

# Academic Catalog 2024 - 2025





# Welcome from the Dean and Provost

# JERRY KRUSE, MD, MSPH

With the many changes on the health and healthcare landscape, you will enter the field of medicine at a time of great excitement and opportunity – new technologies, new philosophies of learning and new team-based, interprofessional curricula how you will learn and how we will teach. The SIU School of Medicine is in period of unprecedented growth and expansion in all of our mission areas. When you visit our campus, you will feel the excitement — a forward facing energy that comes from the constant flow of innovation that permeates our entire campus and culture.

I have been a full-time faculty member of the SIU School of Medicine since 1984, and I've witnessed the growth of the medical school and its practice plan, SIU HealthCare. The people here are wholly dedicated to our mission and will ensure that you experience the very best medical education in the world. That is proven in our continual dedication to innovation and the recognition it brings. We are the only US medical school to receive two consecutive LCME accreditations with no citations. We received three awards from an international medical education associations. We are one of only two medical schools in the world to receive the prestigious Stellar Aspire Award from the Association of Medical Education of Europe. We have pioneered and modernized problem-based education, standardized patients and medical simulation training.

In 2016 we implemented a new third-year curriculum to maximize the development of your clinical skills and your opportunity to craft your education for future you envision. In 2019, we pledged to become an anti-racist organization, and thus we pledge an equitable, just and fair education to you. Our skills in telemedicine, street medicine, interprofessional care and kindness have been honed during the pandemic, and we will pass those skills along to you. At SIU, you'll learn from some of the most celebrated medical educators in the world. Opportunities for novel clinical experiences, for research and for community service keeps our learning creative and interactive — and fun. That's our Triple Aim +1: Health care and healthcare education that is more Effective, Efficient, Equitable — and Enjoyable. I am excited to meet you and help you join the ranks of physicians who are making a difference in our community for better health care education, better health care and better health – for all.

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# **About SIU School of Medicine**

Southern Illinois University School of Medicine was established in 1970 after the Illinois General Assembly passed a bill calling for a second state medical school to be established in downstate Illinois. The School graduated an advanced standing class in 1975 and its charter class of all Illinois students in 1976. Currently, 80 students are admitted each year, 72 students in the traditional program and 8 students in the rural track program known as the "Lincoln Scholars Program." Today, the School encompasses a complete sequence of medical education beginning with the M.D. degree and progressing through residency training and on to continuing medical education for practicing physicians.

The medical education curriculum has brought the school national attention. Since students are not evaluated in competition with their peers, they are stimulated to cooperate with one another, a situation that more closely resembles what takes place in the actual practice of medicine. Problembased learning concepts, including active learning situations with virtual and simulated patients, are used to help students work toward clinical competency throughout the four-year curriculum. In the traditional program, the first year of the four-year M.D. degree is taught at the SIU Carbondale main campus where students concentrate on the basic sciences. The remaining three years are taught in Springfield where students study clinical medicine along with medical humanities and various electives. For the rural track program, all four years are taught on the SIU Carbondale main campus.

The instructional program in Carbondale is based in Lindegren Hall and Southern Illinois Healthcare hospitals. The rural track program also operates out of the joint Family Medicine and Physician Assistant building located on the Memorial Hospital campus. In Springfield, it is based in the Medical Instructional Facility, the SIU Clinics, Memorial Medical Center, St. John's Hospital and other locations.

The school offers an M.D. - J.D. dual degree program in conjunction with the SIU School of Law and an M.D. - MPH degree with the SIU College of Education and Human Services. The school also oversees a Physician Assistant program at SIU Carbondale.

The School's Medical/Dental Education Preparatory Program (MEDPREP) at SIU Carbondale is designed to assist underrepresented populations and others with educationally disadvantaged backgrounds to prepare for success in medical and dental schools.

The School's residency programs include dermatology, emergency medicine, family medicine, internal medicine, medicine/psychiatry, neurology, neurosurgery, obstetrics and gynecology, pediatrics, psychiatry, radiology and six surgical specialties. There are several fellowships for advanced clinical work.

The School's continuing medical education program provides an extensive schedule of accredited conferences and symposia for physicians and other health-care professionals in central and southern Illinois. Programs are held in Springfield, Carbondale and throughout the School's service area.

The School also offers graduate programs for masters and doctoral degrees in physiology, pharmacology and molecular biology, microbiology and biochemistry, and a teaching certificate of anatomy. The faculty in SIU Carbondale's and Springfield's basic science departments divide their time between teaching responsibilities and research. Both clinical investigators and basic scientists collaborate on a wide-range of medical and scientific projects; they work in the various basic science laboratories on both campuses and in the clinical facilities located in the affiliated hospitals in Springfield.

Interfaced with its various educational and research programs is the provision of patient care through the various clinical departments and specialized clinics of the School and the practice of its physician faculty.

Preference for admission is given to applicants from central and southern Illinois and other underserved (inner-city, rural) portions of the state. Inquiries regarding admissions to the M.D. program and requests for a catalog from the School of Medicine should be addressed to the Director of Admissions, Southern Illinois University School of Medicine, P.O. Box 19624, Springfield, Illinois 62794-9624. More information can found at www.siumed.edu.

# **Our Mission:**

The mission of Southern Illinois University School of Medicine is to optimize the health of the people of central and southern Illinois through education, patient care, research and service to the community.

As a medical student at SIU School of Medicine, you'll experience all these elements of health.

# Accreditation

SIU School of Medicine is fully accredited by the following:

- Liaison Committee on Medical Education LCME
- Accrediting Council for Continuing Medical Education ACCME
- Accreditation Council for Graduate Medical Education ACGME
- American Institute of Ultrasound in Medicine AIUM
- Commission on Laboratory Accreditation Review COLA
- Accreditation Review Commission on Education for the Physician Assistant ARC-PA
- Association for Assessment and Accreditation of Laboratory Animal Care International AAALAC

# **Programs Offered**

- MEDPREP
- Doctor of Medicine M.D.
  - M.D. /J.D.
  - M.D. /M.P.H.
- Pharmacology and Neuroscience M.A., M.S., and Ph. D.\*
- Physician Assistant Studies PA\*

#### Programs Offered Jointly with SIUC College of Science

- Molecular Biology, Microbiology and Biochemistry M.S. and Ph. D.\*
- Molecular, Cellular and Systemic Physiology M.S. and Ph. D.\*

\*These programs are found in the SIUC Graduate School Catalog.

