Preparation
- Meet faculty participating in medical research
- Participate in hands-on activities
- Meet medical school faculty, university administrators and community leaders.
- Receive a medical student mentor who will serve as a personal guide during the participants undergraduate experience and medical school processes

Lodging and meals are provided.

CONTACT US

**Marshall University Joan C. Edwards School of Medicine
Office of Diversity & Inclusion**

1600 Medical Center Drive
Suite 2403-P
Huntington, WV 25701
Phone: 304-691-1607
Fax: 304-691-1609
Email: campbels@marshall.edu

Transfer Students

Transfer students will be considered for admission at the Marshall University Joan C. Edwards School of Medicine (MUJCESOM) as advanced standing students for compelling personal circumstances with good academic performance. Transfer spaces are limited by attrition and shall be filled at the sole discretion of the Admissions Committee. Transfer students must be in good academic and professional standing at an LCME-accredited medical school.

In order to transfer into the Marshall University Joan C. Edwards School of Medicine (MUJCESOM) with advanced standing, applicants must meet the following criteria:

ELIGIBILITY:

- Must have “good standing” status (eligible to return) to their previous medical school, which must be a Liaison Committee on Medical Education (LCME) accredited school
- Must be a United States citizen or have a permanent resident visa
- Must be a legal resident of West Virginia, Kentucky, Maryland, Ohio, Pennsylvania, or Virginia, or have strong ties to the state of West Virginia as determined by the Admissions Office
- Must complete at least the last two years of the MUJCESOM curriculum
- Must provide an official United States Medical Licensing Examination (USMLE) Step 1 score report with a passing score in the 50th percentile or better. Board Scores must be received by July 15th of the year in which the transfer student would be enrolled at MUJCESOM
- Must have met the course requirements as listed in the application materials
- Must be accepted and eligible to enter no later than the second 3rd year rotation

REQUIREMENTS:

All applicants must provide the following for consideration:

- Completed application form for Transfer with Advanced Standing or an updated AMCAS application if available.
- Official transcripts from all schools attended
- Letter of “good standing” status from previous medical school
- Letters of reference:
 - Three written recommendations from professors who have taught the applicant in class are required. Two of these references must be from professors in the area of basic science and one from a clinical faculty member who can attest to the applicant’s clinical and/or diagnostic skills
 - Applicants should select professors who are familiar with them and can provide substantive comments regarding their academic career
 - Additional pertinent references are acceptable.
- Personal interview may be requested
- A \$100.00 nonrefundable application fee is required.
- Criminal Background Check will be required on all applicants.

PROCESS:

- All application materials will be gathered and reviewed by the Office of Admissions.
- Applicants deemed acceptable may be invited for an interview by the Office of Admissions
- Final decisions regarding admission will be made by the Admissions Committee.
- Accepted applicants are required to begin orientation by approximately mid-August

DEADLINES:

Applications and all supporting materials, including references, must be received on or before May 1st of the year of enrollment at MUJCESOM. Official United States Medical Licensing Examination (USMLE) Step 1 score report must be received by July 15th of the year of enrollment at MUJCESOM.

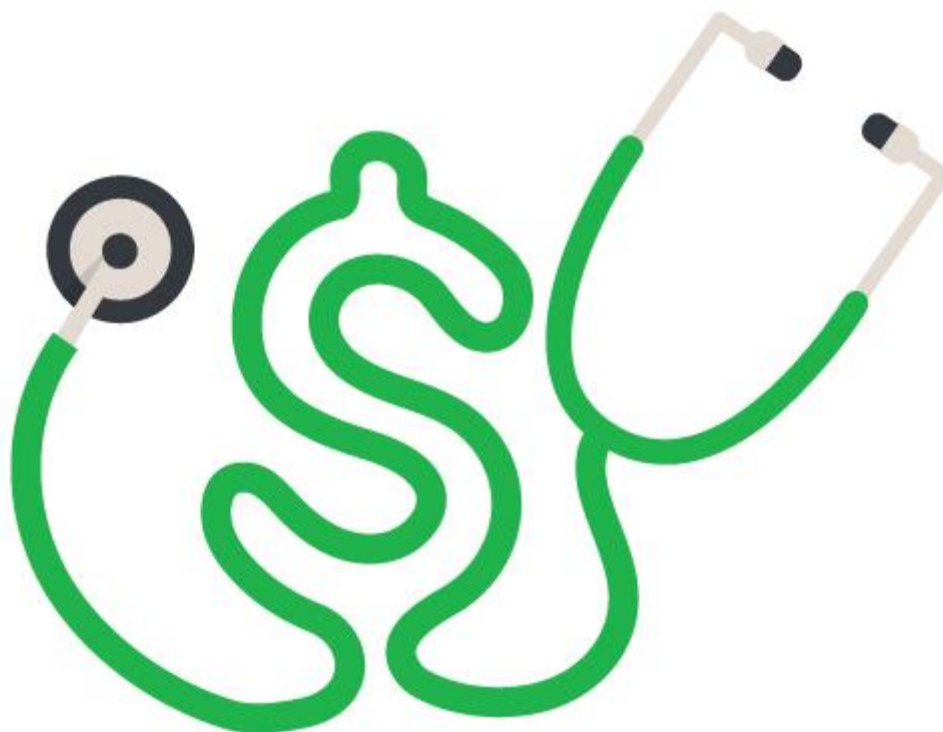
Mail materials to:

Marshall University, Joan C. Edwards School of Medicine
Office of Admissions
1600 Medical Center Drive
Huntington, West Virginia 25701-3655
(304) 691-1738



III. FINANCIAL AID

- ④ Financial Planning
- ④ Financial Aid Links
- ④ Financial Literacy & Debt Management Tools
- ④ Scholarship Links



Financial Planning

The [Office of Student Financial Assistance \(OSFA\)](#) through a variety of services provides assistance to students in securing funding for their medical education as well as providing financial education relating to their personal financial needs. Assisting our students in understanding the financial assistance processes both federal and institutionally as well as providing financial literacy through a variety of debt management programs, will relieve some of the financial stress that may occur during their academic years and after graduation. Business hours are Monday through Friday from 8am to 5pm. Appointments are not necessary, though they are appreciated. All walk-ins are welcome.

Contact the MUSOM Office of SFA for assistance at madden2@marshall.edu or 304-691-8739.

Financial Planning Your Medical Education - What you need to know

Prior to your first year of Medical School

- Review the [MUSOM Financial Aid Timeline](#) for FAFSA for instructions on how to complete the FAFSA (Free Application for Federal Student Aid)
- Review the cost of attendance and procedures by reading the MUSOM New Student Newsletter
- Search outside scholarship programs
- [Financially prepare yourself for your transition to medical school and consider relocation expenses](#)
- Don't forget to schedule an individual financial counseling session with the MUSOM Assistant Director of Student Financial Assistance at madden2@marshall.edu or call 304.691.8739 to arrange an appointment. Office location is at 1321 Hall Greer Blvd. Huntington, WV 25701

MS1 - First Year

- Know how to access your [Loan Servicer\(s\) and monitor your debt](#)
- If you borrowed during your undergraduate or graduate school years, you must contact your servicer(s) and obtain an in-school deferment at the beginning of your first year.
- Attend MUSOM Financial Literacy and Debt Management programs
- [New Student Financial Aid Orientation](#)
- Organize your debt by using [AAMC's Medloans Organizer and Calculator](#)
- Explore [AAMC's Financial Wellness Program](#) which is a free, online financial education resource that provides a variety of financial topics to help students become more financially savvy.

MS2 - Second Year

- Continue to organize and monitor your debt. If you are borrowing each year, be sure to take time to add the amount each year to your [Medloans Organizer and Calculator](#)
- Check your credit report at least once a year. You can receive a free annual credit report at <https://www.annualcreditreport.com/index.action>
- Know your options when faced with unforeseen expenses

MS3 - Third Year

- Know the importance of financially planning early for MS4 away rotations and residency interviews
- Know your financial options of federal and private loan assistance should you feel you need financial assistance for residency interviews or relocation expenses

MS4 - Fourth Year

- **Participate in your Senior Loan Repayment Strategies Session in the spring prior to graduation to review loan repayment options and loan forgiveness programs.**
- All graduates will be notified of loan exit counseling options at the beginning of the spring semester prior to graduation.
 - Follow up with individual exit counseling with the MUSOM Office of SFA
- Review the FinAid.org website for a list of creditable available private student loan options at www.finaid.org/loans/privatestudentloans.phtml. This site provides a comprehensive list of all private student loans so be sure to seek out only the Residency/Relocation loans. Please contact the lender directly for details regarding the eligibility requirements and timeframe of application. According to Marshall University Code of Conduct for Private Education Loans, the OSFA cannot recommend a specific loan program.
- Financially plan for your Residency relocation and opportunities

Post-Graduation/Residency

- Contact loan servicer(s) and complete necessary deferment/forbearance forms and/or determine loan repayment strategy
- You should really know your loan servicer(s) name and contact information at this point, but if not, you can login at the [National Student Loan Data System](#) (NSLDS) to find out. You will then need to contact your loan servicer(s) for information on repayment and/or appropriate forbearance forms.

Financial Aid Links

Please refer to the MUJCESOM Financial Assistance webpage for the most current information on tuition and fees, budgets, disbursement dates and other helpful resources.

FINANCIAL AID BUDGETS – Breakdown of tuition, fees, and other estimated costs for each year of medical school.

DISBURSEMENT DATES – Indicate the dates financial aid will disburse to students for each class.

TASKS AND TIMELINE FOR RETURNING STUDENTS – Visit this link for detailed steps and important deadlines necessary to receive financial aid.

SATISFACTORY ACADEMIC PROGRESS POLICY – This policy defines the requirements necessary to maintain eligibility to receive financial aid.

TREATMENT OF FINANCIAL AID FOR TOTAL WITHDRAWAL – This link will direct you to Marshall University main campus page for financial assistance where you will find specific information regarding the impact of withdrawal on financial aid.

Financial Literacy & Debt Management Tools

AAMC FIRST – The American Association of Medical Colleges (AAMC) provides the FIRST (Financial, Information, Resources, Services and Tools) program to guide you in your path to medical school and beyond.

AAMC MEDLOANS® ORGANIZER AND CALCULATOR (MLOC) – MLOC is a secure location to organize to organize and track student loans while also displaying possible repayment plans and costs based on the borrower's student loan debt.

BUDGET WORKSHEET – An Excel template to help calculate how much you may need to borrow from unsubsidized loan funds.

Scholarship Links

MUSOM SCHOLARSHIP PROGRAM – Marshall University Joan C. Edwards School of Medicine policy, criteria and process for awarding institutional scholarships and tuition waivers.

WV FINANCIAL INCENTIVE PROGRAMS FOR PHYSICIANS

NATIONAL HEALTH SCIENCES LOAN REPAYMENT PROGRAM

WV RECRUITMENT AND RETENTION COMMUNITY PROJECT (RRCP)

WV STATE LOAN REPAYMENT PROGRAM (SLRP)

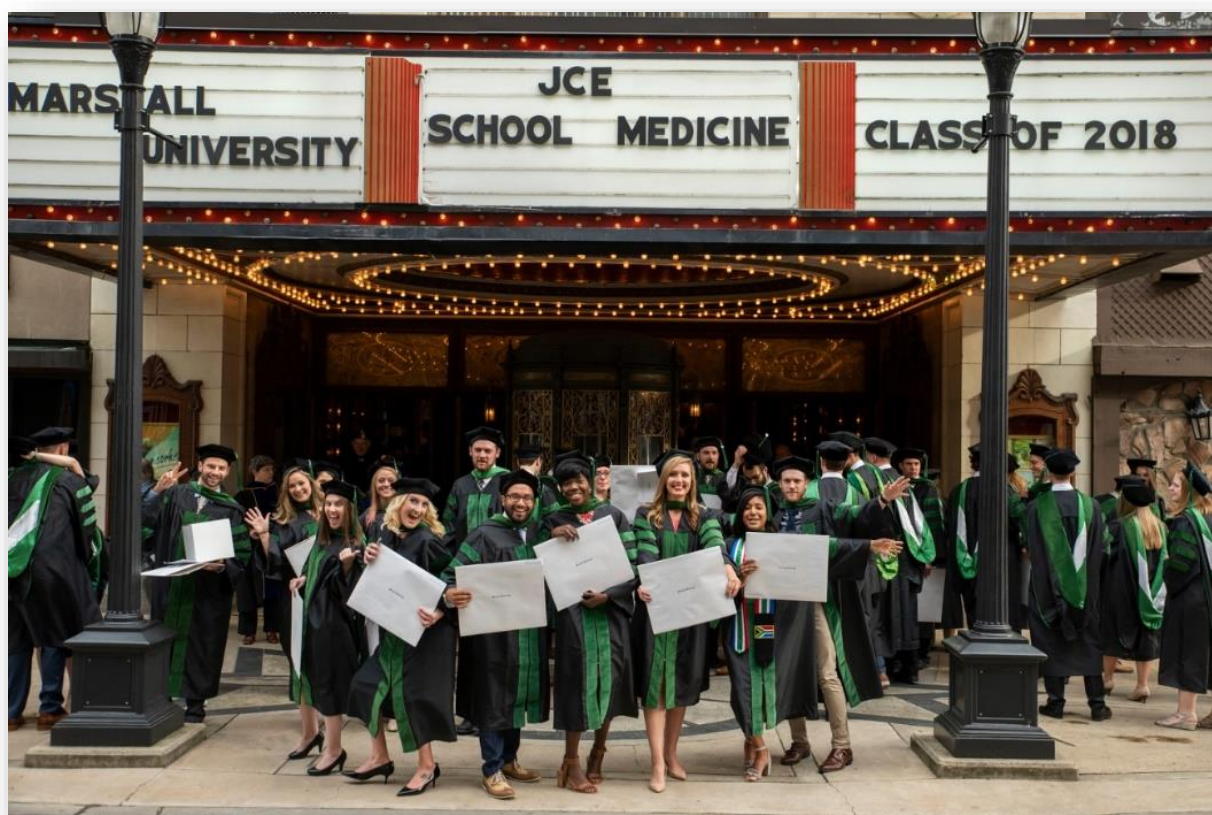
APPLICATION FOR THE HEALTH PLAN SCHOLARSHIP



The [Health Plan scholarship](#) provides need-based funds to medical and nursing students at WVU and Marshall University.

IV. MEDICAL EDUCATION

- ④ Mission Statement
- ④ Graduation Requirements
- ④ Institutional Objectives
- ④ Professionalism Standards
- ④ Academic Calendar
- ④ MD Curriculum at a Glance
- ④ MD Course Descriptions
- ④ Grading and Assessment
- ④ Visiting Students



Office of Medical Education

MISSION STATEMENT

The Office of Medical Education is committed to providing quality patient care to the people of West Virginia and our surrounding communities by educating and training exemplary medical students. Our goal is to produce compassionate physicians who integrate the skills of lifelong learning and evidence based medicine into clinical practice. We are committed to providing programs and curricula that emphasize communication, professionalism, cultural differences, medical ethics, and humanistic aspects of medicine.



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Graduation Requirements for the Doctor of Medicine Degree

The MD degree is conferred upon students who have satisfactorily completed the equivalent of four years of study in the medical sciences. All courses and clerkships, required and elective, must have been completed with a passing grade. A minimum of the final two years of study must be completed as a student at MUJCESOM. Continuous and successful progression toward the requirements for graduation throughout the curriculum is expected. In compliance with the LCME, students have a maximum of six years to complete the MD requirements. Maximum time for completing requirements may be waived to permit the student to engage in research or other scholarly pursuits.

The concept of satisfactory progress mandates monitoring of a student's academic performance through grades, professional behaviors, the number of credits successfully completed, and timely passage of the USMLE licensing examinations. The Academic and Professionalism Standards Committee may set conditions for meeting satisfactory academic progress.

The MD degree is awarded by MUSOM upon certification by the school's faculty that the student has successfully completed all requirements.

MS 1 REQUIREMENTS:

- Successful completion of all required First Year courses
- HIPAA certification
- Basic Life Support (BLS) certification (Must be valid for 2 years)
- Industrial Occupational Health and Safety (OSHA) Bloodborne Pathogens Training
- Institutional Review Board (IRB) Collaborative Institutional Training Initiative (CITI) Certification

MS 2 REQUIREMENTS:

- Successful completion of all required Second Year courses
- Successful completion of OSCE
- Successful passage of CBSE (Comprehensive Basic Science Examination)
- Industrial Occupational Health and Safety (OSHA) Bloodborne Pathogens Training
- Institutional Review Board (IRB) Collaborative Institutional Training Initiative (CITI) Renewal

MS 3 REQUIREMENTS:

- Successful completion of all required Third Year clerkships
- Successful completion of Clinical Competency Examination
- HIPPA certification
- Basic Life Support (BLS) certification (Must be valid for 2 years)
- Industrial Occupational Health and Safety (OSHA) Bloodborne Pathogens Training
- Institutional Review Board (IRB) Collaborative Institutional Training Initiative (CITI) Renewal

MS 4 REQUIREMENTS:

- ACLS certification
- Institutional Review Board (IRB) Collaborative Institutional Training Initiative (CITI) Renewal
- OSHA recertification
- 100% Completion of the Patient Encounter and Procedure Logs as required for my graduating class
- Senior Loan Exit Interview completed before graduation (Financial Aid)
- Passage of the USMLE Step 2 CK*
- Passage of the USMLE Step 2 CS*
- 2 weeks of Required Emergency Medicine/EMS744
- 4 weeks of Sub-I [Must be from the approved list of Sub-I selective options]
- 2 weeks of ICU [Must be from the approved list of ICU selective options]
- 36 weeks of electives that apply toward 4th year graduation requirements.



Institutional Learning Objectives

Complementing the attributes defined in the Academic Honesty and Professionalism Policy are the Institutional Learning Objectives. These objectives are the foundation on which all educational activities in the medical curriculum are based and serve as the platform for the medical students as they develop into residents.

Patient Care

Students must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

Medical Knowledge

Students must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences as well as the application of this knowledge to patient care.

Practice-Based Learning and Improvement

Students must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning.