# **Nondiscriminatory Policy**

Southern Illinois University School of Medicine does not discriminate on the basis of race, color, religion, age, sex, disability or national origin in administration of its educational policies, admissions policies, scholarship and loan program or other School-administered programs.

# **Medical/Dental Education Preparatory Program MEDPREP**

The Medical/Dental Education Preparatory Program (MEDPREP) was established in 1972. It provides assistance to educationally and economically disadvantaged students in preparing for and achieving success in health professions schools. The program operates on a year-round basis, beginning in June of each year.

MEDPREP participants enroll as regular SIU Carbondale students pursuing a special pre-professional certificate. About 70 students participate in the program annually. Participation in MEDPREP does not guarantee admission to SIU School of Medicine or any other medical school, but there is an alliance program with the SIU medical school that allows acceptance under certain conditions.

Students prepare their academic plans through consultation with MEDPREP advisors and participation in courses such as an orientation seminar and learning skills. The curriculum includes science review courses, basic skills classes and advanced enrichment courses in biology. In addition, MEDPREP's status within the School of Medicine provides enrolled students with unique experiences and courses not usually available to pre-professional students.

# Admission into MEDPREP

Applicants must submit a completed MEDPREP application and official transcripts from all colleges attended unless transcripts are on file at SIUC. Also required are two letters of recommendation or a pre-professional committee evaluation letter. Early application is strongly recommended.

# **Program Features**

- Small class size: we only accept 30-35 students per year.
- Preparation for medical (DO or MD) or dental (DDS) professional school entry.
- All first-year MEDPREP classes are MCAT and DAT preparatory, and stress foundational knowledge, deep understanding, and application of concepts.
- Dedicated faculty: MEDPREP courses are taught by full-time MEDPREP faculty with offices in the building.
- Access to upper-division and graduate courses taught by Southern Illinois University School of Medicine (SIUSOM) faculty, particularly in the second year.
- Personal, one-on-one advising from MEDPREP faculty.
- Instruction on study skills, time management, and active-learning approaches to academic success.
- Help with preparation of medical and dental school primary and secondary applications.
- "Mock" MCAT/DAT exam program to prepare for medical/dental school admissions tests.
- Consideration for entry into Southern Illinois University School of Medicine through our Alliance Program.

## **MEDPREP** Pathways

Students choose from three MEDPREP pathways.

The Traditional Pathway. Students complete two years of post-baccalaureate undergraduate coursework and earn a certificate. The traditional pathway is recommended for students who are

working to improve their GPA, strengthen their foundational knowledge, and maximize their MCAT or DAT exam score, to improve their candidacy for medical or dental school.

The Master of Biological Sciences - MEDPREP pathway (MBS-MP). Students in this pathway complete the requirements for a master's degree in the biological sciences integrated with MEDPREP foundational and study skills courses. Students with an interest in research as part of their career trajectory, or with a strong GPA in the biological sciences, may consider this pathway. MBS-MP students focus on MCAT/DAT preparation alongside Traditional Pathway and MPH-MP students.

The Master of Public Health - MEDPREP pathway (MPH - MP). Students in this pathway earn a master's degree in public health in addition to completing MEDPREP foundational and study skills courses. This pathway is appropriate for students with a strong interest in public health. This pathway incorporates heavier course loads than the traditional, or MBS-MP pathway, and requires separate acceptance by the SIUC MPH program. MPH-MP students focus on MCAT/DAT preparation alongside Traditional Pathway and MBS-MP students.

# **Program Timeline**

MEDPREP is a two-year, intensive, in-residence program located in Carbondale, IL. Because cohort building, group study, and personalized advising are hallmarks of our program, we do not have an online option. The program consists of six consecutive terms.

## Year 1

Summer Boot Camp (required). A six week, six credit summer session starting the last week of June and running through the first week of August. The boot camp emphasizes active learning approaches and cohort building while beginning the content review in behavioral and biological sciences, chemistry, and quantitative reasoning.

Fall Semester (required). Students complete MEDPREP coursework in behavioral science, biology, chemistry, physics, reading the analysis, and study skills, take professional seminars to prepare for professional school application and matriculation. Students take one additional science course on the SIUC campus. We follow the SIUC course calendar for a 15 week semester (late August-mid December).

Spring Semester (required). Students continue MEDPREP coursework in biological science, biology, chemistry and reading analysis, as well as professional preparation seminars. Emphasis is placed this semester on additional preparation for MCAT or DAT examinations. Students take one additional science course on the SIUC campus. We follow the SIUC course calendar for a 15 week semester (mid-January - mid-May).

## Year 2

Summer Coursework (optional for Traditional, MBS-MP; required for MPH-MP). MPH-MP must complete several summer courses (these courses are time-compressed and finish by early June). Traditional or MBS-MP students may choose to stay for summer courses on the SIUC campus (variable schedules, offered between June-August), or may leave campus to participate in premedical programs on other campuses, engage in research, mentor for programs such as Upward Bound or Envision, or work. Students also submit medical/dental school applications at this time.

Fall Semester (required). Emphasis is on additional preparation for medical/dental school. Students choose appropriate courses in consultation with their MEDPREP academic advisors.

Spring Semester (required). Emphasis is on additional preparation for medical/dental school. Students choose appropriate courses in consultation with their MEDPREP academic advisors. MP-MPH students complete their Public Health Practicum.

YEAR 1		
Summer	Fall	Spring
Required: MEDP 401A Academic Enrichment (1 cr.)	Required: MEDP 400A Orientation Seminar (1 cr.) MEDP 401A Academic Enrichment (1 cr.) MEDP 401E Convocation (1 cr.)	Required: MEDP 4008 Medical Seminar (1 cr.) MEDP 401E Convocation (1 cr.)
MEDP 4011 Career Development (1 cr.) MEDP 401C Quantitative Skills (1 cr.) MEDP 402A Behavioral Sciences Appl. (1 cr.) MEDP 403G Biology Applications (1 cr.) MEDP 404A Chemistry Applications (1 cr.)	Recommended: MEDP 401G CARS (2 cr.) [Dental: Ind. Read. MEDP 402E-747] MEDP 402A Behavioral Science Apps. (2 cr.) MEDP 403A Biology Apps. (2 cr.) MEDP 404A Inorganic Chemistry Apps. (2 cr.) MEDP 405A Physics Apps. (1 cr.) [EXCEPT DENTAL] MEDP 405A Physics Apps. (1 cr.) [EXCEPT DENTAL] MEDP 402C clinical Experience (1 cr.) Dental Only Plus one-two "campus" courses: MBS: Required BCHM 451A, PHSL 310, BIOL305, etc.	Recommended: MEDP 401H CARS (2 cr.) [Dental: optional] MEDP 402A Behavioral Science Apps. (2 cr.) MEDP 403G Biology Apps. (2 cr.) MEDP 405A Physics Apps. (2 cr.) MEDP 405A Physics Apps. (1 cr.) MEDP 405A Physics Apps. (2 cr.) MEDP 405A Physics Apps. (1 cr.) MEDP 405A Physics Apps. (1 cr.) MEDP 405A Physics Apps. (1 cr.) MEDP 405A Physics Apps. (2 cr.) MEDP 405A Physics Apps. (2 cr.) MEDP 405A Physics Apps. (2 cr.) MEDP 405A Physics Apps. (1 c
6 credits total	15-18 credits total	15-18 credits total
YEAR 2*		
Summer	Fall	Spring
MPH ( <u>required</u> ): PH 588, PH598	Required: MEDP 401E Convocation (1 cr.)	Required: MEDP 401E Convocation (1 cr.)
Summer courses are optional for TRAD or MBS-MP.	Recommended – 11-14 credits: MEDP 404E (3 cr.) Medical Biochemistry PHSL 401 A (5 cr.) Gross Anatomy OR DHSL 2011 A (7 cr.) Jobro Anatomy OR	Recommended- 11-14 credits: MEDP 401D (3 cr.) Problem Based Learning MEDP 4038, 403E (2 cr.) Pharmacology or Immunology MEDD 4028 Health Case Sustemer Science 14 rol
TRAD: To qualify for a tuition waiver, you must take 6 credits, including at least one MEDP credit.	PHSL 301 (4 tr.) into anatomy PHSL 310 (5 cr.) Intro Human Physiology OR PHSL 410 A (4 cr.) Mammalian Physiology MEDP 402C (1 cr.) Clinical Experience	WEDF 4026 freque Late Systems Seminar (A.C.). PHSL 401 8 (5.cr.) Gross Anatomy or PHSL 301 intro Anatomy PHSL 410 8 (4.cr.) Mammalian Physiology MEDP 402C (1.cr.) Clinical Experience
	MBS and MPH: courses as required to complete the Master's Degree – see <i>individual program requirements</i> . MPH <u>required</u> PH 512, PH 525, PH526; may start Practicum. Take electives to complete degree requirements (total 42 credits). MBS must have total 30 G credits for degree; plan schedule carefully.	<ul> <li>MBS and MPH: courses as required to complete the Master's Degree – see individual program requirements.</li> <li>MPH <u>required</u> PH 532; must complete practicum (PH590). Take any additional electives to complete degree requirements (total 42 credits).</li> <li>MBS must have total 30 G credits for degree; plan schedule carefully.</li> </ul>
6 credits (optional for TRAD or MBS-MP)	12-15 credits total	12-15 Credits total
*Students should double-check matriculation requirements for medical/dental schools of interest and complete any outstanding required coursework in Y2. Most medical/dental schools require 1 FULL year each of English, Physics with Lab, Biology with Lab, Chemistry with Lab, and Organic Chemistry with Lab. More and more are requiring at least one course each in Biochemistry and Statistics.	Students should double-check matriculation requirements for medical/dental schools of interest and complete any outstanding required oursework in Y2. Most medical/dental schools require 1 FULL year each of English, Physics with Lab, Biology with Lab, Chemistry with Lab organic Chemistry with Lab. More and more are requiring at least one course each in Biochemistry and Statistics.	st and complete any outstanding required Lab, Biology with Lab, Chemistry with Lab, and try and Statistics.

MEDPREP Curriculum (All Tracks)

Update 7/19/2018 amm

# **Course Descriptions**

MEDPREP students complete a rigorous academic program consisting of required and elective MEPDREP courses, in conjunction with supplementary upper-division science courses offered by other departments on the SIUC campus. While each student's program is uniquely designed in consultation with a MEDPREP advisor, courses commonly taken by our students include Human Physiology, Molecular Biology, Survey of Anatomy, Gross Anatomy, Mammalian Physiology, Immunology, Developmental Biology, Biochemistry, and Neuroscience.

Students in the optional master's degree programs will take graduate level coursework to satisfy master's program requirements. For more information, please visit the MBS-MP and MPH-MP pages.

## **Required MEDPREP Courses**

MEDP 400A – Orientation

(1 credit hour, Fall Semester, P/F)

This course is designed to examine the factors related to the medical and dental school admissions process. The course focuses on the mechanics of applying to medical or dental school, understanding the admissions criteria, self-assessment as a medical school applicant, and preparation for becoming a competitive applicant. Through class discussions, written and oral assignments, and guest lectures, the student develops a comprehensive understanding of the professional school admissions process.

MEDP 400B – Medical Seminar

(1 credit hour, Spring Semester, P/F)

A continuation of MEDP 400A, this course further prepares students for admission to medical or dental schools. Self-exploration of career goals, and writing for the admissions process, are emphasized.

MEDP 401A – Academic Enrichment

(1 credit hour, Summer Semester; 1 credit hour, Fall Semester)

Academic Enrichment provides students with the opportunities to develop skills that will provide a foundation for successful learning in medical/dental school and as a health care provider. Improvement is dependent on the students' willingness to change (by abandoning ineffective habits) and on their motivation to develop more desirable strategies. The course is designed to assist students in: 1) evaluating their own learning styles, 2) utilizing new strategies and techniques for a higher level of learning and testing, 3) acquiring new information and techniques for becoming more organized and active learners, and 4) learning how to manage stress and text anxiety.

#### MEDP 401E - Convocation

(1 credit hour, Fall and Spring Semesters, S/U, Year 1 and 2)

Convocation is designed to give MEDPREP students an opportunity to hear speakers address a variety of topics that will enhance their experience as professionals-in-training. Some former topics have been on the Problem Based Learning Curriculum, medical ethics, the application process, and financing medical school.