Interpersonal and Communication Skills

Students must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Professionalism

Students must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

Systems-based Practice

Students must demonstrate an awareness of and responsiveness to the larger context and system of health care as well as the ability to call effectively on other resources in the system to provide optimal health care.

Critical Thinking

Students must be able to apply creative/critical thinking to develop new information and solutions for health care practices.

General Standards of Professionalism

The general public holds physicians to a high standard and expects them to monitor the professional behavior of their colleagues. As future physicians, medical students at the Marshall University School of Medicine have a responsibility to follow this model and guide their actions to serve in the best interest of their fellow students, patients, and faculty by maintaining the highest degree of personal and professional integrity. Students need to remain cognizant of the fact that they are representative of the medical profession in and out of the academic health environment. Therefore, allegations of misconduct by any medical student will be taken very seriously.

Definitions and Components of Professionalism Standards

Students represent the Marshall University School of Medicine and are expected to uphold the standards of physicianhood. High standards of behavior promote a spirit of community conducive to mutual trust among the students, patients, medical team and society. Medical students are expected to attempt to do that which is right in all of their dealings with fellow students, faculty, other health care professions, and patients. They are expected to promote the highest possible standard of behavior and moral conduct by adhering to the following Components of Professional Standards that are based upon, but not limited to, the American Board of Internal Medicine's Project on Professionalism:

- A. **Altruism:** Students should put the interest of patients and the health care team above self-interest and respect the privacy and the dignity of the patient. Altruism considers both the physical and the psychological wellbeing of the patient and implies compassionate care of the patient.
- B. **Accountability:** Students are to be accountable to patients, other health care providers, the medical team, their fellow students, the society and the profession. The implied contract of the patient /physician relationship must be fulfilled. Accountability also implies reliability. Students are expected to attend all course activities, be prompt in their arrival, and complete all assignments, duties and tasks in a timely manner.
- C. **Excellence:** Students are to strive to exceed ordinary expectations and to commit to lifelong learning.
- D. **Duty:** Students are to accept commitment to service even at the cost of personal convenience.
- E. **Honor and Integrity:** Students are required to maintain high personal standards and are expected to refuse to violate their personal or professional codes.
- F. **Respect:** Students are to have a respect for others including colleagues, patients, their families, other health care providers and staff.

Academic Calendar MS 1 & MS 2

Marshall University Joan C. Edwards School of Medicine 2021-2022 Academic Calendar MS1 & MS2		
FALL SEMESTER 2021		
DATE	EVENT	CLASS
JUL 1	Last Day to be Compliant with Immunization Policy to Remain Registered for Fall Term (HEP B third shot or HEP B TITER exception only)	MS 1
AUG 2 – 6	Orientation	MS 1
AUG 9	Start of “Molecular and Cellular Foundations” Course	MS 1
AUG 9	Start of “Cardiovascular, Renal and Respiratory” Course	MS 2
SEP 6	Labor Day - No Classes University Closed University Computer Services Unavailable September 4-6	MS 1 & 2
SEP 20	Start of “Microbiology and Host Defense” Course	MS 1
OCT 25 – 29	Intercession	MS 1
NOV 1	Start of “Hematology and Oncology” course	MS 1
NOV 24 – 26	Thanksgiving Holiday Break – No Classes	MS 1 & 2
NOV 29	Start of “Hormones and Reproduction” course	MS 2
DEC 1	Last Day to be Compliant with Immunization Policy to Remain Registered for Spring Term (HEP B Titer Exception Only)	MS 1 & 2
DEC 3	Last day to completely withdraw for fall Semester	MS 1 & 2
DEC 13 @ Noon	Deadline to submit Fall FINAL grades via MILO	MS 1 & 2
DEC 17	Last Day of Semester	MS 1 & 2
SPRING SEMESTER 2022		
JAN 3	First Day of Classes	MS 1 & 2
JAN 3	Start of “The Musculoskeletal System” Course	MS1
JAN 17	MLK Holiday - No Classes/University Closed	MS 1 & 2
FEB 4	Last Day of Classes	MS 2
FEB 7	Start of “Neural Network” Course	MS1
MAR 4	Comprehensive Basic Science Examination (CBSE)	MS 2
APR 2	Sit by Date for CBSE Second Attempt	MS 2
APR 18 – 22	Intercession	MS 1
APR 22	Last Day to Completely Withdraw for Spring Semester	MS 1 & 2
APR 25	Start of “Nutrition and Gastroenterology” course	MS 1
MAY 2 @noon	Deadline to submit Spring FINAL grades via MILO	MS 1 & 2
MAY 28 – 30	University Computer Services Unavailable	MS 1 & 2
MAY 30	Memorial Day	MS 1 & 2
JUN 3	Last Day of Classes	MS 1
JUN 6 – AUG 5	Summer Break—Research Opportunities	MS 1

Academic Calendar MS 3

Marshall University Joan C. Edwards School of Medicine 2021-2022 Academic Calendar MS 3		
DATE	EVENT	CALENDAR NOTES
JUN 14 – JUN 25, 2021	Clinical Orientation	Schedule to be posted online by OME
JUN 28 – AUG 13, 2021	ROTATION 1	JUL 5 – University Closed (July Fourth Observation) JUL TBA – Risk Management Seminar
AUG 16 – OCT 1, 2021	ROTATION 2	SEP 6 –University Closed (Labor Day) University Computer Services Unavailable September 4-6 Begin Scheduling for Step 2 CS and Step 2 CK
OCT 4 – NOV 19, 2021	ROTATION 3	
WINTER BREAK / UNIVERSITY CLOSED – DEC 20, 2021 – JAN 4, 2022		
NOV 22 – JAN 21, 2022	ROTATION 4	Thanksgiving Holiday 25 – 26 Rising MS4 Scheduling Meeting
JAN 24 – MAR 11, 2022	ROTATION 5	Marshall Health Sciences Research Day – TBA
MAR 14 – APR 29, 2022	ROTATION 6	Final CCE's Week of APR

Academic Calendar MS 4

Marshall University Joan C. Edwards School of Medicine 2021-2022 Academic Calendar MS 4	
FALL 2021	
JUN 28	First Day of Year 4
JUL TBA	Risk Management Seminar
JUL 5	University Closed – July Fourth Observation
JUL 16 @ noon	Application for August 2021 Graduation Due
AUG 1	Sit by Date for Step 2 CK & CS
SEP 4 – 6	University Computer Services Unavailable
SEP 6	Labor Day – University Closed
SEP	NRMP Opens for Registration
SEP 10 @ noon	Application for December 2021 Graduation Due
OCT 15	Deadline to Finalize Fall Schedules
NOV 30	NRMP Early Registration Deadline – after Nov 30 will pay additional \$50.00
DEC 11	Official Graduation Date for Fall Semester
DEC 17	Deadline to Finalize Spring Schedules
DEC 23 – JAN 3	Winter Break – University Closed
SPRING 2022	
JAN 17	MLK JR. Day – University Closed
JAN 21 @ noon	Application for May 2022 Graduation Due
FEB 1	Ranking Opens
MAR 3	Rank Order List Certification Deadline
MAR TBA	Match Week
MAR TBA	Match Day
APR	Graduation Week Activities
APR 29	Investiture – Hooding/Graduation Ceremony
	Diploma Date APR 30. Use this date on documentation for Residency and Medical Licensing applications– It will be the graduation date on your DIPLOMA

Approved by Curriculum Committee: November 19, 2020

Approved by the Dean: November 23, 2020

Curriculum at a Glance

The Curriculum at a Glance provides current and future students an idea of the overall course structure of medical school. It is not an enforceable contract and is subject to change without notice. The MD Curriculum is comprised of two phases—Phase I is the preclerkship phase of the MD Curriculum and Phase II is the clinical clerkship phase.

PHASE ONE, PART 1 — FOUNDATIONS OF HEALTH AND DISEASE						
August				July (12 months)		
Molecular and Cellular Foundations	Microbiology and Host Defense	Hematology and Oncology	The Musculoskeletal System	The Neural Network	Nutrition and Gastroenterology	Summer and Research Elective
6 weeks	5 weeks	6 weeks	5 weeks	10 weeks	6 weeks	8 weeks
Physicians in Practice – Global and Local Issues in Medicine Humanism and Ethics Bias Training Economics and Law of Medicine Clinical and Translational Science Portfolio			Patient Care and Clinical Skills Early Patient Interactions			
PHASE ONE, PART 2 — FOUNDATIONS OF HEALTH AND DISEASE						
August				April (9 months)		
Cardiovascular, Renal and Respiratory Systems		Hormones and Human Reproduction		USMLE STEP 1		
15 weeks		8 weeks				
Patient Care and Clinical Skills Early Patient Interactions						
PHASE TWO, PART 1 — REQUIRED CLINICAL EXPERIENCES						
May				April (12 months)		
Rotation 1	Rotation 2	Rotation 3	Rotation 4	Rotation 5	Rotation 6	
8 weeks	8 weeks	8 weeks	8 weeks	8 weeks	8 weeks	
Family Medicine	Internal Medicine	Neuro/ Psych	Surgery	Ob/Gyn	Pediatrics	
PHASE TWO, PART 2 — CAREER EXPLORATION						
May				April (12 months)		
ER	ICU	Sub - Internships	Career Electives Research/Away Rotations/Electives			
2 weeks	2 weeks	4 weeks	36 weeks			

MD Curriculum Overview

Our revamped MD curriculum is vertically integrated and is organized in two parts—Phase 1 and 2. Phase 1 is the pre-clerkship phase with classroom pedagogy centered on clinical and foundational science disciplines. Phase 2 is the clerkship phase of the curriculum where students spend most of their time in the clinics learning and training alongside residents and physicians.

Phase 1, Part 1—MS1

In Year One, students begin with an Introduction to the Medical Profession week during which students are familiarized with the six Institutional Learning Objectives and begin to develop the attitudes and habits of professionals. This is followed by a 15-week integrated Molecular and Cellular Foundations course incorporating the fundamentals of biochemistry, genetics, cell biology, microbiology and immunology. A longitudinal course, Physicians in Practice, accompanies the courses of the fall semester and encompasses the attributes of “physicianship”, including humanism and ethics, communication skills, professionalism attributes, foundations of clinical and translational sciences, and inter-professional education. The remainder of the year consists of an integrated systems-based curriculum, which includes all relevant foundational and clinical disciplines for the study of hematology, oncology, neurology, orthopedics, behavioral sciences, gastroenterology and nutrition. Longitudinal patient care course will complement the organ-system courses involving pedagogy on clinical and communication skills. Part 1 ends in a 9-week summer break with many opportunities for students to pursue a research elective.

Phase 1, Part 2—MS2

In part 2, students continue their integration of basic science with clinical medicine in a systems-based curriculum. Cardiology, pulmonology, nephrology, endocrinology, and reproductive health are covered in part 2 of the pre-clerkship phase of the curriculum. As before, longitudinal patient care course will complement the organ-system courses involving pedagogy on clinical and communication skills. Part 2 ends in a 8-week dedicated break to prepare students for their first licensure examination, STEP1 of the United States Medical Licensure Exam.

Phase 2, Part 1—MS3

In the clerkship phase of the curriculum, students work in the clinical settings, including hospital and ambulatory care. Students complete five eight-week clerkships in Family & Community Health, Internal Medicine, Obstetrics & Gynecology, Pediatrics, and Surgery and four-week clerkships in Psychiatry and Neurology. Students continue to develop their life-long learning and critical thinking skills in the context of patient care while beginning to develop appropriate patient assessment, diagnosis, and management skills. Students also have an opportunity to choose electives, including research during their third year of the curriculum.

Phase 2, Part 2—MS4

In Year Four, students complete a required four-week rotations in Emergency Medicine, four weeks in a Selective Sub-Internship and 2 weeks in a Selective ICU. They are provided increased autonomy in the assessment, diagnosis and management of patients in all clinical settings under the supervision of residents and attending physicians. Students complete their fourth year with a minimum of 26 weeks of electives, which gives them considerable flexibility in designing educational and clinical programs to meet their individual interests and needs. A separate electives catalog is located at www.musom.marshall.edu/students/senior-handbook.

MD Course Descriptions

PHASE I, PART 1

Physicians in Practice

Credit Hours: 4 Grade Mode: Pass/Fail

This longitudinal course encompasses competencies critical to practicing physicians, including communication skills, professionalism, patient care, humanism and ethics, team-building and bias training. Through variety of pedagogies and assessments, students will learn real-world skills and attitudes critical to effective care and service of the patients and the community. Skills and attributes introduced in this course will be integrated across the 4-year MD curriculum. A special emphasis will be placed on education of public health, clinical & translational sciences, and foundations of clinical inquiry.

Cellular and Molecular Basis of Health and Disease (CMB)

Credit Hours: 15 Grade Mode: Pass/Fail

CMB introduces the student to the fundamental concepts necessary to understand the structure and function of the human body at a cellular and molecular level. The course also incorporates foundational principles of infectious diseases and the host immune response to threats, both external and internal. The course incorporates principles of biochemistry, cell biology, genetics, microbiology and immunology. The course addresses the foundational concepts of microbiology and immunology. Variety of active and self-directed learning pedagogies, including team-based learning, clinical correlates, small group activities, and independent study of clinical cases complement the didactic material and help the student apply the material to medical problem solving.

Oncology and Hematology

Credit Hours: 6 Grade Mode: Pass/Fail

Oncology and Hematology encompasses foundational and clinical concepts of oncogenesis, hematological sciences, embryogenesis, and dermatology. The course will emphasize clinical applications of these key foundational and clinical subspecialties, and will serve as a bridge to the organ-system based part of the Phase 1 of the curriculum. Through active-learning and self-directed pedagogies students will be trained in new and emerging trends in care of patients with neoplastic and hematological disorders, including genetic screening for common cancers and targeted and biologic therapies for cancer treatment and prevention.

Orthopedics and the Neural Network

Credit Hours: 15 Grade Mode: Pass/Fail

This is first of the organ-system based, vertically integrated course of Phase I of the MD curriculum. The goal of this course is to provide students with foundations of determinants of health and disease of the musculoskeletal, nervous and behavioral system. The course encompasses an interdisciplinary approach to the evaluation and management of orthopedic, neurological and behavioral disorders. True vertical integration of relevant foundational science disciplines are leveraged to highlight the interplay of key concepts in the pathophysiology and management of diseases of the musculoskeletal, nervous and behavioral system. Variety of active and self-directed learning

pedagogies, including team-based learning, clinical correlates, small group activities, and independent study of clinical cases complement the didactic material and help the student apply the material to medical problem solving. The course is centered on patient care and integrates with the longitudinal course “Patient Care and Clinical Skills” to enhance the understanding and application of foundational sciences to the practice of medicine.

Gastroenterology and Nutritional sciences

Credit Hours: 6 Grade Mode: Pass/Fail

The goal of this course is to provide students with foundations of determinants of health and disease of the gastrointestinal system and explore the effects of nutrition on human health and disease. True vertical integration of relevant foundational science disciplines are leveraged to highlight the interplay of key concepts in the pathophysiology and management of diseases of the digestive system. Variety of active and self-directed learning pedagogies, including team-based learning, clinical correlates, small group activities, and independent study of clinical cases complement the didactic material and help the student apply the material to medical problem solving. The course is centered on patient care and integrates with the longitudinal course “Patient Care and Clinical Skills” to enhance the understanding and application of foundational sciences to the practice of medicine.

Patient Care and Clinical Skills 1

Credit Hours: 4 Grade Mode: Pass/Fail

This skills-based course is centered on our Institutional Competencies relating to patient care, communication skills and practice-based learning. The goals of this course are to provide students with basic interviewing, physical examination and medical communication skills; allow students to correlate anatomy and physiology with normal and abnormal physical exam findings in ambulatory patients; reinforce the fundamental values of medical professionalism; and to help students view the broader context of health care using the relationship-centered care and integrated interviewing models. This longitudinal course integrates with other organ-system courses and enhances student learning by reemphasizing foundational concepts in the context of patient care.

MD Courses Descriptions

PHASE I, PART 2

Cardiovascular, Renal and Respiratory Systems

Credit Hours: 15 Grade Mode: Pass/Fail

This course will help students master the foundational concepts and clinical correlations for diseases of the three vital organ systems. The course employs integrative approach to build foundations for understanding determinates of health and disease related to these organ systems. All relevant foundational disciplines, including anatomy, physiology, pathology, pharmacology, and radiology will be covered in this course. The educational goals of the course are achieved by providing holistic education with variety of pedagogical tools to bridge the gap from “Book to Bedside”. Through inductive reasoning, problem solving and continuous feedback, students learn to apply foundational concepts to clinical reasoning and patient care. The course also integrates with the longitudinal course “Patient Care and Clinical Skills” for well-rounded development of students across all Institutional Competencies.

Hormones and Human Reproduction

Credit Hours: 10 Grade Mode: Pass/Fail

The goal of this course is to provide students with foundations of determinants of health and disease of the endocrine and the reproductive system. True vertical integration of relevant foundational science disciplines are leveraged to highlight the interplay of key concepts in the pathophysiology and management of diseases of these. Variety of active and self-directed learning pedagogies, including team-based learning, clinical correlates, small group activities, and independent study of clinical cases complement the didactic material and help the student apply the material to medical problem solving. The course is centered on patient care and integrates with the longitudinal course "Patient Care and Clinical Skills" to enhance the understanding and application of foundational sciences to the practice of medicine.

Patient Care and Clinical Skills 2

Credit Hours: 4 Grade Mode: Pass/Fail

This skills-based course is centered on our Institutional Competencies relating to patient care, communication skills and practice-based learning. The goals of this course are to provide students with basic interviewing, physical examination and medical communication skills; allow students to correlate anatomy and physiology with normal and abnormal physical exam findings in ambulatory patients; reinforce the fundamental values of medical professionalism; and to help students view the broader context of health care using the relationship-centered care and integrated interviewing models. This longitudinal course integrates with other organ-system courses and enhances student learning by reemphasizing foundational concepts in the context of patient care.



MD Courses Descriptions

PHASE 2, PART 1

Family & Community Health – FCH 742

Credit Hours: 8 (8 weeks) Grade Mode: Honors/Pass/Fail

The Family & Community Health Clerkship emphasizes continuity of patient care and patient-based student-directed learning in ambulatory settings. The course focuses on teaching clinical problem-solving skills as well as understanding preventive, community health, and patient education issues. Students also work with the Family Medicine Hospital team for a limited experience. Students are exposed to the rich variety of clinical experiences that comprise the specialty of Family Practice.