MEDP 401I – Career Development

(1 credit hour, Summer Semester, P/F)

During a student's first summer at MEDPREP, he/she is involved in a variety of professional development activities. This course includes problem-solving activities, guest speakers, focus groups, and opportunities for self-reflection and career development.

MEDPREP First-Year Foundation (MCAT/DAT Preparation) Courses

MEDP 401C – Quantitative Skills

(1 credit hour, Summer, Spring)

This course emphasizes strong understanding of basic mathematical and statistical principles for the health sciences. Topics covered include mathematical operations, algebra, geometry, trigonometry, logarithms, graphical analysis, SI system of measurement, probability, and statistical reasoning. Emphasis is placed on estimation and mathematics without calculators. (This is a continuation course, taught over two academic terms).

MEDP 401G, 401H - Critical Analysis and Reading Skills II-III

(1 credit hour, Summer Semester; 2 credit hours, Fall and Spring Semesters)

This course is designed to assist students in developing the reading and writing skills they will be tested on during the MCAT and used throughout their professional and personal lives. Students will work on: 1) developing higher-level critical reading skills through component analyses and summarizing of passage writings, 2) analyzing passages, questions, and answer stems, 3) charting errors to develop personalized VR rules, 4) developing flexibility in test-taking and computer strategies, 5) strengthening writing in terms of language and organization, 6) building vocabulary, and 7) reading a variety of articles to increase literary schema.

MEDP 402A – Behavioral and Social Science Applications

(1 credit hour, Summer Semester; 2 credit hours, Fall and Spring Semesters)

The behavioral and social science application course is an introductory overview of psychology and sociology used in preparation for the MCAT examination and medical school matriculation. The course will examine factors that influence human behavior, including socio-cultural factors, environmental and behavioral factors, human emotions, and individual and group dynamics. (This is a continuation course, taught over three academic terms.)

MEDP 402B - Health Care Systems Seminar

(1 credit hour, Spring Semester, P/F)

Overview of major topics in U.S. and global healthcare, including US healthcare systems, insurance and economics, malpractice, research and pharmaceuticals, and healthcare policy, as well as global healthcare delivery, medical mission volunteerism, and host country perspectives.

MEDP 403G - Biology Applications

(1 credit hour, Summer Semester; 3 credit hours, Fall; 2 credit hours Spring)

Biology Applications is a team-taught course that covers foundational biology topics in preparation for the MCAT examination and medical school matriculation. Emphasis is placed on improving problemsolving skills and increasing the student's knowledge base. Course topics include human physiological systems, and principles of cell and molecular biology, immunology, microbiology, genetics and evolution. (This is a continuation course, taught over three academic terms.)

MEDP 404A – Inorganic Chemistry Applications

(1 credit hour, Summer Semester; 2 credit hours, Fall Semester)

Inorganic Chemistry Applications is a review of general chemistry with an emphasis on problem solving. The course provides a solid foundation for the general chemistry and the atomic physics topics emphasized on the MCAT: electronic structure and the periodic table, bonding, phases and equilibria, stoichiometry, thermodynamics and thermochemistry, kinetics and equilibrium, solution chemistry, acids and bases, electrochemistry, and atomic and nuclear structure. (This is a continuation course taught over two academic terms.)

MEDP 404C – Organic Chemistry Applications

(2 credit hours, Spring Semester)

Organic Chemistry Applications is a review of organic chemistry with an emphasis on problem solving. The course provides a solid foundation for the organic chemistry topics emphasized on the MCAT: covalent bonds, molecular structure and spectra, separations and purifications, hydrocarbons, oxygencontaining compounds, amines, and biological molecules.

MEDP 405A – Physics Applications: Biophysics

(1 credit hour, Fall Semester; 1 credit hour, Spring semester)

Physics Applications is an overview of biophysics topics from a basic college physics course that are biologically relevant. The topics covered are closely aligned with the MCAT exam, and prepare students for basic physics as it applies to medical study. The content review is based on practice on calculation and extensive study of concept questions. Mathematical estimation and test-taking techniques are also emphasized. (This is a continuation course, taught over two academic terms).

MEDPREP Second-Year Courses: Advanced Preparation for Medical/Dental School

MEDP 401D – Problem Based Learning

(3 credit hours, Spring Semester, P/F)

Problem Based Learning (PBL) focuses on skills required for success in a problem-based learning professional school curriculum. Using a student-centered learning model, faculty tutors guide students through simulated patient cases to build both thinking strategies and foundational knowledge. Limited enrollment; permission of the PBL course supervisor is required.

MEDP 402C – Clinical Experience

(1 or 2 credit hours, Fall, Spring or Summer Semesters, P/F)

The Clinical Experience course is a one- or two-credit elective course offered each semester (fall, spring, and summer). The primary goal of Clinical Experience is to enable MEDPREP students to gain exposure to a health-related environment under the direct supervision of a practicing health care provider. This involves the cooperation of an outside agent or agency to serve in the capacity of site supervision. In most instances the site supervisor is a practicing physician. This is a limited enrollment course; permission to register must be obtained from the clinical experience course supervisor.

MEDP 403B - Medical Pharmacology

(2 credit hours, Spring Semester; may not be offered every year)

This course serves as an introduction to pharmacology as presented in the medical school curriculum. Emphasis is placed on foundational principles of pharmacokinetics, pharmacodynamics and drug toxicity. The course surveys the most commonly prescribed prescription medications, including treatments for infection, hyperlipidemia, depression, anxiety, thyroid disorders, asthma and diabetes.

MEDP 403E Medical Immunology

(2 credit hours, Spring Semester)

This course serve as an introduction to immunology in preparation for professional school matriculation. Emphasis is placed on foundational principles of immunology and application to the practice of medicine.

MEDP 404E - Medical Biochemistry

(3 credit hours, Fall Semester)

This course serves as an introduction to biochemistry as presented in the medical school curriculum. Emphasis is placed on application of basic principles of biochemistry to human physiology and disease. Topics include fuel metabolism, molecular biology techniques in medicine, protein metabolism and the urea cycle, enzyme kinetics, blood cell metabolism, and ethanol metabolism and toxicity.