Internal Medicine – MED 742

Credit Hours: 8 (8 weeks) Grade Mode: Honors/Pass/Fail

The Internal Medicine Clerkship provides a broad exposure to the core aspects of Internal Medicine. Students participate in a comprehensive multidisciplinary approach to inpatient medicine in addition to experience within the ambulatory general medical and subspecialty clinics. Students are expected to acquire knowledge and skills of major disease entities related to internal medicine patients and apply this to development of diagnostic and therapeutic plans, thereby providing personalized, scientific, evidence-based patient care.

Obstetrics/Gynecology – OBG 742

Credit Hours: 8 (8 weeks) Grade Mode: Honors/Pass/Fail

The Obstetrics and Gynecology Clerkship is designed to provide the medical student a base of information regarding human reproduction and the function and dysfunction of the reproductive system. Students participate in the care of women with various gynecologic diseases, including endocrinopathies and neoplasia. Emphasis is placed upon family planning, screening for disease, and preventative care for women throughout life. The students learn the basis of antepartum, intrapartum, and postpartum care for low and at risk pregnancies. Students learn the physiologic response to normal pregnancy, and the effect of pregnancy on chronic disease.

The clerkship is centered at the Marshall University Medical Center in the Obstetrics and Gynecology Department for ambulatory patient care and Cabell Huntington Hospital being primarily used for inpatient care. The clerkship also utilizes the Edwards Cancer Center, Cabell Huntington Hospital Perinatal center and Cabell-Huntington Health department for ambulatory gynecology and obstetrics.

Pediatrics – PED 742

Credit Hours: 8 (8 weeks) Grade Mode: Honors/Pass/Fail

The Pediatric Clerkship is an eight-week required clinical clerkship designed to involve students in the evaluation, assessment, care and counseling of pediatric patients and their families from infancy to young adulthood. During the rotation, two weeks will be spent at Cabell Huntington Hospital on the Pediatric Ward, one week in the Neonatal Intensive Care Unit, one week in the Pediatric Intensive Care Unit, one week in the Newborn Nursery and

three weeks will be divided between the various Pediatric Outpatient Clinics. During this clerkship, there will always be an Attending Physician and Pediatric Residents to supervise student education and serve as a resource for all questions.

Psychiatry– PSI 742

Credit Hours: 4 (4 weeks) Grade Mode: Honors/Pass/Fail

The Psychiatry / Neurology Clerkship is designed to broaden the student's knowledge of psychiatry, behavioral health issues, and neurology and how these relate to the practice of medicine. Students learn how to recognize and evaluate psychiatric and neurologic disorders. Students learn appropriate treatment and management approaches to psychiatric and neurologic illnesses. Students experience care in general medical, neurologic, and psychiatric settings, across the continuum of care. This includes time in outpatient and in-patient services, also including consultation for psychiatric and neurologic conditions in hospitalized patients.

Neurology – NEU 742

Credit Hours: 4 (4 weeks) Grade Mode: Honors/Pass/Fail

The Neurology Clerkship is designed to broaden the student's knowledge of primary neurologic pathology and how these relate to the practice of medicine. Students learn how to recognize and evaluate common neurologic disorder presentations. Students learn appropriate treatment and management approaches to neurologic illnesses. Students experience care in general outpatient and inpatient settings and across the continuum of care from new and emergent evaluations to routine follow-up of chronic conditions. The students will also be exposed to common procedures used in the evaluation and treatment of patients with neurology symptomatology including neurophysiologic studies, neuroimaging, botulinum injections and lumbar punctures. Four week rotation is not eligible for rural placement.

Surgery – SUR 742

Credit Hours: 8 (8 weeks) Grade Mode: Honors/Pass/Fail

The Surgery Clerkship provides a core learning experience for medical students in the discipline of general surgery. Students have the opportunity to gain knowledge and skills basic to the practice of general surgery through formal classroom teaching and clinical activities, both in-patient and out-patient. Students rotate through one week of Orthopaedics and one week of Anesthesia as well as 2 days of breast surgery and urology. Four weeks can be spent at an approved rural rotation.

Career Exploration Electives TBD

Credit Hours: 8 (8 weeks) Grade Mode: Pass/Fail

All students must complete minimum 8-weeks of career exploration electives, which may include research projects, away rotations and specialty shadowing.

MD Courses Descriptions

PHASE 2, PART 2

Emergency Medicine – EMS 744

Credit Hours: 2 (2 weeks) Grade Mode: Honors/Pass/Fail

This course is a required two week experience for all Fourth Year Students and must be successfully completed prior to graduation. Students are expected to complete a minimum of 40 hours per week in the Cabell Huntington Emergency Department. Students will evaluate patients and formulate effective testing and treatment strategies. Active participation in patient care and procedural skills is required.

Students will be assigned to see patients under the direct supervision of faculty preceptors. Scheduling of the students' shifts is to be at the convenience of the preceptors who work with the students. Midnight and weekend shifts are required.

ALL STUDENTS MUST SUCCESSFULLY COMPLETE ONE OF THE FOLLOWING 2-WEEK SELECTIVE ICU EXPERIENCES

Selective ICU – NEONATOLOGY – PED 805

Credit Hours: 2 (2 weeks) Grade Mode: Honors/Pass/Fail

The student will observe and participate in the management of the high risk newborn in the Neonatal Intensive Care Unit with neonatologists, nurse practitioners, and pediatric residents. Emphasis will be placed on recognizing and assessing the high risk newborn, instituting acute therapeutic emergency measures, requisitioning appropriate laboratory studies and therapy under direct supervision. Daily assessment of nutritional needs and growth and development of the high risk infants will be among the student's responsibilities. Reading and participation in selected diagnoses and/or management reports related to the patients in the unit is expected.

Selective ICU – INTERNAL MEDICINE INTENSIVE CARE UNIT – MED 833

Credit Hours: 2 (2 weeks) Grade Mode: Honors/Pass/Fail

The primary purpose of this elective is to provide the senior medical student with a diverse, well-rounded, meaningful, and focused exposure to the field of Critical Care Medicine. Students will have the opportunity to apply the basic physiology learned in their initial three years to the critically ill patient.

Selective ICU – PEDIATRIC CRITICAL CARE – PED 807

Credit Hours: 2 (2 weeks) Grade Mode: Honors/Pass/Fail

The student will observe and participate in the management of the critically ill pediatric patient. Emphasis will be placed on assessing and recognizing critically ill children and developing early intervention and daily treatment plans. The student will have primary responsibility for one or two patients on daily rounds. Reading and participation in selected diagnoses and/or management reports related to the patients in the unit is expected.

Selective ICU – SURGICAL INTENSIVE CARE UNIT – SUR 833

Credit Hours: 2 (2 weeks) Grade Mode: Honors/Pass/Fail

The course objectives for this course include:

- Gain experience with monitoring and evaluation of the critically ill surgical patient.
- Provide a broad exposure to fundamental concepts of critical care including ventilator management, hemodynamic monitoring, fluids and electrolytes, and nutritional support.
- Develop an understanding and basic skills in the assessment, initial resuscitation, management and recovery of post-surgical intensive care patients from a wide variety of surgical disciplines including general, orthopedic, trauma, thoracic and urologic.
- Understand the indications for common surgical intensive care procedures.

ALL STUDENTS MUST SUCCESSFULLY COMPLETE ONE OF THE FOLLOWING 4-WEEK SUBINTERNSHIPS

Subinternship in Family Medicine – FCH 827

Credit Hours: 4 (4 weeks) Grade Mode: Honors/Pass/Fail

Students will perform at the level of an acting intern on the busy and lively family practice inpatient team. Patients followed by the family practice hospital service include newborn infants, children, adults, and critical care patients (ICU/CCU) in a 350-bed hospital. The subintern will perform admission histories and physicals on hospitalized patients and then function as the patients' primary physician during the hospitalization under the close supervision of the chief residents and attending. The subintern will present his or her patients daily at a resident-directed, dynamic morning rounds. He or she assumes responsibility for ordering and interpreting laboratory data, choosing suitable treatments and communicating with patients and their families. Students are expected to follow a minimum of 2 patients daily while on the service. Attendance at weekly Family Practice Grand Rounds is required (90 minutes every Thursday afternoon, lunch is provided). Night call will be assigned to average every fourth to fifth night. Students on the Family Medicine Sub-Internship will review imaging studies on daily rounds and participate in weekly radiology sessions supervised by attending radiologists.

Subinternship in Internal Medicine – MED 827

Credit Hours: 4 (4 weeks) Grade Mode: Honors/Pass/Fail

This Selective Medicine Course is a 4 week course that is organized as a sub-internship to provide senior students with a structured clinical internal medicine experience. Students assume the responsibilities of being an integral team member of an inpatient medical service and as such improve and build upon cognitive and technical clinical skills attained during the third year clerkship. This course is offered at the Huntington VA Medical Center only.

Subinternship in OB – OBG 827

Credit Hours: 4 (4 weeks) Grade Mode: Honors/Pass/Fail

The course objectives for this course include:

- Learn the principles of antepartum care with specific attention to routine prenatal care and screening
- Identify, evaluate, and manage at risk pregnancies
- Develop the tools to evaluate and manage pregnant patients in the emergency room (triage) setting
- Learn the principles of management of labor including vaginal delivery
- Understand the indications for and techniques of labor induction
- Understand the principles of postpartum care with specific emphasis on breast feeding and contraception

Subinternship in Orthopaedics – ORT 827

Credit Hours: 4 (4 weeks) Grade Mode: Honors/Pass/Fail

A 4th year subinternship in orthopaedic surgery is offered, providing experience in office and hospital management of diseases of the musculoskeletal system. Preference is given to those considering matching in orthopaedic surgery. Visiting Medical Students are allowed enrollment, but preference will be given to Marshall students. For those looking for an outpatient musculoskeletal experience only, please consider ORT 808.

Goals: The student will be introduced to office and hospital management of diseases of the musculoskeletal system. The goals of the course are to: 1) introduce the student to common musculoskeletal conditions as encountered by the orthopaedic department; 2) develop procedural, outpatient, and inpatient clinical skills relevant to orthopaedic surgery, 3) develop a solid knowledge base of musculoskeletal conditions, and 4) develop the skills needed to succeed as an intern on a busy orthopaedic service. The student will take up to four 1 week rotations through the available services at the time of his or her rotation, including Joint Replacement, Sports Medicine, Spine, Trauma, Hand, Foot and Ankle, and Tumor. Reasonable requests made at least one week prior to arrival will be honored on a "first come, first served" and basis.

Subinternship in Pediatrics – PED 827

Credit Hours: 4 (4 weeks) Grade Mode: Honors/Pass/Fail

The student will function as a member of the house staff team observing and participating in the delivery of care of the pediatric hospital patient from the initial admission with the attending and resident. The complete evaluation of the patient, the planning of the clinical appraisal and care will be under the management of the student. All procedures, laboratory follow-through and therapeutic management of the patient will be coordinated with the pediatric resident to whom the student is assigned. Location of this elective is the Inpatient Pediatric Floor at Cabell Huntington Hospital – 5th floor.

Subinternship in Psychiatry –PSI 827

Credit Hours: 4 (4 weeks) Grade Mode: Honors/Pass/Fail

The course will prepare students to provide comprehensive and evidence-based care for hospitalized adult psychiatric patients. Duties will include: performing intake and follow-up assessments, documenting completed history and physical examinations (H&Ps) and daily progress notes, assisting in the development of comprehensive treatment plans, actively participating in treatment team discussions, coordinating patient follow-up care case management, coordinating care with therapists, psychologists, and nursing staff, and performing daily evaluations of patient safety.

Subinternship in Surgery – SUR 827

Credit Hours: 4 (4 weeks) Grade Mode: Honors/Pass/Fail

The surgical sub-internship (Sub-I) is a focused month designed to have students directly participate in the care of surgical patients; that is, initial evaluation, formulation of differential diagnoses, establishment of treatment plans and eventual daily care of the patient. It is important to emphasize that the student should function at the PGY-1 level with close supervision from the resident and attending surgical team. Students will actively participate on rounds, daily care tasks, procedures, and conferences.

The Sub-I is a chance for the soon-to-be resident to gain and/or polish the clinical skills critical for entering residency. The student should actively participate in procedures, clinical decision-making, and patient interaction. Call responsibility will be addressed by the attending surgeon and Chief Resident. This month is a chance to establish a preliminary comfort level in taking care of patients and is designed to simulate what it may be like as a PGY-1, with appropriate supervision. Although the patient population is primarily of a surgical nature, students will obtain a broad clinical exposure which will provide a solid experience for entrance into any type of residency program.

ALL STUDENTS MUST SUCCESSFULLY COMPLETE 36 WEEKS OF FOURTH YEAR ELECTIVE OPTIONS WITH THE FOLLOWING RESTRICTIONS:

A maximum of 16 weeks are permitted for Away Rotations

A maximum of 8 weeks are permitted for Non-Patient Contact electives, which include:

- ACH 813 Surgical Anatomy
- FCH 885 Med Spanish
- FCH 857 International Readings
- FCH 855 Rural Readings
- Research NEU 805, ORT 809, PED 809, PSI 820, SUR 814, PMC 785

Anatomy

Anatomy - ACB 813 – Surgical Anatomy (NPC)

Course length: 2-4 weeks

Focuses upon laboratory work and completion of dissections as determined by the course director. The course allows you to review gross anatomy, from the perspective of surgery, with special emphasis on regions of particular interest to you but might also include regions requested by the course director. The number of regions to be dissected depends on the number of weeks and the particular region(s) requested.

Cardiology

Cardiology - CVS 800 – Essentials of EKG

Course length: 1 week

A fast-paced course that will expose you to the common dilemmas in ECG interpretation. You will be taught advanced interpretation of the electrocardiogram, with a specific emphasis on cardiac arrhythmia. You are expected to come in with a basic understanding of the principles of electrocardiography. Dr. Wehner tailors the curriculum to meet your needs for residency.

Cardiology - CVS 801 – Cardiovascular Medicine

Course length: 4 weeks

Is an integral core component of training to be a physician. Many cardiovascular disease processes are prevalent with the potential to be life threatening. Recognition, triage, and appropriate therapy are vital to the internist, regardless of specialty. You will have exposure to the majority of cardiovascular cases, presentations, management and procedures. Will include exposure and education in: EKG interpretations, stress testing, echocardiography and invasive procedures such as cardiac catheterization and pacemaker placement.

Dermatology

Dermatology - MED 803 – Clinical Dermatology

Course length: 4 weeks

You will develop the ability to examine a core curriculum of skin diseases, understand the methods of differential diagnosis and techniques for skin testing, and formulate a diagnostic and therapeutic plan of treatment.

Emergency Medicine

Emergency Medicine EMS 710 – Emergency Medicine

Course length: 2-4 weeks

You will be exposed to the evaluation of patients and formulation of effective testing and treatment strategies. Active participation in patient care and procedural skills is required. You will be assigned to see patients under the supervision of faculty preceptors. Scheduling of shifts will be at the convenience of the preceptors. Midnight and weekend shifts are required.

Family Medicine

FCH 780 – Special Topics in Family Medicine

Course length: 2-4 weeks

You assume the responsibilities of determining the content and organization. you must be an independent learner and able to function under limited supervision. You will be permitted to create a family medicine special topic study experience to meet individual study and/or career interest needs.

FCH 800 – Outpatient Family Medicine

Course length: 2-4 weeks

Experiences will vary. Electives will be available at a variety of family medicine sites, including community health centers as well as, private family practitioner offices. You will be assigned to sites based upon your interest and site availability. You will work under the direct supervision of clinical faculty and residents. You will obtain appropriate histories and complete indicated physical exams, develop a working assessment and initiate management of patients of all ages with acute and chronic illnesses. You will participate in health promotion and disease prevention needs of presenting patients. Proper documentation of all patient encounters will be completed by you where appropriate.

FCH 806 – Local Health Department Clerkship

Course length: 2 weeks

Will introduce you to the local health department and the public health issues confronting the agency. You will participate in disease investigation and contact tracing as it happens in the community. You will accompany sanitarians during restaurant, school, daycare, or nursing home inspections and participate in immunization clinics, family planning, STD and TB clinics.

FCH 820 – Rehabilitative Medicine

Course length: 2 weeks

Will introduce you to chronic and acute disability conditions. You will observe patients in rehabilitation therapy and observe physiatrist in rounds, clinics and brace-prosthetics. You will participate in team conferences, lectures, and literature review.

FCH 845 – Sport Medicine and Adult Fitness

Course length: 2 weeks

Arranged during specified times within the Fall & Spring. Opportunities for pre-participation examinations, assessment of acute injuries, and interactions with athletic training personnel, physical therapists, and orthopedists. The role of exercise in fitness and health is also explored with exercise physiologists and literature review.

FCH 850 – Rural Geriatrics

Course length: 2-4 weeks

You will have the opportunity to improve knowledge, skills, and experience in caring for rural elders. You will gain clinical experiences in diverse environments such as rural long term care facilities, rural medical clinics and offices, patient's homes, and rural agencies on aging. There will be a didactic component of directed readings and discussion with faculty.

FCH 855 – Readings in Rural Health (NPC)

Course length: 2 weeks

Provides an in-depth examination of an issue related to providing health care in rural communities.

FCH 857 – Readings in International Health (NPC)

Course length: 2 weeks

Provides an in-depth examination of an issue related to providing health care in an international setting.

FCH 880 – International Health

Course length: 4-12 weeks

Recognizes that primary care is not bound by hospital walls or national borders. Instead, it is a universal process of prevention, diagnosis, and treatment. It will provide an opportunity for students with an interest in tropical medicine, parasitology, infectious disease, or public health to take part in clinical, field, or research activities. Allows you to see the universal process of prevention, diagnosis, and treatment outside the context of our culture: often problems and solutions stand out when viewed against an unfamiliar backdrop. Numerous opportunities for study abroad are available.

FCH 885 – Medical Spanish (NPC)

Course length: 2 weeks

Will develop your competence in interviewing, taking medical histories, examining, diagnosing, and treating Spanish-speaking patients. Will offer elementary-level instruction in Spanish language and culture, all oriented to the practice of medicine with Spanishspeaking patients. Instruction focuses on basic grammar and vocabulary fundamentals, combined with medical terms, medically related phrasing and idioms, language for specific clinical situations (admissions, emergencies, etc.) and health-related cultural information. You will be provided with opportunities to practice applying Spanish in mock medical settings. Cultural studies include readings, presentations by clinicians working with Spanishspeaking populations, case studies, and role-playing exercises. Focus will be on dialogues on taking patient medical history, history of medication, and family and social history. No prior knowledge of Spanish is required.

FCH 895 – Hospice and Palliative Medicine

Course length: 2-4 weeks

A hands-on, intensive and well-supervised experience in the management of end-of-life situations involving patients, family members and other health care providers.

Interdepartmental

IDM 801 – Academic Medicine (NPC)

Course length: 2 weeks

Allows you to be involved in teaching first- and second-year medical students in the clinical and basic science settings. * Must complete a total of 30 hours.

IDM 810 – Readings in Sexual and Minority Health (NPC)

Course length: 2 weeks

Students will be provided a comprehensive health education curriculum to improve cultural competency in providing care for LGBTQ patients. Will serve as a supplemental course for LGBTQ medical education so that you will have the training and tools to deliver informed compassionate care to all sexual and gender minorities across multiple disciplines.

IDM 830 – Culinary Medicine (NPC)

Course length: 2 weeks

Utilizes online learning modules and in-person experiences to teach and enhance your knowledge of eating/cooking foods suitable to maintaining control over medical conditions. * Limited to 10 students at a time. Offered a limited number of times per year. In-person experiences are scheduled at Huntington's Kitchen.

Internal Medicine

MED 780 – Special Projects in Internal Medicine

Course length: 2-4 weeks

Prior approval must be granted by the department. The number of credit weeks will be determined by the planned activities and study proposal submitted. You must be an independent learner and able to function under limited supervision.

MED 805 – Clinical Endocrinology and Metabolism

Course length: 2-4 weeks

Provides an opportunity for you to develop your clinical skills and expertise in diabetes, thyroid disease and other endocrine diseases. You will participate as a member of the team consisting of the endocrinologists, fellow, assigned resident, and medical student. You will work closely with the endocrinologist who will make patient rounds daily. You will attend outpatient endocrinology clinics two half-days a week for training in the management of endocrinology problems in ambulatory patients. A variety of educational conferences are scheduled including endocrinology clinical case conference, endocrinology lectures, and other meetings to which you are invited. About forty percent of your time will be spent directly or indirectly in ambulatory care.

MED 807 – Gastroenterology

Course length: 2-4 weeks

Will introduce you to clinical gastroenterology. You will be integrated into a clinical rotation similar to that of the interns whereby he/she is responsible for the consultation history and physical examination of a hospitalized patient for whom the primary service has requested a GI consultation. You will be expected to discuss the case with the fellow or faculty, review the scientific literature pertinent to the case, and finally present the case to the attending during rounds. You will make daily rounds with the house staff and attending on all patients on the GI Service, will attend all of the GI-oriented conferences, and Grand Rounds and may be asked to participate in one during his/her rotation. You will be introduced to the procedural aspects of gastroenterology, including upper endoscopy and colonoscopy, and will have the opportunity to observe these in both his/ her patients and others. There will be a strong interaction between you and other services that share in the management of gastroenterology patients, such as general and colorectal surgery, critical care, pathology, and radiology.

MED 811 – Hematology/Medical-Oncology

Course length: 2-4 weeks

Provides you with experience in the diagnosis and management of hematological and oncological problems both in the inpatient and outpatient clinic setting. These include anemia, coagulation disorders and hematological and solid neoplasms. Special instruction includes the focused physical examination techniques appropriate to blood disorders and neoplasia, bone marrow aspiration under supervision, the microscopic evaluation of peripheral blood and bone marrows, and treatment planning. Longer rotation emphasis will be on continuity of care and modalities of support appropriate to on-going disorders.

MED 813 – Infectious Disease

Course length: 2 weeks

Infectious diseases have plagued mankind since the beginning of time. In the 21st century, the morbidity and mortality attributable to infectious diseases continues to be a major threat to human health and well-being. Future physicians should have the knowledge and skills to diagnose and manage infections commonly encountered in their practice. You will acquire knowledge and skills in the evaluation and treatment of infected patients. Special emphasis will be placed in the development of a rational approach to antimicrobial use and infection prevention. You will be exposed to outpatient infectious disease evaluation and management at the Byrd Clinical Center, participate in the Sexually Transmitted Diseases Clinic and Tuberculosis Clinic at the Cabell-Huntington Health Department and be involved in inpatient consults at Cabell-Huntington Hospital and St. Mary's Medical Center.

MED 817 – Clinical Nephrology

Course length: 2-4 weeks

Renal disorders are common in general population. These problems are frequently seen as a complication of common diseases such as diabetes mellitus and hypertension which are prevalent in the community. In conjunction with intrinsic renal pathology, kidneys may be affected by numerous other diseases, as well as due to exposure to toxins and various medications. You are offered the opportunity to evaluate and manage patients with common renal problems, including acute and chronic renal failure, fluid and electrolyte abnormalities, hypertension, hemodialysis and transplantation. You are assigned to an inpatient nephrology unit and round daily with the resident and nephrologist. It is a mixture of inpatient consultation and outpatient experiences.

MED 821 – Pulmonary Medicine

Course length: 2-4 weeks

Is both an inpatient and outpatient experience. You will work directly with different pulmonary attendings and fellows, attend 2-3 half-day clinics per week and attend the sleep clinic. You will experience consultations on hospitalized patients and be involved in their evaluation, including any necessary pulmonary procedures. It is based at the MUMC, HWWVAMC, CHH, and SMMC.

MED 823 – Clinical Rheumatology

Course length: 2-4 weeks

Rheumatologic illnesses account for a significant proportion of morbidity in the general population. Physicians should possess the knowledge and skills to diagnose and manage basic rheumatologic conditions commonly encountered in a medical practice. During this rotation, you will acquire the knowledge and skills to identify and manage these illnesses. Emphasis will be placed on recognition of various rheumatologic illnesses, appropriate diagnostic evaluation and testing, and development of effective treatment plans.

MED 826 – Hospital Medicine

Course length: 2 weeks

Provides a structured clinical experience in the field of Academic Hospital Medicine. It is a supervised and personalized educational experience that will serve to improve and build upon cognitive and technical clinical skills attained during the medicine clerkship. You will learn the clinical skills and attitudes essential to the practice of Academic Hospital Medicine and the delivery of the highest quality patient care. The attending will be responsible for assigning you patients to follow from admission to discharge. You will be expected to participate in patient care, including but not limited to writing admission orders, daily progress notes, obtaining consults and discharge planning. In addition to patient care, you will be expected to identify and present on a topic in hospital medicine such as patient safety, quality improvement, risk management or the economics of hospital medicine. You will attend committee meetings and conferences required by the attending. *Limited to 1- two week rotation.

MED 828 – Advanced Clerkship in Med/Ped

Course length: 2-4 weeks

Provides a structured clinical experience in the broad field of General Internal Medicine and Pediatrics. It is an educational experience that will serve to improve and build upon cognitive and technical clinical skills attained during the clerkships. You will learn the clinical skills and attitudes essential to the practice of General Internal Medicine and Pediatrics. You will be expected to deliver the highest quality patient care. You will be encouraged to combine ambulatory and inpatient experiences in order to gain understanding of a typical Med/Ped practice but will have an opportunity to concentrate solely in one aspect or the other as you prefer. You will rotate with several faculty members in Internal Medicine and Pediatrics to gain the full experience.

MED 830 – Interdisciplinary Medicine

Course length: 2 weeks

Will provide you with the opportunity to learn about the roles and responsibilities of a variety of non-physician health care providers. You will shadow and spend time (8am – 5pm) working with a different type of provider each day. *Limited to 10 students an academic year.

Neurology

NEU 803 – Neurosurgery

Course length: 2-4 weeks

Will give you a basic understand of surgical diseases of the brain and spinal cord. You will learn how to diagnosis common neurosurgical problems through the proper neurological history and examination, the interpretation of basic neurological diagnostic studies including, plain X-rays, CT scans, MRI-scans, and other commonly used diagnostic modalities. You will attend rounds with staff physicians and all neurological and neurosurgical conferences. You will be encouraged to actively participate in all conferences including presentations and discussions. You will be required to spend equal amounts of time in clinical and surgical settings. In the surgical setting, you will be required to scrub in on all procedures you attend. You will be required to participate in the on-call schedule and to be an active participant in neurosurgical consultations on the hospital floor and emergency ward. *Bahamas Option* Dr. Magnus Ekedede from Princess Margaret Hospital and Doctor's Hospital in the Bahamas, invites MUSOM students to rotate for Neurosurgery. Lodging will be provided; however, travel and meal expenses are your responsibility. For questions, email mekedede@hotmail.com or neurosurgicalinstitutebahamas@gmail.com. *When registering put Bahamas in the location box.

NEU 813 – Clinical Pediatric Neurology

Course length: 2-4 weeks

Will expose you to pediatric patients with various neurologic disorders. You will learn how to examine patients ranging in age from neonates to teenagers and how to obtain a thorough history from patients/family members. Appropriate evaluation of the patient's condition will be emphasized. You will participate as an integral member of the neurology team. This involvement allows you to: build on your basic science and clerkship experience in terms of knowledge and physical examination skills; expand your skills in ambulatory pediatric neurology, with an emphasis on neurological problems unique to the infant and child; gain knowledge regarding newer treatment modalities and research in the field; explore the option of pediatric neurology as a career choice; learn more about sub specialization in pediatric neurology.

NEU 829 – Clinical Neurology

Course length: 2-4 weeks

Will familiarize you with the presentation and techniques of evaluation appropriate to patients with neurological disorders. You will participate as an integral member of the neurology team. This involvement allows you to: build on your basic science and clerkship experience in terms of knowledge and physical examination skills; expand your skills in ambulatory neurology, with an emphasis on neurological problems which you will encounter throughout your career, regardless of specialty; gain knowledge regarding newer treatment modalities and research in the field; explore the option of neurology as a career choice; learn more about sub specialization in neurology.

Obstetrics and Gynecology

OBG 780 – Special Projects in OB/GYN

Course length: 2-4 weeks

Prior approval must be granted by the department. The number of credit weeks will be determined by the planned activities and study proposal submitted. You must be an independent learner and able to function under limited supervision.

OBG 813 – Gynecologic Surgery

Course length: 2-4 weeks

You will be responsible for the pre- and post-operative management of patients undergoing surgical procedures for benign gynecologic diseases. You will learn the evaluation, ambulatory management, and surgical options to treat female pelvic floor dysfunction. You will be required to demonstrate knowledge of the anatomy of the female pelvis. You will be required to demonstrate basic laparoscopic skills.

OBG 814 – Pediatric Gynecology

Course length: 2-4 weeks

You will understand the principles of primary and preventative health care in the female pediatric and adolescent population. Learn the principles of antepartum care with specific attention to the adolescent age group. Describe mental health disorders as they relate to adolescents. Understand and provide counseling for adolescent females seeking contraceptive care. Describe the evaluation and management of pediatric/adolescent females with abnormal development of secondary sexual characteristics. Describe the evaluation and management of pediatric/adolescent females with pelvic pain. Describe the evaluation and management of pediatric/adolescent females with abnormal uterine bleeding. Understand how to educate adolescent females on sexuality.

OBG 835 – Maternal and Fetal Medicine

Course length: 4 weeks

You will develop the basic tools to evaluate and manage at risk pregnancies with specific regard to prenatal diagnosis and imaging (including ultrasound); understanding of embryology and fetal growth and development; understanding of genetics as related to prenatal diagnosis; maternal hypertensive disorders; diabetes complicating pregnancy; inpatient and ambulatory management of at-risk pregnancies; maternal and fetal physiology, including anatomic adaptations to pregnancy.

OBG 850 – Gynecologic Oncology

Course length: 2-4 weeks

You will participate in the complete management of patients with precancerous and invasive lesions of the pelvic organs on inpatient and outpatient bases. Will be an integral part of the service and will participate in all activities of the service, including attendance at departmental conferences, hospital rounds and outpatient clinics. *Dates and duration must be pre-approved by Course Director and Gynecologic Oncology faculty. *Ophthalmology*

Ophthalmology

OPH 804 – Ophthalmology

Course length: 2-4 weeks

You will be acquainted with the techniques of the examination of the eye, common fundus pathology, cataracts, glaucoma, common external problems and ophthalmic emergencies. You may be exposed to ophthalmic surgery, pre-op, and post-operative care.

Orthopaedics

ORT 808 – Introduction to Musculoskeletal Care

Course length: 2-4 weeks

Non-operative musculoskeletal care is offered, providing experience in the multidisciplinary management of diseases of the musculoskeletal system. Rotations may include inpatient medical management of orthopedic patients, non-operative sports medicine, general clinical orthopedics, rheumatology, osteoporosis, and physical therapy. There is no 'call' requirement. Evaluation is based on a logbook of patients you evaluate. *If you are looking for a sub internship experience, consider

ORT 807. If you are looking to fulfill the General Surgery Elective requirement, consider SUR 744, Orthopedic Surgery.

ORT 810 – PM&R

Course length: 2-4 weeks

Will expose you to a wide variety of cases in an outpatient setting treating conditions in the field of Physical Medicine and Rehabilitation from an early subacute to disability and long term chronic medical conditions.

Pathology

PTH 802 – Forensic Pathology

Course length: 2-4 weeks

You will be provided an orientation to basic forensic medicine. Daily activities include observation of medico legal autopsies, visits to out of hospital death scenes, participation in departmental conferences, and working directly with a forensic pathologist as an integral member of the investigation team. You will assist in postmortem examinations and follow case development inclusive of autopsy protocol dictation, review of microscopic slides, and formulation of the case opinion. You may also participate in law enforcement interaction, observe court testimony and other aspects of the program. Exposure to forensic toxicology may be provided. *Available to 1/2 at a time.

PTH 803 – The Practice of Pathology

Course length: 2-4 weeks

You will be introduced to the practice of anatomic and clinical pathology at SMMC. This includes laboratory hematology, flow cytometry, cytology, surgical pathology and other aspects of anatomic and clinical pathology. Emphasis will be on surgical pathology. You will attend all teaching conferences and rounds. You are expected to be in the department for the full workday, absences must be approved in advance. You will review microscope slides and unknown cases on a daily basis. You will prepare a mini presentation on a pathology topic. You will be required to spend time with the pathologists and technologists in order to gain insight into their role in health care and to allow the staff to give a valid evaluation of you.

Pediatrics

PED 801 – Ambulatory Pediatrics

Course length: 2-4 weeks

You will observe and participate in the delivery of general pediatric care in the outpatient resident clinics with the pediatric faculty and residents. You will participate in well-baby exams and health maintenance visits for infants through adolescents. You will be exposed to a wide variety of acute health problems as well as a wide variety of chronic medical problems. Report to Resident Clinic at 8:30a.m. *Available to 1 at a time. NEW

PED 802 – Newborn Nursery

Course length: 2 weeks

You will observe and participate in the care of the newborn infant. You will participate in newborn baby exams and history taking in the newborn nursery. Care of the wellborn infant will be emphasized with routine newborn nursery interviews. You must contact the Course Director one week prior to start of the rotation. *Available to 1 at a time.

PED 803 – Primary Care Pediatrics

Course length: 2-4 weeks

You will observe and participate in the delivery of general pediatric care in an office setting with pediatric faculty. You will participate in well-baby exams, health maintenance visits, mental health visits as well as, acute sick visits for infants through adolescents. Emphasis will be on the

comprehensive assessment of medical problems of patients and families and development of treatment plans including preventive measures, health education and follow-up care. Potential of 3 campus options. You will need to contact the Course Director two weeks prior to start of rotation.

*Available to 1/2 at a time.

PED 806 – Pediatric Community Medicine

Course length: 2-4 weeks

Flexibility exists to include a variety of experiences so that your particular needs and interests are met. You must contact Dr. Christina Hensley 1 month in advance so that an appropriate schedule may be arranged. You will spend a variable amount of time with a variety of agencies in order to observe what services are offered and how their individual missions are carried out. This will give you the opportunity to become familiar with different agencies and services available in the community and to gain an understanding of the workings of these agencies and how they affect the lives of pediatric patients. You will learn how to access these services when needed by the patient. You will develop a working relationship with the staff of these agencies in order to be able to better serve the patients. You will gain experience with local agencies that provide various services to infants, children, and adolescents in our area. Topics in community pediatrics including organization of primary care services, principles of public health, and preventive medicine will be stressed. *Available to 1 at a time.

PED 808 – Pediatric Cardiology

Course length: 2-4 weeks

You will be introduced to the pediatric subspecialty of cardiology. You will participate in supervised clinical evaluation of patients in the outpatient department, hospital ward, and pediatric/neonatal ICU's. You must contact the Course Director one week prior to start of the rotation.

PED 810 – Child Health Advocacy (NPC)

Course length: 2 weeks

Focuses on a holistic approach to child health advocacy. You will learn about how to advocate for children's health by utilizing media platforms, engaging with policymakers and legislative bodies, and becoming more familiar with community resources for children with various health and socioeconomic backgrounds. You must contact the Course Director two weeks prior to start of the rotation.

*Available to 1 at a time.

PED 812 – Pediatric Gastroenterology

Course length: 2-4 weeks

You will be introduced to the pediatric subspecialty of gastroenterology. You will participate in supervised clinical evaluation of patients in supervised clinical evaluation of patients in the outpatient department, hospital ward, and pediatric/neonatology ICU's. You must contact the Course Director one week prior to start of the rotation. *Available to 1 at a time.

PED 814 – Pediatric Adolescent Medicine

Course length: 2-4 weeks

You will be introduced to the spectrum of adolescent health care from the healthy futureoriented high school student to the severely emotionally disturbed adolescent. Patients will include those who are sexually active, pregnant, have gynecological problems, chronic medical and psychiatric problems, as well as those presenting for routine and acute health care. You will be exposed to the multidisciplinary approach to adolescent health care. You must contact the Course Director one week prior to start of the rotation. *Available to 1 at a time.