# **Doctor of Medicine M.D.**

The medical education curriculum has brought the school national attention. Since students are not evaluated in competition with their peers, they are stimulated to cooperate with one another, a situation that more closely resembles what takes place in the actual practice of medicine. Problem-based learning concepts, including active learning situations with virtual and simulated patients, are used to help students work toward clinical competency throughout the four-year curriculum. In the traditional program, the first year of the four-year M.D. degree is taught at the SIU Carbondale main campus where students concentrate on the basic sciences. The remaining three years are taught in Springfield where students study clinical medicine along with medical humanities and various electives. For the rural track program, all four years are taught on the SIU Carbondale main campus.

# Lincoln Scholars Program (LSP)

The Lincoln Scholars Program is a parallel track to SIU School of Medicine's traditional M.D. program. The traditional program matriculates 72 first-year medical students who complete Year 1 of their studies on the main campus at SIU Carbondale, Illinois. These students then relocate to the medical school's Springfield, Illinois, campus for Year 2 through Year 4. The LSP track will enroll 8 students per year who will remain in Carbondale for all four years of their medical school experience.

The learning issues and graduation objectives of the LSP are the same as those for the traditional program. However, the LSP track curriculum features additional curricular components, including extended experiences in rural locations, a rural health skills lab, summer experiences in rural hospitals, assignment to a "rural" mentor, "non-cognitive" components of leadership and public speaking, integrative medicine and opportunities for personal growth and wellness, basics of health policy with an emphasis on rural issues, and a team learning environment with SIU physician assistant students, a rural physician mentor and other SIU health care students, such as nursing, clinical pharmacy and behavioral health.

# Admission into the M.D. Program

Admission into the M.D. program is highly competitive. Meeting or exceeding the academic requirements does not ensure admission. The SIU Admissions Committee looks beyond academic qualifications for evidence of responsibility, time management skills, maturity, integrity, social awareness, compassion, service orientation, proper motivation, identification with the goals and nature of the School, exploration of medicine as a career and good interpersonal skills.

Preference is given to established residents of downstate Illinois and other underserved locations in the state of Illinois (including rural and inner-city areas).

# **General Requirements**

- Must be a US citizen or possess a permanent resident visa.
- Must be a legal Illinois resident for the MD program. Out-of-state applicants are considered only for the MD/JD program.
- Must meet minimum Medical College Admissions Test (MCAT) and grade point average standards.

• Must have completed at least 90 credit hours of undergraduate work at an accredited, US or Canadian degree-granting college or university.

## **Academic Preparation**

SIU School of Medicine does not have any premedical coursework requirements, but it is highly recommended the following coursework be completed:

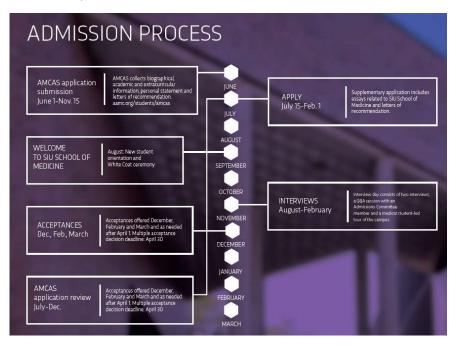
- 1 year of general biology
- 2 years of chemistry, including organic chemistry
- 1 year of English composition
- 1 year of general physics
- 1 year of math, including statistics
- 1 semester of biochemistry, cell/molecular biology, physiology, genetics

#### **Outside Activities**

Successful applicants often have a high level of involvement in activities outside of the classroom. These include numerous student groups, sports, music, science or social science research, physician shadowing, community service, philanthropy and employment.

## **Other Selection Factors**

The admissions committee admits students who are responsible, mature, compassionate and motivated. Applicants are selected for interview according to their strengths in academics, extracurricular activities, employment and volunteer experiences, in addition to place of residence. Preference is given to central and southern Illinois residents and to those from rural, inner-city or disadvantaged backgrounds. Selected applicants are required to interview. Although the committee uses no quotas, active efforts are made to recruit qualified applicants from groups traditionally under-represented in the medical profession.



# Technical Standards for Admission, Retention and Graduation

Students graduating from the School of Medicine must be able to meet the physical and emotional requirements of the academic program as set forth below.

A candidate should have the ability to:

- Communicate effectively in order to elicit and provide information.
- Perceive, interpret and communicate various aspects of physical examination, including palpation, auscultation and percussion.
- Learn to interpret basic laboratory tests.
- Learn to interpret diagnostic procedures (e.g., venipuncture, lumbar puncture and arterial puncture).
- Learn to interpret EKGs and X-rays.
- Execute motor movements sufficient to perform a physical exam and provide emergency care to patients.
- Compare quantitative and qualitative differences to reason, analyze, synthesize and problem solve.
- Exercise good judgment.
- Promptly complete all responsibilities attendant to the diagnosis and care of patients.
- Develop mature, sensitive and effective relationships with patients.
- Function effectively under stress.
- Adapt to changing environments.
- Demonstrate compassion, integrity, interpersonal skills, interest and motivation.
- Comprehend three-dimensional relationships.
- Demonstrate the emotional health required for full use of intellectual abilities.

# **Curriculum Guidelines**

SIU School of Medicine has built a reputation as an innovator in medical education. The overall focus of curriculum is on clinical case-based, self-directed learning in a small group setting. The goal is to foster integration of the basic and clinical science knowledge as students solve patient, community and population problems. Clinical experiences beginning in the first month of the curriculum ensure that all content is learned in a clinical context. Students use both real and simulated patients for their training. Emphasis on issues such as community health care and the psychosocial issues of medicine demonstrate SIU's focus on caring while curing and treating patients as people rather than medical conditions.

- Students should be exposed to a variety of clinical settings throughout their entire undergraduate education and should be expected to show progressive development of skills and professional behaviors.
- Learning of basic and clinical sciences shall be integrated.
- Active learning in small group settings should be encouraged.
- The curriculum shall develop the flexibility necessary for students to function in the rapidly evolving health care delivery system and in a variety of roles such as individual patient care, community health and preventive medicine.
- All curricular events should be evaluated; such evaluations should be diverse in style and performance-based.

- The following content areas should receive emphasis in the curriculum: history and physical examination skills, medical practice management, health policies, evidence-based medicine, resource acquisition and medical informatics and opportunities to explore diverse career choices.
- Where appropriate, curriculum should be managed by interdisciplinary teams that cross geographical and calendar barriers.