PED 820 – Pediatric Hematology/Oncology

Course length: 2-4 weeks

You will be introduced to the specialty of Pediatric Hematology/Oncology and will be involve in the

management and care in the inpatient and outpatient setting with a broad spectrum of hematologic and oncologic disorders. You must contact the Course Director one week prior to start of the rotation. *Available to 1 at a time.

PED 825 – Child Development and Behavior

Course length: 2-4 weeks

You will observe and participate in the care of children with behavioral concerns and developmental disabilities such as ADHD, Autism Spectrum Disorder, learning disorders, and intellectual disability. You will be introduced to the psychological aspects of Pediatrics and will observe and participate in developmental evaluations. You will also have the opportunity to observe children in various clinical and community settings. Different types of screening and assessment techniques will be discussed. Community experiences may vary depending on timing and duration of rotation. You must contact the Course Director two weeks prior to start of the rotation. *Available to 1 at a time.

PED 895 – Pediatric Infectious Disease

Course length: 2-4 weeks

You will be exposed to a wide range of infectious diseases pathophysiology predominantly through inpatient consultation involving patients from the NICU, PICU, and general peds wards. Discussion and exposure to outpatient ID will be present, but less predominant. You must contact the Course Director one week prior to start of the rotation. *Available to 1 at a time.

PED 898 – Pediatric Allergy/Immunology

Course length: 2-4 weeks

Focuses mainly on outpatient evaluation and management of allergic and immunologic diseases. Aspects of inpatient and emergency evaluation and management will be discussed. Experience in these areas will vary based on frequency of consultations. You must contact the Course Director one week prior to start of the rotation. *Available to 1 at a time.

Pharmacology

PMC 785 – Clinical Pharmacology (NPC)

Course length: Option A: 4 weeks up to 12 with permission. Option B: 4 weeks. Option C: 4 weeks (multiple locations).

Option A: Offers you the opportunity to research a topic of special interest. You will be assigned to a faculty member in the Department of Pharmacology, Physiology and Toxicology for guidance and assistance. Projects may involve literature review or laboratory research. Projects may be selected from Cardiovascular, Pharmacology, Neuropharmacology, or Toxicology.

Option B & C: Offers you an opportunity to integrate clinical drug considerations with didactic pharmacology knowledge. You will evaluate acute care patients with respect to their active drug therapy, including pharmacodynamics and pharmacokinetic issues. The respective hospital's Clinical Pharmacist will coordinate your experience and project(s).

Psychiatry

PSI 801 – Child and Adolescent Psychiatry

Course length: 2 weeks

You will focus on obtaining clinical experience in the diagnosis and treatment of psychiatric disorders in children and adolescents. Common disorders you will gain experience in treating include attention deficit hyperactivity disorder, depression, oppositional defiant disorder, conduct disorder, anxiety, autism and other developmental disorders, and substance abuse. Experience will be provided working with inpatients in an acute setting or residential setting and in the Marshall Psychiatry outpatient mental health clinic. Additional experiences may be arranged after discussion with and approval by the Course Director.

PSI 804 – Psychiatric Consultation

Course length: 2 weeks

You will be assigned to work directly with the faculty member assigned to consultations. In working with patients from the point of view of the psychiatrist answering a request for consultation, you will have an opportunity to sharpen interviewing and diagnostic skills and develop a better understanding of the relationship of emotional and physical aspects of illness. You will accompany or precede the faculty member in answering consultations. You will follow patients seen in consultation as either inpatients or outpatients and be supervised in follow-up contacts by faculty. You will be expected to prepare cases for presentation at clinical staff conferences.

Radiology

RAD 810 – Radiology

Course length: 2-4 weeks

You will be provided a basic understanding of the principles of radiology and will become familiar with the many diagnostic techniques available, their values and limitations, and how they may best be used in the management of the patient. *4 weeks must be in the same semester.

RAD 898 – Radiation Oncology

Course length: 2-4 weeks

You will be provided a basic understanding of the principles of radiation oncology and will become familiar with the many diagnostic techniques available, their values and limitations, and how they may best be used in the management of the patient. Located at the ECCC *Must be requested & approved at least a month in advance.

Surgery

SUR 801 – General Surgery

Course length: 2-4 weeks

Will give you a more in-depth experience in surgery. You will take on the responsibilities of an intern. In this capacity, you will see consults in the emergency room and on the floor, manage patients that have been admitted to the service, and assist in the operating room.

SUR 806 – Anesthesiology

Course length: 2-4 weeks

You will learn the ability to: obtain pre-operative patient histories including system review, lab tests, and plan of anesthesia; discuss cardiopulmonary evaluations in patients undergoing anesthesia; develop plans for pre-operative, operative and postoperative care and management. You will learn to: describe the pharmacology of the drugs used by anesthesiologists and common techniques in general and regional anesthesia, including but not limited to; standard and invasive anesthesia monitoring; post-operative analgesia regimen; drugs for sedation and analgesia; post-operative PACU standard of care; be familiar with the anatomic and physiologic variable to anesthetic practice; be familiar with perioperative evaluation for patients scheduled for surgery; be familiar with the monitoring devices and pharmacology of anesthesia drugs (sedation and analgesia). *Available to a limited number. Must be arranged at least a month in advance.

SUR 808 – Otolaryngology

Course length: 2-4 weeks

Provides an opportunity for you to observe all phases of E.N.T. from both the clinical and surgical aspects to advance your knowledge of otolaryngology and to obtain experience in the diagnosis and management of disorders of the ear, nose and throat in inpatient and outpatient settings. It will provide contact with various patient populations with acute and chronic head and neck pathologies. Both pediatric and adult patients will be seen in the clinic and operating room.

SUR 809 – Plastic Surgery

Course length: 2-4 weeks

Will acquaint you with the overall breadth and variety of plastic and reconstructive surgery. Will enable you to better understand wound healing and the management of injured tissues, as well as basic pre-operative and post-operative evaluation and management of plastic surgery patients.

SUR 811 – Urology

Course length: 2-4 weeks

Will acquaint you with state of the art medical and surgical care in all aspects of adult and pediatric urology. You will be exposed to all aspects of urologic practice including laparoscopic, open, image guided and endoscopic surgery as well as office-based practice. State-of-the-art equipment is available including the Da Vinci surgical system, laser technology, surgical imaging systems, lithotripters and ablative energy sources. Will enable you to better understand the basic clinical diagnosis from signs and symptoms of diseases common to practice of Urology. You will be exposed to the pre- and post-operative approach to the evaluation and management of patients. SUR

812 – Surgical Burn Management

Course length: 2 weeks

You will learn initial assessment and resuscitation of burn patients in the Burn Intensive Care Unit at Cabell. You will work with the emergency department and surgical burn team. You will round on patients, assist in the OR, and in pre-and peri-operative treatment.

SUR 815 – Pediatric Surgery

Course length: 2-4 weeks

Will allow you to participate in the evaluation and care of babies and children with surgical problems on the wards and in the operating room. You will attend out-patient clinics, round on children to the hospital, and participate in ward rounds throughout their stay.

Research Options

Research is Non-Patient Contact. Course length for BMS Research is 8-12 weeks and Clinical Research is 4-6 weeks. Department Coordinators are the Course Coordinator for research unless otherwise noted below.

BMS 813 – Research in Biomedical Sciences You will be provided an opportunity to become familiar with the tools and techniques used in biomedical research. Prior to beginning the course, you will select and meet with a departmental faculty member who will serve as your mentor. A research problem appropriate for the length of the course will be selected by joint agreement between you and your mentor. You will conduct laboratory experiments, gather and interpret data, read current literature, and write a paper on the research. Topics may include but are not limited to; hormone responsiveness in human breast cancer, control of tumor cell growth and differentiation, β -catenin as a molecular target in cancer, molecular therapeutics for cancer, cellular and whole animal models of nutrition and cancer, and Chmp1/Sap7 as a p53-mediated tumor suppressor in pancreas.

CVS 816 – Cardiovascular Research You will plan a research project in conjunction with a research mentor in the department.

FCH 816 – Research in Family and Community Health You will plan a research project in conjunction with a research mentor in the department.

IDM 816 – Clinical Research For students conducting clinical research in a department that does not have a research elective. *Must be approved by the Office of Medical Education.

MED 816 – Research in Internal Medicine You will plan a research project in conjunction with a research mentor in the department.

NEU 816 – Neurology/Neurosurgery Research You will plan a research project in conjunction with a department mentor; take the lead role in submitting the project to the appropriate regulatory committee (IRB, IACUC); carry out the research plan under supervision; present data orally to the rest of the research team on a regular basis; perform appropriate literature review to determine the current understanding of the problem; write up the research results in a form suitable for publication; attend and participate in the department's grand rounds, journal club, EEG conference, epilepsy conference and other regularly scheduled conferences as the schedule permits.

OBG 816 – Research in OBG You will plan a research project in conjunction with a research mentor in the department.

ORT 816 – Orthopedic Research Elective You must contact the course director to discuss opportunities that are available or may be accommodated. You will be expected to complete your project in the time allotted. Clinical work is proscribed unless it is germane to the project.

PED 816 – Pediatric Research Those interested will contact the course director to discuss opportunities available. Research will be arranged on an individual basis with a faculty member on a predetermined project in an area of mutual interest. You will attend scheduled lectures and conferences.

PSI 816 – Research in Psychiatry/Human Behavior You will have the option of designing and implementing a research project under supervision or will be able to join an existing research team. It is expected that you will submit any original work for publication. If you work with an ongoing research activity, you will develop a paper describing the project, experience with the project, and will critique its expected impact on medicine and health.

SUR 816 – Surgical Research You will develop a laboratory or clinical project suitable for completion during the period of the elective, with a faculty preceptor. The project and plan will be reviewed by a departmental research committee prior to initiation and following completion of the research. Projects include opportunities in gastrointestinal physiology, cardiovascular physiology, urological disease, and surgical infections.

Rural Options

Course length: 2-4 weeks. You will receive an introduction to primary care with a particular focus on wellness, maintenance, and disease prevention. The experience will demonstrate team health care provision, case management for functionality and quality and will include community service such as participation in health fairs, health education projects in schools. Patient care will be examined in terms of continuity management and community support as opposed to anecdotal disease management.

FCH 888 – Rural Family Medicine Experience will vary by location. Electives will be available at a variety of rural sites. You may be primarily involved in office-based patient care or may have a more varied experience combining outpatient care, emergency room evaluation of patients and inpatient care of hospitalized patients. You will be assigned to sites based upon interest and availability. You will work under the direct supervision of clinical faculty and residents. You will obtain appropriate histories and complete indicated physical exams, develop a working assessment and initiate management of patients of all ages with acute and chronic illnesses in a rural setting. You will participate in health promotion and disease prevention needs of presenting patients. Proper documentation of all patient encounters will be completed by you where appropriate. You will be involved in a community service project. Requirement for night call varies with the site.

MD Program Grading and Assessment

It is the policy of the Joan C. Edwards School of Medicine based upon the recommendations of the Liaison Committee on Medical Education (LCME) that all enrolled medical students are provided information regarding the JCESOM grading systems, assessments and narrative summaries.

There are three grading systems within the Marshall University Joan C. Edwards School of Medicine:

1. For the two pre-clinical years (MS1 & MS2), all required courses use the Pass/Fail grading system.
2. During the Clinical Clerkship (MS3) year, all clerkships utilize the Honors, Pass, Fail grading system.
 - o The third year clinical clerkship departments will determine the grading bases to be used to obtain Honors, Pass and Fail within the clinical clerkship. Grading bases cannot be changed after the academic year has begun.
3. During the final (MS4) clinical year, courses are awarded Pass/Fail or Honors/Pass/Fail grades as outlined in the course syllabus.

Final grades will be entered in the MUSOM Scheduling system by the course director and submitted electronically or via grading sheets to the Marshall University Registrar's Office during open grading periods.

Students cannot begin the next academic year without satisfactorily completing the previous academic year's coursework and requirements to advance to successfully. Failure to complete course work without fulfillment of these criteria will result in a grade of "Fail". The student will then be referred to the Academic & Professionalism Standards Committee for remediation, to repeat the course, or dismissal.

INCOMPLETE GRADES

- A grade of "I" (Incomplete) is given to indicate a student has not completed all course requirements.
- The incomplete grade is given at the discretion of the Clerkship or Course Director when due to extenuating circumstances preventing the student from completing the course requirements.
- Once the student has completed the requirements, the course director should notify the JCESOM Registrar to submit a change of grade form to the University Registrar's Office.
- Incomplete grades will revert to a grade of "F" if not completed within one year.

WITHDRAWAL FROM JCESOM

- Students may choose to withdrawal from courses at any time with approval from the Office of Medical Education. A student's request to withdrawal may not be granted solely because a student is failing a course(s); extenuating non-academic circumstances must also be documented to justify late withdrawal.
- To withdrawal from the Marshall University Joan C. Edwards School of Medicine, a student must first meet with the Vice Dean of Medical Education. If the Vice Dean is not available, the student should request a meeting with the Dean of the Medical School.
- If the withdrawal is approved, there will be a W (Withdrawal) entered upon a student's record when the student officially withdraws from a course or the school of medicine. The W will be entered on the transcript irrespective of the student's academic standing in that course.

SUBMISSION OF GRADES OVERALL

- Submission of grades is monitored by the JCESOM Registrar.
- Course Directors are to report all student grades within six weeks of the end of a course or clerkship.
- The JCESOM Registrar will notify the course director and/or clerkship coordinator of any missing grades on a monthly basis.

SUBMISSION OF GRADES MS 1 AND MS 2 YEARS

- Submission of grades for the MS1 and MS2 year occurs at the end of the fall term (December) and the spring (May) term.
- Grades are to be submitted via Medhub® and MyMu/MILO to the Marshall University Registrar's Office.
- Any course which ends after the respective grade entry time, should only enter grades in Medhub®. The JCESOM Registrar will request a grade sheet from the University Registrar's office for grades to be entered once the course is completed.
- Students who have outstanding or incomplete assignments, should be issued a grade of incomplete.
- For all required MS1 & MS2 courses, the type of grading is Pass/Fail.

SUBMISSION OF GRADES MS 3 YEAR

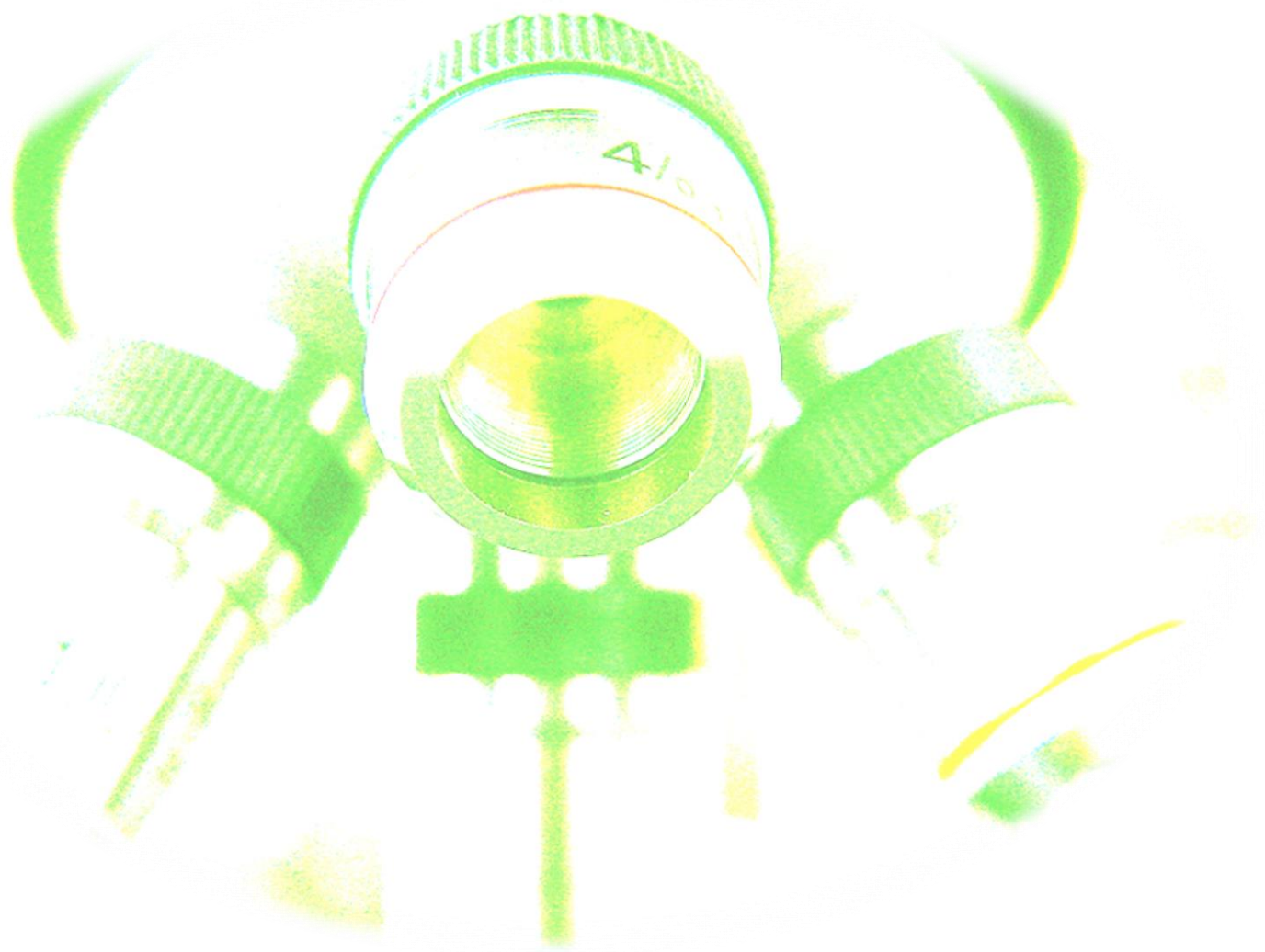
- Submission of grades for the MS3 year occurs at the end of the fall (December) and spring (May) terms.
- Grades are to be submitted in Medhub® and via MyMu/MILO to the Marshall University Registrar's Office.
- Any course which ends after the respective grade entry time, should only enter grades in Medhub®. The JCESOM Registrar will request a grade sheet from the University Registrar's office for grades to be entered once the course is completed.
- Students who have outstanding or incomplete assignments should be issued a grade of incomplete.
- For all Clinical Clerkships the type of grading is Honors, Pass, and Fail.

SUBMISSION OF GRADES MS 4 YEAR

- Submission of grades for the MS4 year occurs at the end of the fall (December) and spring (May) terms.
- Grades are to be submitted via Medhub® and MyMu/MILO to the Marshall University Registrar's Office.
- Any course which ends after the respective grade entry time, should only enter grades in Medhub®. The JCESOM Registrar will request a grade sheet from the University Registrar's office for grades to be entered once the course is completed.
- Students who have outstanding or incomplete assignments, should be issued a grade of incomplete.
- The MS4 year type of grading is both Pass/Fail and Honors/Pass/Fail. These grading systems are set in place at the department level with support from the Office of Medical Education.

V. MD/PHD

- ④ Program Overview
- ④ Prerequisites
- ④ Application
- ④ Funding
- ④ Academic Calendar
- ④ Curriculum Overview
- ④ Degree Requirements
- ④ Course Descriptions



Biomedical Research, MD/PhD Program Overview

The Joan C. Edwards School of Medicine offers a combined M.D./Ph.D. degree in partnership with the Biomedical Research Graduate Program at Marshall University. The curriculum takes seven to eight years to complete. Students first take years one and two of medical school. During that time, they complete the requirements for BMR 785 (Introduction to Research). After passing the USMLE Step I exam at the end of year two, students begin Ph.D. coursework and research. This takes three to four years. After completing the Ph.D. requirements, students then complete years three and four of medical school. All of the requirements for both the M.D. and Ph.D. degrees must be met.

Up to 3 applicants are admitted each academic year.

MD/PhD Prerequisites

Prerequisite Courses

Prerequisites must be completed at an accredited college or university in the U.S. or Canada and must be passed with a grade of "C" or better by June 15 of the year of matriculation. The level of these required courses should be equal to courses for those majoring in these respective fields. If Advanced Placement or College Level Examination Program credits are on the college transcript, these may be accepted as a fulfillment of a prerequisite providing that there is evidence of proficiency in the subject: examples of proficiency may be successful completion of a more advanced course in that field or a strong Medical College Admission Test (MCAT) score.

Required Courses	Semester Hours
GENERAL BIOLOGY OR ZOOLOGY (WITH LAB)	8
GENERAL CHEMISTRY (WITH LAB)	8
ORGANIC CHEMISTRY (WITH LAB)	8
BIOCHEMISTRY (WITH LAB)	3
PHYSICS (WITH LAB)	8
ENGLISH	6
SOCIAL OR BEHAVIORAL SCIENCES	6
Highly Recommended Courses	Semester Hours
STATISTICS/BIOSTATISTICS OR EPIDEMIOLOGY	3
CELLULAR AND MOLECULAR BIOLOGY	3

MD/PhD Application

Applicants interested in pursuing the combined degree should indicate this on their medical school AMCAS application. The AMCAS application period is from June 1 to November 1, with supplemental material due by December 15. Applications are accepted on a rolling basis and reviewed November 1 through December 15. Final decisions will be made by January 31. Applications and supplemental material will not be accepted beyond the above deadlines. A separate M.D./ Ph.D. admissions subcommittee will review the applications.

Application Requirements:

- **MCAT** - The Medical College Admission Test (MCAT) is required and is used along with other data to predict success in preclinical course work. The MCAT must be taken within three calendar years prior to matriculation. Applicants are encouraged to review the [Profile of Entering Students](#) to determine if they have a competitive score.
- **GPA** - A minimum overall undergraduate GPA of 3.0 or better, or a post-baccalaureate (e.g., Master of Science) GPA of 3.4 or better, is preferred. Applicants with a GPA below 3.0 will be considered with exceptional research productivity [as evidenced by multiple peer reviewed publications] on a case by case basis.
- **LETTERS OF RECOMMENDATION** - Letters of recommendation must be provided from a premedical committee or from three faculty members who have taught the applicant. If three individual letters are provided, two of these recommendations must be from science professors and one of the three must be from the applicant's major department. Additional letters of recommendation from other persons the applicant has performed research with are strongly encouraged. All letters must to be submitted via AMCAS by December 15 of the year prior to matriculation.
- **SUPPLEMENTAL APPLICATION** – An invitation to complete the Supplemental Application will be extended to applicants with a verified AMCAS application.
- **SUPPLEMENTAL APPLICATION FEE** - There is a nonrefundable supplemental application fee of \$75 for West Virginia residents and \$100 for nonresidents. The fee is waived if the applicant has received a fee waiver from AMCAS.

Applicants must demonstrate quality research outside of classes at the undergraduate or post-baccalaureate level in the form of recent, past five years, published abstracts for scientific meetings and/or publications.

Preference is given to West Virginia residents, Marshall University graduates, and students within the Masters of Science in Biomedical Research with Medical Sciences and [Research Emphasis](#).

Regardless of the state of residency, applicants are considered only if they are U.S. citizens or have permanent resident visas.

All completed applications meeting minimum requirements will be screened by the MD/PhD Application Screening Committee. Approved applications will be forwarded to Biomedical Graduate staff for interview scheduling. Interviews are arranged only by invitation.

For students who want to strengthen their academic record and enhance their science foundation prior to applying for the MD/PhD program, Marshall University Joan C. Edwards School of Medicine (MU JCESOM) and the Office of Research and Graduate Education offers the ideal option. This program, commonly referred to as the Medical Sciences Program with an area of [emphasis in](#)

research, is a rigorous, two-year, non-thesis degree that couples a challenging curriculum in basic medical sciences with significant research exploration. Research experience can significantly enhance an application for entry into medical school or an MD/PhD program at MU JCESOM or elsewhere, and subsequently for highly competitive residency training programs. Additionally, students may earn academic credit or be paid an hourly stipend for their laboratory time. Students in this program, as long as they meet admission criteria, will be interviewed for the MD/PhD program at JCESOM.

MD/PhD Funding

Applicants who are admitted to the MD/PhD program will receive the following:

- A tuition waiver for the entire length of the program
- A yearly stipend equivalent to the PhD student stipend (currently \$25,000) for all years of the program. The stipend and tuition are considered in-house, no interest educational loans that will be forgiven by completion of the MD/PhD dual degree program

If a student chooses to leave the MD/PhD program, he/she will have to reimburse the School of Medicine for the stipend and tuition benefits received.

MD/PhD Academic Calendar

MD/PhD students will follow the [MU Joan C. Edwards School of Medicine Academic Calendar](#) while completing the MD requirements and will follow the [Marshall University Huntington campus Academic Calendar](#) while completing the PhD requirements.

MD/PhD Curriculum Overview

Students accepted into the MD/PhD program will initially complete first and second year course requirements for the MD program. During that time, they will concurrently complete the requirements for BMR 785 (Introduction to Research). After passing the USMLE Step I exam at the end of year two, students will begin their Ph.D. coursework and research. The graduate portion of the MD/PhD is up to three to four years of research, which is then followed by the third and fourth year of the medical program.

NOTE: The medical student courses meet the requirements for core PhD courses as determined by the student's advisory committee and the Graduate Studies Committee.

Once students have entered graduate school they have to take the following required classes (Full time in Fall and Spring is nine credit hours and four credit hours for summer):

Course Code	Course Name	Credit Hours	Notes
BMR660	COMMUNICATIONS I	1	*SEE BELOW
BMR661	COMMUNICATIONS II	1	*SEE BELOW
BMR680	STUDENT SEMINAR	1	SHOULD ENROLL FOR 4 - 6 CREDITS REQUIRED TO GRADUATE
BMR 679	SPECIAL PROBLEMS	1	UP TO TWO CREDIT HOURS EARNED WHICH CAN QUALIFY FOR 2 HOURS OF BMR 680
BMR617	STATISTICAL TECHNIQUES FOR THE BIOMEDICAL SCIENCES	3	MAY SUBSTITUTE WITH CTS 600
CTS600	EPIDEMIOLOGY AND BIostatISTICS USED IN MEDICAL RESEARCH	3	MAY SUBSTITUTE WITH BMR 617
BMR644	RESEARCH CONDUCT	1	
BMR882	RESEARCH	1	UNLIMITED NUMBER OF CREDIT HOURS CAN BE TAKEN
One of the following journal clubs based on research interests for at least 3 credit hours is required			
BMS631	Neuroscience and Developmental Biology Literature Review	1	
BMS664	Obesity and Related Diseases Journal Club	1	
BMR665	Cardiovascular Disease Research Colloquium.	1	
BMR652	Cancer Biology Colloquium	1	
PMC655	Toxicology Reviews	1	
CTS620	Introduction to Clinical Research	3	

*At least one presentation for each 660 and 661 at a national level scientific meeting as presenting author may substitute pending approval of student's graduate committee

**May substitute for two credit hours of journal club

Other courses may be recommended by the student's committee.

MD/PhD Degree Requirements

ADVISORY COMMITTEE FOR PhD

Student's advisory committee should be formed no later than the end of the first year of graduate education or upon completion of 18 semester hours of credit. As soon as the committee has been identified, an Approval for Dissertation Topic and Committee Membership form is completed and submitted to the Director of Graduate Studies and the Vice Dean for Research and Graduate Education. The advisory committee will be selected by the student and research advisor with approval from the Vice Dean for Research and Graduate Education. The committee will be composed of at least five faculty members with appropriate expertise; one of the members may be from another institution. The student's research advisor will act as the chairperson of the committee.

APPROVAL OF COURSE STUDY

It is essential for the student and advisory committee to carefully define a Course of Study by the end of the first year of graduate research. This is considered a basic contract between the student and the program and includes:

- Proposed dissertation topic
- All transfer credits
- Required and elective courses to be taken at Marshall University
- All competencies to be achieved by the student during graduate study. These details must be recorded on the Ph.D. Course of Study form and submitted for approval by the Director of Graduate Studies and the Dean of the Graduate College

ACADEMIC PERFORMANCE FOR ALL MD / PHD GRADUATE STUDENTS

- A passing grade on USMLE Step 1 is required before completion of the PhD component of the MD/PhD.
- Maintain a minimum of a 3.0 Grade Point Average (GPA). No more than six hours of C and no grades below C may be applied toward the degree.
- If the GPA falls below 3.0, the student will be placed on academic probation. Following notification of probation, the student will be counseled by his/her advisor. At this time, the deficiency will be identified and a written plan will be prepared for removing it within the next nine semester hours. This plan, co-signed by the student and the advisor, must be approved by the Graduate Studies Committee and Director of Graduate Studies before the student can register for additional coursework.
- If probationary status is not removed within nine semester hours, the Director of Graduate Education, in consultation with the Vice Dean for Research and Graduate Education and the Graduate Studies Committee, will determine whether the student is retained or dismissed from the program. Retention must be recommended by the advisor and student's advisory committee and endorsed by the Graduate Studies Committee.

TIME LIMITATIONS

Students must meet all requirements for the Doctor of Philosophy degree within seven years from the date of enrollment in the first course to be used in the degree program. The Vice Dean for Research and Graduate Education may grant an extension upon recommendation by the Graduate Studies Committee. Absence due to military obligations, long serious illnesses, or similar circumstances beyond the student's control may be considered valid reasons for an extension. It is the option of the advisory committee to require validation of outdated courses by special examination.

ADMISSION TO CANDIDACY

Admission to graduate study and enrollment in graduate courses does not guarantee acceptance as a candidate for the Doctor of Philosophy degree. This is only accomplished by satisfactorily passing a comprehensive qualifying examination and meeting all other specified requirements. The qualifying examination assesses whether the student has attained sufficient knowledge to undertake independent research. The examination should be completed at the end of the second year of study. The examination consists of written and oral components covering all areas specified in the Course of Study. The examination is prepared, administered and graded by the advisory committee. The written portion includes all coursework and relevant topics determined by the advisory committee. The student will be given 2-3 days to complete the written component of the examination.

Upon passing the written examination, the student may submit a grant proposal on the topic of his/her dissertation research or a related topic approved by the advisory committee. The proposal must be in the style of a National Institutes of Health (NIH) pre-doctoral grant proposal. Links to the instructions for the proposal format can be found on the BMR Graduate Program website. The grant proposal may be submitted within two months of completion of the written exam and given to the advisory committee members at least two weeks in advance of the oral defense. The oral examination consists of a defense of the grant proposal and, at the discretion of the advisory committee, may include topics from the written portion of the exam in which the student was deemed to be deficient. Successful completion of the qualifying examination is based on approval of the committee. Only one dissenting vote is permitted on each component. If necessary, a single portion of the examination may be repeated at the discretion of the advisory committee. The student must have the approval of the advisory committee to repeat either the written or oral component of the qualifying examination. The committee assesses the deficiencies and determines the time required for the student to make corrections. A student may take a given component of the qualifying examination no more than three times. Failure to pass this examination on the third attempt will result in dismissal from the BMR Ph.D. program. The advisory committee must complete an Admission to Candidacy for Ph.D. form after the student completes the examinations and submit it for approval by the Director of Graduate Studies and the Vice Dean for Research and Graduate Education.

DISSERTATION

All candidates must successfully complete a biomedical research project and prepare, submit, and defend a dissertation. The dissertation must present the results of the candidate's individual investigation and make a definite contribution to the current state of knowledge. While conducting research and writing a dissertation, the student must register for Research (BMR 882) at the beginning of each semester or summer term for which progress is to be earned. No more than 15 hours of Research may be credited toward the degree. Candidates are to follow the general guidelines outlined in *Publishing Your Dissertation: How to Prepare Your Manuscript for Publication and General Information About Dissertations*. Copies of these documents are on file in the Office of Research and Graduate Education. Candidates must also follow the current Graduate College Guide for Preparation and Submission of Electronic Theses and Dissertations, which can be downloaded from the Graduate College website. Oral Defense of the Dissertation The oral defense of the dissertation is held during the semester or summer session in which all other degree requirements have been met. The advisory committee must read and tentatively approve the dissertation before the examination can be scheduled. The committee chairperson will complete an Approval to Schedule Dissertation Defense form and submit it for approval of the Director of Graduate Studies and the Vice Dean for Research and Graduate Education before the examination can be given. Such notification must occur at least two weeks before the proposed date of the defense. A portion of the defense is an open examination and sufficient time is required for adequate public notice.

The open examination usually takes the form of a one-hour seminar. This is followed by a thorough review of the dissertation by the advisory committee and the candidate. Successful completion of the defense requires the approval of all but one of the members of the advisory committee. The results (pass/fail) must be recorded on a Results of Dissertation Examination form, which is to be reported to the Office of Research and Graduate Education and forwarded to the Graduate College Office within 24 hours. Should the candidate fail the defense, reexamination may not be scheduled without the approval of the advisory committee and the Vice Dean for Research and Graduate Education.

All advisory committee members are to be present for the defense. If this is not possible, the Vice Dean for Research and Graduate Education, or designee, may permit one substitute for any member of the committee except the chairperson. A request for a substitute must be submitted in writing to, and approved by, the Vice Dean for Research and Graduate Education. The committee chairperson, the student, and both the original member of the committee to be replaced, and the substitute must sign this request. The substitute must have the same, or higher, graduate faculty status as the original member and represent the same academic discipline or area of emphasis.

ACCEPTANCE OF DISSERTATION

Acceptance of the dissertation is a requirement for the doctoral degree. An accepted dissertation must bear the original signatures of at least all but one member of the advisory committee. If more than one member cannot approve the dissertation, the doctoral degree cannot be recommended. If the substitute member attends and approves the dissertation defense, he or she signs the dissertation. For complete information on the preparation and submission of electronic theses and dissertations see www.marshall.edu/graduate/current-students/edt.

MD/PhD Course Descriptions:

In addition to the courses described below, the student must successfully complete courses required by his/her area of emphasis and advisory committee. All courses will be defined in the student's Ph.D. Course of Study form. The student must also pass a written and oral exam prior to becoming a Ph.D. candidate. These exams are set by the advisory committee and are outlined below under Admission to Candidacy. Before graduating, students are required to write and publish three peer-reviewed manuscripts, two of which must be as first author. To remain in good academic standing and to graduate, the student must have a minimum graduate GPA of 3.0.

BMR 617 Statistical Techniques for the Biomedical Sciences

3 Credit Hours

Grade Mode: Graded

An application-oriented course in statistical concepts and techniques aimed at prospective researchers in the biomedical sciences

BMR 631 Neuroscience and Developmental Biology Literature Review

1 Credit Hour

Grade Mode: Graded

A seminar course where published articles in the fields of neuroscience and developmental biology will be presented by students and faculty.

BMR 644 Responsible Conduct of Research

1 Credit Hour

Grade Mode: Graded

Responsible conduct of research, including human subjects, live vertebrate animals, conflict of interest, mentor/mentee responsibilities, collaborative research, peer review, data management, research misconduct, and responsible authorship, with case discussions.

BMR 652 Cancer Biology Colloquium

1 Credit Hour

Grade Mode: Graded

This is a mentored journal club for graduate students covering selected areas of current interest in cancer biology research.

BMR 660 Communication Skills for Biomedical Sciences I

1 Credit Hour

Grade Mode: Graded

Biomedical graduate students are trained to plan, prepare, and deliver effective scientific presentations.

BMR 661 Communication Skills for Biomedical Sciences II

1 Credit Hour

Grade Mode: Graded

Biomedical graduate students are trained to plan, prepare, and deliver effective scientific presentations.

BMR664 Obesity and Related Diseases Journal Club

1 Credit Hour

Grade Mode: Graded

A seminar course where published articles in the field of obesity and obesity-related diseases are presented and discussed.

BMR 665 Cardiovascular Disease Research Colloquium

1 Credit hour

Grade Mode: Graded

A seminar-style series that will focus on recent advances in topics related to cardiovascular disease.

PMC 655 Toxicology Reviews

1 Credit hour

Grade Mode: Graded

This course will provide a presentation and discussion of current literature in the area of toxicology. Fundamental principles and new discoveries will be emphasized.