# **Curriculum Goals**

# **Competent, Compassionate Physicians**

The goal of our curriculum is to prepare students to be physicians who:

- Are compassionate, tolerant and respectful in caring for patients and trustworthy and truthful in all of their professional dealings.
- Understand the scientific basis of medicine and are capable of applying that knowledge in the practice of medicine.
- Are highly skilled in providing care to individual patients.
- Are self-directed, lifelong learners capable of employing systematic approaches for promoting, maintaining and improving the health of individuals and populations.
- Understand the roles of other health care professionals and who collaborate with and learn from them in fulfilling their roles as clinicians and patient advocates.
- Skilled in the critical appraisal of new scientific knowledge and its application to clinical practice.
- Recognize and accept limitations in their knowledge and clinical skills and who are committed to improving their knowledge, ability and habits and patterns of practice.
- Are responsive to the changing environment of health care.
- Recognize that spirituality and cultural beliefs are important elements of the health and wellbeing of patients.
- Advocate the interests of patients over self-interest and their own personal rewards.

# **Primary Care and Ambulatory Care**

The School requires a clinical rotation in family and community medicine. Since 1981, more than 2,500 students have participated in the program, working alongside more than 160 central and southern Illinois physicians. In addition to primary care, other clinical rotations offer students more than one-quarter of their clinical experiences in non-hospital settings. Some of these experiences include opportunities to work in rural communities. Fulltime and community faculty work side by side with students in their practices to provide students with valuable clinical experiences.

# **Humanistic Medicine**

Good interpersonal skills and professionalism are essential to the practice of medicine. Development of these skills, which help build trusting physician-patient relationships, is continuously evaluated by the faculty. The use of small group learning throughout the curriculum encourages team building, enhances communication skills and plays a major role in building interpersonal skills. Interpersonal skills have equal weight with knowledge and clinical reasoning skills in the assessment process.

The Department of Medical Humanities emphasizes the psychosocial, ethical and legal dimensions of the practice of medicine. Its standardized patient experiences allow students to interact with a number of different types of patient scenarios so students have many opportunities to fine tune professional behavior.

# **Evaluation and Promotion**

Every student must attain the predefined levels of competence established by the faculty. Evaluations are designed to measure competence in knowledge, skills and attitudes. Decisions regarding student progress are made on the basis of whether students demonstrate the prescribed levels of competency. Oral and computer-based examinations, faculty evaluation of cognitive and non-cognitive attributes, and performance-based examinations are used to evaluate students' knowledge, attitudes, concepts and skills.

Performance-based examinations give students the opportunity to demonstrate their clinical skills and abilities with standardized patients. These exams, in which students' interviewing and physical examination skills are observed by faculty, occur with increasing frequency throughout the first three years of study. Feedback provided by faculty observers helps students recognize strengths and weaknesses and provides advice to improve performance.

After completing all clerkships, students are required to participate in the fourth year (senior) clinical competency examination, which assesses their ability to apply knowledge and clinical skills in a "real life" medical setting. Students are evaluated and receive feedback regarding inquiry strategy, diagnosis development, test selection and interpretation and patient management.

All students are required to take the US Medical Licensing Examination (USMLE) Step 1 before beginning clerkships and must pass Step 1 of the USMLE to graduate. All students must sit for both USMLE Step 2 Clinical Knowledge and Clinical Skills components to graduate. Course designations of honors, pass or fail are included on students' official transcripts.

# **Curriculum Overview - Traditional Track**

# Year 1

First-year students study in Carbondale. The year consists of 38 weeks divided into three units organized around organ systems.

Curriculum materials are designed to guide students primarily to anatomy, behavioral science, biochemistry, clinical medicine, and physiology. Cases also incorporate elements of embryology, genetics, immunology, molecular biology, pharmacology, and population health and prevention. History taking and physical examination skills are taught concurrently in all units.

History taking and physical examination skills are taught concurrently in all units. Students work with standardized patients beginning in the first week of the curriculum, and they begin working with real patients in the fourth week, under the supervision of a physician mentor.

- CRR Cardiovascular, Respiratory, Renal (14 weeks)
- NMB Neural, Muscular, Behavioral (12 weeks)
- ERG Endocrine, Reproduction, Gastrointestinal (12 weeks)

Examinations are administered at mid-unit (CRR and NMB only) and end-of-unit on a pass/fail grading scale.

Unit 1 – Cardiovascular/Respiratory/Renal (CRR)

- Introduction to issues involving the cardiovascular, respiratory, and renal systems. Related content areas include anatomy, behavioral and social sciences, biochemistry, genetics, embryology, pharmacology, etc.
- Introduction to small group processes, self-directed learning, and learning resources.
- Introduction to clinical medicine including basic history taking and physical exam skills, physician mentor experiences, clinical field experiences, and elective clinical opportunities.

Unit 2 – Neural/Muscular/Behavioral (NMB)

- Introduction to issues and problems involving the neuroscience (neurobiochemistry, neuroanatomy, neurophysiology), locomotion, behavioral and social sciences. Continuation of related basic science disciplines (e.g., anatomy, biochem, embryo, etc.)
- Continuation of small group processes, self-directed learning, and learning resources.
- Continuation of clinical medicine including basic history taking and physical exam skills, physician mentor experiences, clinical field experiences, and elective clinical opportunities.

Unit 3 – Endocrine/Reproduction/Gastrointestinal (ERG)

- Introduction to issues involving endocrine function, reproduction, the gastrointestinal system, and nutrition. Continuation of related basic science disciplines (e.g., anatomy, biochem, embryo, etc.).
- Continuation of small group processes, self-directed learning, and learning resources.
- Continuation of clinical medicine including basic history taking and physical exam skills, physician mentor experiences, clinical field experiences, and elective clinical opportunities.

More detailed and often updated information on the Year 1 Curriculum is found here; https://www.siumed.edu/oec/y1/year-1-curriculum.html

## Year 2

In the second year at SIU Medicine, the curriculum is fully integrated around organ systems. Materials integrate the disciplines of clinical medicine, immunology, microbiology, pathology, pharmacology, public health populations and radiology into four, nine week long core instructional units arranged around organ systems.

- Unit 1-HII (Hematology, Immunology, & Infection)
- Unit 2- CRR (Cardiovascular, Respiratory, & Renal)
- Unit 3- NMB (Neuromuscular Behavior)
- Unit 4-ERG (Endocrine, Reproductive, & Gastrointestinal).