CTS 600 Epidemiology and Biostatistics Used in Medical Research

3 Credit hours

Grade Mode: Graded

This course provides a foundation for epidemiology and applied biostatistics in medical clinical and translational research

CTS 620 Introduction to Clinical Research

3 Credit hours

Grade Mode: Graded

This course provides an overview of all aspects of conducting clinical and translational research trials.



VI. STUDENT RESOURCES

- ③ Office of Student Affairs
- ③ Academic Support
- ③ Career Development
- ③ Medical Student Mentoring
- ③ Study Space
- ③ Health and Wellness
- ③ Links to Student Services



Office of Student Affairs

The Joan C. Edwards School of Medicine's Office of Student Affairs is committed to meeting the personal, academic and professional needs of students throughout all four years of medical education. We support students by being accessible, responsive, and advocating on their behalf. We collaborate with administration and faculty to facilitate a positive learning environment based upon mutual respect between teacher and learner. We strive to foster an atmosphere in which differences are respected and valued so that students become accomplished team players and compassionate practitioners of medicine.



Amy Smith, M.Ed

Associate Dean, Student Affairs
304-691-8684
304-691-1727 (fax)



Laura Christopher, MS

Assistant Director
Academic & Career Support Services
304-691-1730
304-691-1727 (fax)



Cindy Canterbury, MS

Assistant Director
Student Financial Assistance
304-691-8739
304-691-8740 (fax)



Charise Lindsey, MS, MCCT

Program Coordinator
Leadership Development & Wellness
304-696-7300
304-691-1727 (fax)

Learning Communities

Learning communities strengthen the medical student experience through dynamic, engaged and relationship-centered communities for curricular and co-curricular learning and development. At Marshall, learning communities are divided into six houses that act as student-led networks that:

- Provide medical students a familiar cohort for the duration of their medical school experience
- Facilitate the development of trust and collaboration among the medical student body
- Support student efforts to adapt to and succeed in the culture of medicine in general and medical education in particular
- Provide students with a broad range of resources for learning, advising, support, teamwork and community engagement

For additional details, please go to the webpage for [Learning Communities](#) or contact learningcommunities@marshall.edu

Houses

WARREN HOUSE

This house is named in honor of Ms. Cindy A. Warren, a legend and beloved fixture of the Marshall University Joan C. Edwards. She is the first voice each accepted student hears and from that point on she continues to enrich their lives.

About Ms. Cindy Warren

Ms. Cindy Warren is the Assistant Dean of Admissions at Marshall University Joan C. Edwards School of Medicine, holding this position for more than 40 years.



Cindy was born and raised in Logan, West Virginia. She earned her bachelor's degree in consumer science from Marshall University, followed by a master's degree in counseling and rehabilitation. In 1977, Cindy began working in the Admissions Department at the Marshall School of Medicine, and she has informed every student of their acceptance into the school since that time.

When Cindy is not working, she enjoys rescuing animals, especially kittens and cats. Additionally, she is passionate about auctions and works part-time at a local auction house.

YINGLING HOUSE

A pharmacist and physician, Kevin W. Yingling, RPh, MD, is the namesake of Yingling House. He has devoted his 30+ year career to the training of medical and pharmacy students while setting a standard of quality patient care as an internal medicine physician.



About Dr. Kevin Yingling

Dr. Yingling has been a registered pharmacist since 1981, a licensed physician since 1990 and a consultant pharmacist since 1995.

Dr. Yingling received his B.S. degree in pharmacy from West Virginia University and his M.D. degree from Marshall University. He completed his residency and fellowship at the University of Cincinnati Medical Center. He has served as an honorary visiting academic fellow in clinical pharmacology at the University of Southampton in Southampton, England. He served as chairman

of the Department of Internal Medicine at the Joan C. Edwards School of Medicine for more than 10 years before stepping into the role of founding dean of the Marshall University School of Pharmacy, a position he held until his retirement in 2016.

Dr. Yingling continues to serve as an associate professor of medicine and pharmacology at Marshall University and maintains an active base of patients. He volunteers his time as chairman of the board of directors for Cabell Huntington Hospital, and as a member of the board of directors for the Cabell-Huntington Health Department. He has also participated in faith-based and humanitarian medical missions to Russia, Bolivia, Honduras, Nicaragua and Haiti.

In 2010, Yingling was honored with the Laureate Award from the West Virginia Chapter of the American College of Physicians, recognizing excellence in medical care, education or research. He is a member of the Rho Chi Society and the Alpha Omega Society, pharmacy and medical honoraries, respectively. Dr. Yingling received the 2015 Distinguished Alumnus Award from the Joan C. Edwards School of Medicine and the 2017 Bowl of Hygeia award from West Virginia Pharmacy Association, the association's most prestigious award.

RICHARDSON HOUSE

This house is named in memory of the late Laura L. Richardson, PhD, for her commitment and dedication to medical students' successes during their preclinical education. She was highly respected by each student and always supported them throughout their schooling.



About Dr. Laura Richardson

Dr. Richardson served as Assistant Dean of Academic Affairs and Director of Pre-Clinical Education at Marshall University until her sudden passing in 2018. Dr. Richardson received a B.A. degree in biology from Newton College of the Sacred Heart, followed by a Master of Science in Biology from the University of Virginia. She then worked at Georgetown University as a research instructor prior to entering their PhD program and receiving her doctoral degree in cell biology. She received postdoctoral training at The Burnham Institute and the University of Tennessee before joining the Department of Anatomy at the Marshall University Joan C. Edwards School of

Medicine.

Dr. Richardson was very enthusiastic about teaching both graduate and medical students, educating the students in the areas of cell biology and microscopic anatomy. She was instrumental in the education programs of first-year medical students at Marshall. She conducted research in the area of testicular cancer and received funding from the National Institutes of Health for her work. She was also a member of the American Society for Cell Biology, Society for the Study of Reproduction, and the American Society of Andrology.

Dr. Richardson was particularly proud of her leadership in the establishment of the Anatomy Outreach Program that brought Huntington-area high school students to the anatomy labs at Marshall, where they learned about career paths by spending time with medical students and faculty. The program has grown every year since it was created and supports efforts by the Marshall University Admissions Office to attract minority students and students from rural West Virginia to the medical school. She was equally as proud of her role as the director of the Human Gift Registry, a program that encouraged donation of human bodies for medical student education. Under Dr. Richardson's leadership, donations for the Human Gift Registry more than doubled in recent years. To honor donors and their families, she organized an annual memorial service that has become an emotional touchstone for all who are involved.

CAMPBELL HOUSE

This house honors the accomplishments of Shelvy L. Campbell-Monroe, PhD, in heightening the level of diversity and inclusion programming, community outreach, and partnerships with the Marshall University schools of medicine and pharmacy. She continues to ensure a quality and inclusive environment for all students, faculty and staff.



About Dr. Shelvy Campbell

Dr. Campbell is the Assistant Dean for Diversity & Inclusion. A veteran of higher education administration, she has served in human resources, equity compliance, admissions, student financial assistance and student service positions at Marshall University for the past 25 years. She also served for many years as the Civil Rights and Equity Compliance Administrator at West Virginia State University Gus R. Douglass Land Grant Institute.

Dr. Campbell directs two summer residential pipeline programs designed to attract minority and underrepresented students to the medical and other health care fields. She serves as an advisor for the school of medicine's Health Spectrum Alliance (LGBT student organization) and chairs the school's Multicultural Advisor Committee. Dr. Campbell also serves on the university's Women of Color Committee and as a Title IV Investigator. Dr. Campbell is a member of several community, state, and national organizational boards and councils including: Kanawha Valley Bureau of Senior Services, Charleston Family Resource Center, the National Office of Minority Health Regional Health Equity Council (RHEC), and the West Virginia Department of Health & Human Resources Newborn Hearing and Screening Advisory Board. She currently serves as the national program chair for the National Association of Medical Minority Educators (NAMME).

Dr. Campbell holds a bachelor's degree in business administration from West Virginia State University, a master's degree in industrial and employee relations and an education specialist degree from Marshall University as well as a doctorate in education from Capella University. Dr. Campbell is married to Lloyd Monroe, has one adult son, Jordan, and one granddaughter, Jocelyn.

MILLER HOUSE

This house recognizes Bobby L. Miller, MD, for his dedication in caring for our tiniest patients as well as for his leadership in medical education, heightening the curriculum and scholarship expectations of our medical students. He makes it his mission for every student to succeed.



About Dr. Bobby Miller

Dr. Miller has served as Vice Dean for Medical Education at the Marshall University Joan C. Edwards School of Medicine since 2016. He was born and raised in Ashland, Kentucky. He graduated magna cum laude with a Bachelor of Science in Biology from Marshall University. Dr. Miller also earned his medical degree from Marshall University, where he completed a combined internal medicine/pediatrics residency, during which he served as chief resident.

After completing fellowship training in neonatal-perinatal medicine at Baylor College of Medicine/Texas Children's Hospital in Houston, Texas, Dr. Miller returned to join the Department of Pediatrics at Marshall. Prior to his role as vice dean, he served as Pediatric Residency Program Director for seven years. In addition to his role as vice dean of the medical school, Dr. Miller is a professor of pediatrics and medical director of the Neonatal Intensive Care Unit at Cabell Huntington Hospital/Hoops Family Children's Hospital. He also maintains an active clinical practice.

Dr. Miller is married to Eric Hardin-Miller. They live on a farm with 50 chickens, two miniature donkeys, seven dogs, five cats, canaries and one giant South African leopard tortoise.

ZILL HOUSE

This house is named for Sasha Zill, Ph.D., a gross anatomy, neuroscience and surgical anatomy professor and researcher who has dedicated himself completely to his students and has set the highest standard for scholarly research at Marshall.



About Dr. Sasha Zill

Dr. Zill received a bachelor's degree in zoology from Columbia University and a doctoral degree in anatomy from the University of Colorado. He has served on the faculty of Marshall University since 1987, earning the rank of full professor in 1994.

Dr. Zill has been recognized by the Joan C. Edwards School of Medicine for his teaching, receiving countless awards for Instructor of the Year, the Golden Apple Teaching Award, and the Innovation in Teaching Award. He was inducted into the Alpha Omega Alpha Medical Honor Society in 2009 and named an Honorary Alumnus by the Marshall School of Medicine Alumni Association in 2016. Medical students have selected Dr. Zill numerous times to hood them at graduation. However, teaching is just one of his loves.

His research is what he calls his labor of love. He has dedicated his life's work to understanding how the nervous system generates motor behaviors. Dr. Zill was on the cutting-edge of biorobotics. He collaborates with scientists across the globe and continues to produce fascinating research in neurobiology, which has been funded continuously since 1976, including grants from the National Institutes of Health, National Science Foundation and Office of Naval Research. With hundreds of publications, he embodies the type of scientist he encourages his students to be.

Office of Academic Support

Medical school is one of the most difficult educational endeavors that a student will ever encounter, and very often students have to learn new academic skills and techniques in order to both survive and thrive academically. It is difficult, but far from impossible. Every year students move forward toward fulfilling lifelong goals of becoming practicing physicians, and many of these students had a helping hand along the way. Just as you expect your patients to one day come to you with difficulties that you can help them with, we at the Office of Academic Support ask that you come to us when you are experiencing academic difficulties.

Below is a description of just some of the various ways that the Office of Academic Support can be of assistance to you:

Study Strategies

- Analyze and troubleshoot your current academic study skills and strategies
- Learn how to engage and achieve dynamic and multisensory study
- Get more out of lecture by previewing and active listening
- Diversify your contact with study material through self-testing and reviewing
- Learn how to use effective mnemonics and memory strategies

Test Taking

- Effectively read and work with vignette-style multiple choice questions
- Identify your common test taking mistakes and possible solutions
- Analyze your performance on classroom exams and board practice questions
- Establish strategies for Step and shelf exam preparation
- Address issues with pacing, answer changing, and test anxiety

Time Management

- Effectively manage and prioritize your use of time
- Achieve improved focus and concentrated study
- Minimize internal and external distractions
- Determine your ideal study space

Peer Tutoring

- Meet one-on-one with a peer to help clarify and better understand concepts covered in class
- Get a better understanding of how others have managed their medical school experience
- Attend test preparation sessions conducted by peer tutors

One-on-one consultation and instruction available

Skill-specific presentations offered throughout the year and upon request

Medical Student Career Development

The MCD program is a four year longitudinal course based on the AAMC Careers in Medicine (CiM) program. Beginning with the class of 2019, participation in the Medical Career Development Program will be a graduation requirement. Students use the CiM websites as their primary source of information.

The third and fourth year students will meet with the Associate Dean of Student Affairs annually to discuss the CiM objectives outlined below.

The Assistant Director of Academic and Career Support Services will serve as the liaison for the first and second year students. By utilizing The CiM four-phase model, the Assistant Director will help the medical students understand themselves and begin to explore their understanding career development.

Independent learning exercises are also completed by students throughout the year. The outcome measures of these are listed below.

MCD YEAR	OBJECTIVES	OUTCOME MEASURES
YEAR 1	Demonstrate familiarity with CiM as a resource for career development by attending a school sponsored introduction to Careers in Medicine workshop and complete the CiM's Medical Specialty Preference Inventory (MSPI). Demonstrate evidence of identifying your career interests and personal values by CiM's Physician Values in Practice Scale (PVIPS).	Completion of the MSPI to create a targeted starting point for further exploring specialty options Completion of the self-assessments and submitting a short narrative describing the results. Attendance of one "Career Conversation" session
YEAR 2	Attend two or more specialty interest group meeting. Complete the CiM self-assessments to consider how they fit with the specialties that interest you.	Submit a personal reflection paper on your career development and attend two "Career Conversation" sessions
YEAR 3	Attend school sponsored – student driven Career Development Workshops. Draft an updated Curriculum Vitae to Associate Dean of Student Affairs for feedback	Focus on Career choices as third year progresses. Submission of updated Curriculum Vitae and personal statement
YEAR 4	Attend "Interviewing Seminar" and participate in one mock interview with your Medical School Advisor.	Attendance at "Interviewing Seminar" Completion of mock interview

MS 1 and MS 2 Student Mentoring Program

The Marshall Mentoring Program is a combined program that provides every undergraduate medical student with the opportunity for early clinical experiences and academic-career advising with a practicing clinical physician. The primary objective is to create collaborative relationships with students that will foster an atmosphere of connection, support and guidance. The advisory program portion of the program is based on the Association of American Medical Colleges Careers in Medicine (CiM) program and can be referenced at <https://www.aamc.org/cim/advisorsandliaisons/advisors/advisingstudents/>.

The Office of Student Affairs will provide oversight for the Marshall Mentor Program so please forward any questions or comments to Laura Christopher at 304-691-1730 or by email at christopherl@marshall.edu.

Student requirements (All students are responsible to making first contact with their mentor via email or telephone):

1. MS-1 STUDENTS ONLY: Completion of 12 hours of clinical shadowing beginning in the Spring Semester only.
2. MS-2 STUDENTS ONLY: Completion of 18 total hours of clinical shadowing in the second year of medical school. The hours can be divided up to best fit the student.
3. MS-3 and MS-4 STUDENTS ONLY: Completion of 1 hour of career advising session per semester and mock interview (MS-4 ONLY).
4. Provide all mentors with a copy of the Marshall Mentoring Program guide.
5. Provide documentation forms to their mentor and submit to the Office of Student Affairs as noted in the Marshall Mentoring Program Guide.

Mentor Responsibilities:

1. Respond to emails or phone messages from mentees when attempting to schedule first sessions.
2. Become familiar with resources available to students (see Marshall Mentoring Program)
3. Assure student confidentiality
4. Document both clinical shadowing and academic advising sessions. Students will provide mentors with documentation forms and a copy of the Marshall Mentoring Program Guide.

Link to the [Marshall Mentoring Program Guide](#)

Study Space

The school of medicines provides dedicated space for focus and study in each of the facilities utilized throughout all four of years of medical education. To maintain security, the following rules apply at all times in all facilities:

- Students must wear their ID badge.
- Students cannot leave doors propped open under any circumstance.
- Students cannot open the door for anyone seeking access. All individuals approved for access have the swipe cards that allow them to do so.
- Students are not to loan their swipe card to anyone.
- Students are not permitted to access clinical areas before or after business hours.

Robert W. Coon Education Building 1542 Spring Valley Drive

**Access:**

Medical Students have swipe card access to the CEB 24 hours a day, seven days a week.

Study Space:

On the third floor of this building, there are three small group rooms that seat up to 4 students each (with computers and white boards) and four small round tables. In the computer lab across the hall are ten computer stations, 29 study carrels, and five couches. In the adjacent library of the VAMC are an additional four study carrels and two large tables. The medical students also have access to the second floor lecture room when class is not in session. Study rooms on the main floor of the Coon Educational Building (Rooms 105 and 106) are available to reserve for in 2 hour increments. To reserve a room, a student may email Ms. Rebecca Huff at huffr@marshall.edu.

Parking:

During business hours, students must park in the student lot adjacent to and below the employee parking lot. After 4pm on weekdays, vehicles can be moved closer to the CEB (under the water tower), but on weekdays, students cannot park on the main level in front of the CEB or in the parking garage. On weekends and holidays, parking is available at all locations. The exception is the 24-hour handicap parking spots.

Security:

The Veterans Affairs Police Department can be reached at (304) 429-6755 ext. 2855. They are available to assist you while on the grounds of the Veterans Affairs Medical Center which includes the MEB.

Byrd Biotechnology Sciences Center (BBSC)
Third Avenue across from the Marshall University Science Building



Access:

Medical students have swipe card access to the BBSC 24 hours a day, seven days a week.

Study Space:

There are three small group rooms (Rooms 204, 205, 206) and a computer lab with 10 computer stations (Room 203) on the second floor near the bridge that connects to main campus. There is a lounge space and six study cubicles in the lobby area in front of the elevators on the second floor as well. This is available all day, does not get a lot of traffic, has lots of natural light with large windows, and comfortable seating with floor outlets for laptops. It has a capacity of about 15 students. On the third floor, students have access via their swipe ID to the small conference room in the administrative suite after 4 pm (301A). On the fourth floor, there is large conference room (Room 433) at the east end of the building available via swipe ID after hours.

Parking:

As assigned by Marshall University.