Examinations are administered at the end of each unit on a pass/fail grading scale. The second-year curriculum is nine months long with a two-week winter break. Students usually take Step 1 of the U.S. Medical Licensure Exam (USMLE) at the end of the second-year curriculum.

Unit 1 – Hematology/Immunology/Infection (HII)

The general goal of this unit is for the student to:

- 1. Acquire and utilize knowledge of the biological basis for infectious processes.
- 2. Acquire and utilize knowledge of the role of immunology and other host defenses against infectious agents.
- 3. Acquire and utilize knowledge of the pathogenesis of infectious diseases.
- 4. Acquire and utilize knowledge of the treatment of infectious diseases with emphasis on the pharmacologic treatment.
- 5. Acquire and utilize knowledge of the population health, epidemiologic and preventive health aspects of infectious diseases.
- 6. Acquire and utilize knowledge of basic hematology and hematologic disorders.
- 7. Acquire and utilize knowledge of the role of genetics disorders in infectious processes and immune disorders.
- 8. Acquire and utilize knowledge of the diagnosis and diagnostic approaches of/to infectious diseases.
- 9. Acquire proficiency in the clinical skills related to the diagnosis of infectious diseases.
- 10. Review the anatomy, physiology, and biochemistry of the organ systems that are relevant to the understanding of infectious processes.
- 11. Demonstrate proficiency in the acquisition of information through the effective use of information science based methods.

In addition, since hematology is central to all of the Year 2 Units, introductory objectives to the subject are included in the unit. The general approach will be to present the student with patient problems in a variety of formats (ePBLM's, standardized patients, clinical case presentations and basic science resource sessions) and to require students to develop and master the learning issues necessary to understand the infectious process (and incidentally to attempt to solve the patient problem).

Unit 2 – Cardiovascular/Respiratory/Renal (CRR)

The Cardiovascular-Renal-Respiratory unit consists largely of the pathology and pharmacology as well as clinical integration related to these body systems. Review of basic anatomic, physiologic, and biochemical processes learned in Year 1 is expected. The material will be presented in several formats including ePBLM's, minicases, class discussions, resource sessions, radiology sessions, and clinical experiences as noted on the calendar. Students are responsible for all material related to these topics.

Robbins, Pathologic Basis of Disease, 8th ed., is a recommended text, and refer to the Web-based Instructional Material (WIMS) for Pharmacology. The WIMS can be found on D2L.

The general goals of the CRR Unit are:

- 1. Acquire and utilize knowledge of the pathology of diseases of the cardiovascular, respiratory, and renal organ systems.
- 2. Acquire and utilize knowledge of the treatment of diseases of the cardiovascular, respiratory, and renal organ systems with emphasis on the pharmacologic treatment.
- 3. Acquire and utilize knowledge of the infectious diseases affecting the cardiovascular, respiratory, and renal organ systems.
- 4. Acquire and utilize knowledge of the immunologic aspects of diseases of the cardiovascular, respiratory, and renal organ systems.
- 5. Acquire and utilize knowledge of the population health, epidemiologic and preventive health aspects of diseases of the cardiovascular, respiratory, and renal organ systems.
- 6. Acquire and utilize knowledge of the genetics of diseases of the cardiovascular, respiratory, and renal organ systems.
- 7. Acquire and utilize knowledge of the diagnosis and diagnostic approaches of/to diseases of the cardiovascular, respiratory, and renal organ systems.
- 8. Acquire proficiency in the clinical skills related to the cardiovascular, respiratory, and renal organ systems.
- 9. Review the anatomy, physiology, and biochemistry of the cardiovascular, respiratory, and renal organ systems.
- 10. Demonstrate proficiency in the acquisition of information through the effective use of information science-based methods.

## Unit 3 - Neural/Muscular/Behavioral (NMB)

The NMB Unit is divided into three sub-units; Musculoskeletal, Neurology, and Behavioral.

- 1. The general goals of the Neuromuscular and Behavior Unit are for the student to:
- 2. Acquire and utilize knowledge of the pathology of diseases of the nervous and musculoskeletal systems and of behavioral disorders.
- 3. Acquire and utilize knowledge of the treatment of diseases of the nervous and musculoskeletal systems and of behavioral disorders with emphasis on the pharmacologic treatment.
- 4. Acquire and utilize knowledge of the infectious diseases affecting the nervous and musculoskeletal systems and behavior.
- 5. Acquire and utilize knowledge of the immunologic aspects of diseases of the nervous and musculoskeletal systems.
- 6. Acquire and utilize knowledge of the population health, epidemiologic and preventive health aspects of diseases of the nervous and musculoskeletal systems and of behavioral disorders.
- 7. Acquire and utilize knowledge of the genetics of diseases of the nervous and musculoskeletal systems and of behavioral disorders.
- 8. Acquire and utilize knowledge of the diagnosis and diagnostic approaches of/to diseases of the nervous and musculoskeletal systems and of behavioral disorders.
- 9. Acquire proficiency in the clinical skills related to the nervous and musculoskeletal systems and to behavioral disorders.

- 10. Review the anatomy, physiology, and biochemistry of the nervous and musculoskeletal systems and behavioral disorders.
- 11. Demonstrate proficiency in the acquisition of information through the effective use of information science-based methods.

The NMB unit will utilize a variety of complementary learning experiences. The basic educational elements of this unit are:

- 1. Small group sessions to integrate acquisition of basic science and clinical knowledge in a PBL format.
- 2. Resource sessions
  - a. Multidisciplinary, which use a case-based format and content experts to present basic science and clinical knowledge in a lecture format.
  - b. Single discipline, which cover a specific topic by a content expert.
- 3. Clinical activities to facilitate acquisition of clinical skills (see the unit schedule)
  - a. Clinical skills sessions
  - b. Radiology sessions
  - c. Mentor activities
  - d. Neuro Exam Patient Day
  - e. Psychiatric Patients Days
- 4. Self-assessment tools, which will allow you to evaluate your progress in acquisition of knowledge and skills.
- 5. Small group assessment which will allow the facilitator to evaluate your participation, active learning strategy and articulation, clinical reasoning, non-cognitive behaviors, and professionalism in tour group sessions.
- 6. End of unit assessment which will allow you to measure your knowledge, performance and non-cognitive behaviors.