Security:

A security officer is present in the building or on the grounds at all times and is available by cell phone at (304) 696-3718 to address non-emergent or less serious security concerns.

Byrd Clinical Center (BCC)
1249 15th Street



Access:

Medical students have 24/7 swipe card access to the BCC (ground floor only). Swipe access before or after regular business hours is through the single door to the right of the main BCC entrance.

Study Space:

There are four small group rooms that can accommodate about 4 students each (group study) and in the computer lab, there are 19 computer/study carrels. The large auditorium/classroom is available for study space as is the Clinical Skills Laboratory (swipe card access) which can accommodate about 15 students. The students may also use the Clinical Skills exam rooms after hours. The lobby of the BCC has 4 individual study carrels and 3 tables for the students to use as viable study locations. ****Note-during the Spring term, these study locations are to be used only by second year students in preparation for the Step 1 Examination.****

Parking:

Parking on the street level parking deck is restricted to patients only between the hours of 7:00 a.m. - 5:00 p.m. Monday through Friday. Faculty, staff, and students are not permitted to park on the patient deck during these hours and will be subject to towing without advance warning. The lower level and intermediate level parking decks are available for all occupants of the building. Everyone choosing to park on the intermediate deck should exercise extra caution as this area is somewhat obstructed from general lines of sight and may pose increased security risks although cameras, lighting, and emergency call boxes are installed. Students who intend to access the building after 8 p.m. on weekdays must move their vehicles to the street level parking deck. The gates to the intermediate and lower level are locked on the weekends so students may park on the patient (street) level deck but their vehicles must be moved prior to 7am Monday morning.

Shuttle Bus:

A shuttle bus is available to transport students to and from the BCC to the MUMC. This service is offered 24 hours a day, 7 days a week. To schedule transportation, contact the shuttle bus driver at (304) 544-7433.

Security:

A security officer is present in the building or on the grounds at all times and is available by cell phone (304-634-5166) to address non-emergent or less serious security concerns.

Linda Holmes Wellness Center
1320 Hal Greer Boulevard



Access:

All medical students have swipe card access to the Linda Holmes Wellness Center 24 hours a day, seven days a week.

Study Space:

This 4,200-square-foot center features five study rooms, group meeting space and a large gathering room. The center also houses the school's student affairs and financial aid offices. The center is designed to provide a safe, convenient relaxation space for medical students when they need to take a break from studying to relax and decompress. The large gathering room is a great hang out space where students can shoot pool, play board games or watch a movie.

Parking:

Students and staff are permitted to park in the lot behind the building. Alternatively students may park in general parking available at the Byrd Clinical Center and/or Cabell Huntington Hospital and be shuttled over. Parking lots to the north and south of the building belong to private businesses and are not permissible options.

Security:

This facility remains locked at all times and is accessible only via ID swipe card.

Cabell Huntington Hospital Student Lounge 3rd Floor, CHH

In addition to the Linda Holmes Wellness Center, third and fourth year medical students have access to a student lounge located behind the Labor and Delivery waiting room on the third floor of Cabell Huntington Hospital. Students are able to relax during their down time during their clinical rotations. The students have access to a TV, couch and snacks 24/7.

Security:

The student lounge is accessible only via ID swipe card.

Marshall University Medical Center
1600 Medical Center Drive



Health Sciences Library (HSL) in the MUMC

Access:

All medical students have swipe card access to the Health Sciences library 24 hours a day, seven days a week.

Study Space:

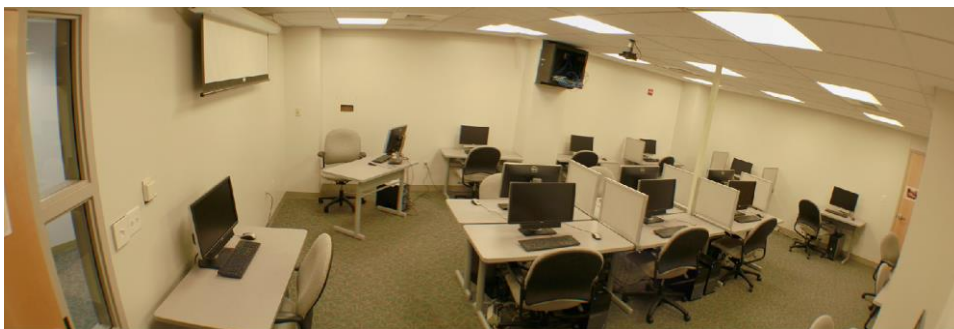
The HSL is located on the second floor of the MUMC. In the HSL outer atrium area there are 3 round tables that can seat 5 people apiece and 1 single table. There are also 2 small study rooms available in the outer area. There is a small enclosed computer room that 4 students can use at one time and computer stations along the way of the HSL and 2 computer stations to the right of the entrance of the HSL. Towards the back of the HSL office area, there are 3 study rooms available to students. Note- these study areas may not be always be available during the SOM interview season, which usually is from October to February

Parking:

Due to the construction of the Cabell Huntington Hospital parking garage, it is recommended that students park on the lower level of the Byrd Clinical Center and use the shuttle bus to be transported to CHH and to the MUMC. This service is offered 24 hours a day, 7 days a week. To schedule transportation, contact the shuttle bus driver at (304) 544-7433.

Security:

Cabell Huntington Hospital Security is present in the building or on the grounds. They can be contacted by calling (304) 526-2223.



Lewis

Technology Center in the MUMC

The Lewis Technology Center is a computer lab on the second floor of the MUMC (to the left of the stairwell) that includes 17 study carrels. This is a shared space and students will have access during the day according to a calendar that will be posted. Students will have swipe access after business hours.

Medical Student Health and Wellness

Maintaining a healthy sense of emotional well-being is a vital component of success as a medical student and as a practicing physician. Because of the challenges that medical students inevitably face, part of maturing as a physician involves self-reflection, adaptability, and resiliency and that means learning to ask for help when it is needed.

- [Medical Student Wellness Committee](#)

Resources

- [General Healthcare Providers](#)
- [Personal Counseling Services](#)

[Relaxation](#) - This tool was recorded by Dr. William A. McDowell, professor emeritus and former chairman of the counseling department at Marshall University. The recording is designed to reduce anxiety and create a relaxed mind which will aid in areas for study, concentration, sleep and will reduce other symptoms of stress and anxiety. It has been utilized by students and health professionals with great success.



HEALTH CARE AND PERSONAL COUNSELING

The Marshall University Joan C. Edwards School of Medicine provides its students with access to diagnostic, preventive, and therapeutic health services. Listed below is a list of physician practices, broken down by specialties, where students and/or their families may receive medical care. Students are encouraged to be proactive in meeting their health care needs. LCME states that health professionals at a medical education program who provide psychiatric/psychological counseling or other sensitive health services to a medical student must have no involvement in the academic assessment or promotion of the medical student receiving those services (MS-27-A). Because of this policy, Marshall Health Psychiatry is excluded from the provider list; however, exceptions to this policy may be discussed with Amy Smith, Associate Dean of Students.

Marshall University Joan C. Edwards School of Medicine in collaboration with Cabell Huntington Hospital Counseling Center provides opportunities for medical students to gain access to counseling services. Students can make appointments by calling 304-526-2049 or ask the Associate Dean of Student Affairs for assistance. No referral is necessary.

The Counseling Center is located on the second floor of the Chafin Building at 517 Ninth Street in downtown Huntington. For your convenience, designated patient parking spaces are available on the 6th Avenue side of the building. Appointments are available from 11 a.m. to 7 p.m. on Monday, and from 8 a.m. to 5 p.m. on Tuesday, Wednesday and Thursday. In addition to counseling couples, families, children and adolescents, counselor specialties also include helping people facing ADHD/ADD, sexual addiction, drug & alcohol addiction and traumatic events. Faith-based counseling is also available. Appointments can be made by calling 304-526-2049. Inform the receptionist that you are medical student.



STUDENT HEALTH INSURANCE

It is the policy of the Marshall University Joan C. Edwards School of Medicine that all enrolled medical students have health insurance. All students are automatically enrolled in the school sponsored student health insurance plan and per policy must “waive” out by demonstrating adequate health care coverage. All students who chose to waive out must do so annually by the date posted on the annual renewal notices.

In the event an enrolled student should suffer a disabling injury or illness that lasts longer than 90 days, the Marshall University Joan C. Edwards School of Medicine sponsors a disability benefit sponsored by the American Medical Association and underwritten by The Standard Insurance Co.

Contact Amy Smith at smith305@marshall.edu for questions regarding student health or disability insurance.

<https://www.studentinsurance.com/>

[Student Disability Insurance](#)

HEALTH CARE PROVIDERS AVAILABLE TO MEDICAL STUDENTS

COUNSELING

Cabell Hunt. Hosp. Counseling Ctr.	1616 13 th Ave.	Huntington, WV 25701	304-526-2049
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FAMILY MEDICINE

CHH Family Medicine Center	750 Oak St.	Kenova, WV 25530	304-453-1756
Huntington Internal Medicine Group	5170 US Rt 60 East	Huntington, WV 25705	304-528-4600
Marshall Health Family Medicine	1600 Medical Center Dr., Ste. 1500	Huntington, WV 25701	304-691-1100
St. Mary's Women & Family Care Ctr.	143 Peyton St.	Barboursville, WV 25504	304-697-2035
Valley Health – East Huntington	3377 US Rt. 60 East	Huntington, WV 25705	304-399-3335
Valley Health – Huntington	1301 Hal Greer Blvd.	Huntington, WV 25705	304-525-0572
Valley Health – Hurricane	3729 Teays Valley Rd, Ste. 100	Hurricane, WV 25526	304-760-6040
Valley Health – Westmoreland	2908 Auburn Rd.	Huntington, WV 25704	304-781-5800

INTERNAL MEDICINE

Huntington Internal Medicine Group	5170 US Rt. 60 East	Huntington, WV 25705	304-528-4600
Marshall Health Internal Medicine	Byrd Clinical Center 1249 15 th St, Ste. 2000	Huntington, WV 25701	304-691-1000
Valley Health – East Huntington	3377 US Rt. 60 East	Huntington, WV 25705	304-399-3335
Valley Health – Huntington	1301 Hal Greer Blvd.	Huntington, WV 25705	304-525-0572
Valley Health – Hurricane	3729 Teays Valley Rd., Ste. 100	Hurricane, WV 25526	304-760-6040

OBSTETRICS / GYNECOLOGY

Advantage Health Care for Women	5187 US Rt. 60 East, Ste. 2	Huntington, WV 25705	304-525-5405
Huntington Women's Health	1660 12 th Ave.	Huntington, WV 25701	304-522-3420
Marshall Health OB/GYN	1600 Medical Center Dr., Ste. 4500	Huntington, WV 25701	304-691-1400
St. Mary's Women & Family Care Ctr.	143 Peyton St.	Barboursville, WV 25504	304-697-2035
Valley Health – A Woman's Place	1630 13 th Ave.	Huntington, WV 25705	304-697-2014
Valley Health – East Huntington	3377 US Rt. 60 East	Huntington, WV 25705	304-399-3335
Valley Health – Hurricane	3729 Teays Valley Rd, Ste. 100	Hurricane, WV 25526	304-760-6040
Valley Health – Southside	723 9 th Ave.	Huntington, WV 25701	304-529-0645
Valley Health – Westmoreland	2908 Auburn Rd.	Huntington, WV 25704	304-781-5800

PEDIATRICS

Cabell Huntington Hosp. Pediatrics	1115 20 th St., Suite 105	Huntington, WV 25701	304-399-4141
Marshall Health Pediatrics	1600 Medical Center Dr., Ste. 3500	Huntington, WV 25701	304-691-1300
St. Mary's Pediatrics	2828 First Ave., Suite 305	Huntington, WV 25701	304-399-7565
Valley Health – Huntington	1301 Hal Greer Blvd.	Huntington, WV 25705	304-525-0572
Valley Health – Hurricane	3729 Teays Valley Rd, Ste. 100	Hurricane, WV 25526	304-760-6040
Valley Health – Southside	723 9 th Ave.	Huntington, WV 25701	304-529-0645
Wee Care Pediatrics Group	5187 US Rt. 60 East	Huntington, WV 25705	304-399-5437

PSYCHIATRY

Prester Center for Mental Health	3375 US Rt. 60 East	Huntington, WV 25705	304-551-8310
Valley Health – East Huntington	3377 US Rt. 60 East	Huntington, WV 25705	304-399-3335
Midland Behavior Health	3450 US Rt. 60 East	Barboursville, WV 25504	304-955-6300

AFTER HOURS

Cabell Huntington Urgent Care	2 Stonecrest Dr.	Huntington, WV 25701	304-525-2206
Med Express	3120 US Rt. 60 East	Huntington, WV 25705	304-522-3627
Med Express	10 Adams Ave.	Huntington, WV 25704	304-523-8838
NOW Care – HIMG	5170 US Rt. 60 East	Huntington, WV 25705	304-399-2273
St. Mary's Urgent Care Center	2825 Fifth Ave.	Huntington, WV 25702	304-399-7182
Valley Health – Huntington	1301 Hal Greer Blvd.	Huntington, WV 25701	304-525-0572

Links to General Student Resources

ACADEMICS

[Academic Calendar & Important Dates](#)

[Student Scheduler and MSPE](#)

["Guide to the MSPE" presentation by Amy Smith](#)

[LCME Report](#)

[National Residency Match Program \(NRMP\) "Match Day" Results](#)

[Graduation Requirements](#)

[Strategic Goals & Objectives](#)

EVALUATIONS

[Link to New Innovations](#)

Evaluation of Professionalism

- [General Standards of Professionalism](#)
- [Guidelines for Students](#)
- [Evaluation of 3rd Year Students](#)

INSTRUCTIONAL RESOURCES

[BLS Online Healthcare Provider Course Part I](#)

[IRB Certification](#)

[OSHA Blood-borne Pathogens Training | Adobe Flash Player Required \(Download\)](#)

FORMS, STANDARDS, AND POLICIES

[Student & Faculty Policies](#)

[Transcript Requests](#)

[Reasonable Accommodations Policies and Application Form](#)

[Request to Travel Form ***NEW***](#)

[Name and Address Change Request Form](#)

[Criminal Background Checks](#)

[Graduation Application](#)

COMMUNITY SERVICE

[Community Service Activities](#)

STUDENT SERVICES

[Office of Student Affairs](#)

[Marshall Mentor Program](#)

[Peer Accountability Committee](#)

[Study Space and Building Access](#)

[Medical Student Career Development Program](#)

[Office of Student Financial Assistance](#)

[Marshall Medical HELP Program Resources](#)

HEALTH AND WELLNESS

[Medical Student Wellness](#)
[Student Health Insurance](#)

HEALTHCARE RESOURCES

[Healthcare Providers](#)
[CHH Counseling Center](#)

RESEARCH

[Student Research: Opportunities and Information](#)
[Student Travel for Research Presentations](#)
[Marshall Research Day](#)
[Office of Research Integrity](#)
[Clinical & Research Opportunities \(AAMC\)](#)

STUDENT LIFE

[Class Officers](#)
[Event Photos \(White Coat Ceremony, Match Day, Investiture, Etc.\)](#)
[Learning Communities](#)
[Student Organizations](#)
[Student Organizations Event Calendar](#)

VII. POLICIES

- ④ Admissions
- ④ Academic, Professionalism, and Technical Standards
- ④ Attendance
- ④ Conflicts of Interest
- ④ Educational
- ④ Examinations
- ④ Health, Disability and Impairment
- ④ Faculty & Staff

Policy Links

Admissions

- [Admissions Policy](#)
- [AMCAS Policy Regarding Criminal Background Checks](#)
- [Admissions Committee Conflict of Interest Policy](#)
- [Immunization Policy](#)
- [Marshall University Joan C. Edwards School of Medicine Admissions Procedural Document](#)
- [Medical Student Illicit Drug and Alcohol Screening Policy](#)
- [Transfer Student Policy](#)

Academic, Professionalism, and Technical Standards

- [Honor Code and Academic and Professionalism Standards, Leaves and Appeals](#)
- [AMCAS Policy Regarding Criminal Background Checks](#)
- [Criminal Background Check Policies & Procedures for Rising Third Year Students \[Policy | Background Check Website \]](#)
- [Dress and Personal Appearance UPDATED](#)
- [Institutional Standards of Behavior Policy \(Student Mistreatment Policy\)](#)
- [Student Illicit Drug and Alcohol Screening Policy](#)
- [Student Impairment Policy NEW](#)
- [Technical Standards](#)

Attendance

- [MUSOM Inclement Weather Policy](#)
- [Third Year Student Attendance](#)
- [Fourth Year Student Attendance](#)

Conflicts of Interest

- [Nepotism Policy](#)
- [Conflict of Interest Policy](#)

Educational

- [Compliance with Course Evaluations UPDATED](#)
- [Course Audit Policy](#)
- [Education Records: Privacy Rights / Student Records \(FERPA\)](#)
- [Electives Policy](#)
- [Identification of Students Experiencing Academic Difficulty](#)
- [Patient and Procedure Logger Policy](#)
- [Student Access to Records Policy](#)
- [Student Grading Policy](#)

- [Student Grading and Narrative Policy](#)
- [Student Supervision Policy](#)
- [Student Travel Policy ***NEW***](#)

[Student Work Hours](#)
[Syllabus Policies](#)
[Visiting Students](#)
[Pre-Medical Student Shadowing](#)

Examinations

First Year Students

[Examination Policy](#)

Second Year Students

[Examination Policy](#)

[USMLE Step 1 Policy](#)

[MS 2 CBSSA Examination Policy](#)

Third Year Students

[NBME and Exam Policy](#)

[CCE Policy](#)

Fourth Year Students

[Required Comprehensive Radiology Examination](#)

[USMLE Step 2 Policy](#)

Health, Disability and Impairment

[Needle Stick / Blood and Body Fluid Exposure Protocol Summary](#)

[Health Insurance Requirement](#)

[Immunization Policy](#)

[Post-Exposure Policy for Management of Blood and Body Fluid Exposure](#)

[Reasonable Accommodations Policies and Application Form](#)

[Student Immunization and Physical Examination Form -- Instructions](#)

Faculty and Staff

[Medical School Faculty & Staff Policies](#)