#### Unit 4 – Endocrine/Reproduction/Gastrointestinal (ERG)

This unit will utilize a variety of self-directed, integrated learning experiences. The basic educational elements of this unit are:

- 1. Small group sessions, which occur twice weekly for 2-3 hours each.
- 2. Multidisciplinary Sessions, in which faculty present basic science and clinical information in a case-based, interactive format.
- 3. Single Disciplinary Sessions, in which faculty from one discipline present basic science information.
- 4. Clinical activities
  - Clinical Review Sessions
  - Clinical Skills Sessions
  - Radiology Sessions
  - Clinical Selective
  - Mentor activities
- 5. Self-Assessment Tools, which allow students to evaluate their progress in acquisition of knowledge and skills
- 6. End of Unit Assessment, which will measure student knowledge.

The general goals of the Endocrine, Reproductive and Gastrointestinal Unit are for the student to:

- 1. Acquire an integrated basic knowledge base of the pathophysiological basis of endocrine, reproduction, and gastrointestinal disorders, including aspects related to pharmacology, immunology, genetics, neoplasia, evidence-based medicine, and population science.
- 2. Reinforce core concepts of Year-One ERG unit and introduce pathophysiology, pharmacology, immunology, microbiology, population science, and clinical concepts related to endocrine, reproduction, and gastrointestinal disease processes.
- 3. Reinforce learning skills through small group learning, self-directed study, and use of a variety of learning resources.
- 4. Apply clinical knowledge and skills to execute basic patient medical history taking and physical examination skills.
- 5. Acquire communication and professional skills through participation in mentoring program, clinical experiences, and elective clinical opportunities.

Please visit https://www.siumed.edu/oec/y2 for more information about the Year 2 Curriculum.

## Year 3

Third-year medical students are immersed in an individualized learner-centered experience of the foundational practices of medicine.

The curriculum integrates the fundamentals of basic science and the foundations of scholarly medicine into the skills of clinical practice and professional development.

Core Curriculum: (Eight / Four Week Rotations 34 weeks) in an inter-professional clinical environment

- Emergency Medicine
- Family and Community Medicine
- Internal Medicine
- Neurology
- Obstetrics and Gynecology
- Pediatrics
- Psychiatry
- Surgery

Intersession Period: 3 weeks

- Medical Humanities
- Summative Clinical Competency Exam
- Geriatrics

Personalized Education Plan (PEP): 15 weeks

• Selective courses to improve clinical skill/professional development

Evaluations are administered at the completion of each clerkship on a pass/fail grading scale assessing Clinical Skills and Professionalism with an overall rating within the Reporter Interpreter Manager Educator (RIME) schematic.

A comprehensive Summative Clinical Competency Examination (SCCX) is administered during the Intersession Period existing of 14 cases assessing clinical reasoning, differential diagnoses, history and

physical exam performance, planned management, patient satisfaction communication, and interpersonal skills. Students usually take Step 2 of the U.S. Medical Licensure Exam (USMLE) following the end of the third-year curriculum.

Elective course descriptions can be found at https://student.siumed.edu/fusebox.cfm?fuseaction=CourseCatalog&rpt=1

Additional Year 3 information is located here, https://www.siumed.edu/oec/y3

# Year 4

Fourth-year medical students enjoy a diverse range of experiences through which they can explore their medical interests, strengthen areas of weakness in knowledge, clinical skills, and/or clinical reasoning, and broaden their preparation for postgraduate training and practice.

The year comprises a required 30 weeks of elective credit (20 weeks required with SIU Faculty), 1 week of Medical Humanities, and a fourth-year Doctoring Curricula.

Students may also design their own elective if they are interested in a course or topic for which a regular elective does not exist. This Individual-Designed (ID) elective can include experiences with non-SIU faculty, or at a military or other health care setting. A student must be in good academic standing (determined by Student Progress Committee) to enroll in an elective experience with any non-SIU faculty.

Evaluations are administered at the completion of each elective on a pass/fail grading scale.

Upon graduation students must meet all fourth-year requirements, attain a passing score on USMLE Step 1 and Step 2, and successfully complete all SIU Medicine graduation requirements.

Further information for Year 4 is found here, https://www.siumed.edu/oec/y4

# Curriculum Overview - Lincoln Scholars Program (Rural Track)

# Year 1

The Lincoln Scholars students remain on the Carbondale campus throughout their education. The year consists of 40 weeks divided into five units organized around organ systems.

Curriculum materials are designed to guide students primarily in anatomy, behavioral science, biochemistry, clinical medicine, and physiology. Cases also incorporate elements of embryology, genetics, immunology, molecular biology, pharmacology, and population health and prevention. History taking and physical examination skills are taught concurrently in all units.

Students work with standardized patients beginning in the first week of the curriculum, and they begin working with real patients in the fourth week, under the supervision of a physician mentor.

- Hematology, Gastrointestinal, Cardiology (8 weeks)
- Immunology, Infectious Diseases, Pulmonology, Rheumatology (8 weeks)
- Neurology, Behavioral, Muskuloskeletal (8 weeks)

- Obstetrics/Gynecology, Urology, Endocrine (8 weeks)
- Renal, Endocrine, Metabolism, Nutrition (8 weeks)

Examinations are administered at the mid-unit of Hematology, Gastrointestinal, Cardiology, and at all end-of-units on a pass/fail grading scale.

Unit 1 – Hematology, Gastrointestinal, Cardiology

- Issues primarily involving:
  - o Hematology
  - o Gastrointestinal
  - Cardiology
- Introduction to small group process, self-directed study, and variety of learning resources
- Overview of clinical medicine: basic history taking and physical examination skills; mentor program; clinical field experiences; elective clinical opportunities

Unit 2 – Immunology, Infectious Diseases, Pulmonology, Rheumatology

- Underlying problems in:
  - o Immunology
  - Infectious Diseases
  - o Pulmonology
  - o Rheumatology
- Small group process, self-directed study, and variety of learning resources
- Clinical medicine: basic history taking and physical examination skills; mentor program; clinical field experiences; elective clinical opportunities

Unit 3 – Neurology, Behavioral, Muskuloskeletal

- Underlying problems in:
  - Neuroscience neurobiochemistry, neuroanatomy, neurophysiology
  - Locomotion anatomy, and physiology of the musculoskeletal system
  - o Behavioral sciences
- Small group process, self-directed study, and variety of learning resources
- Clinical medicine: basic history taking and physical examination skills; mentor program; clinical field experiences; elective clinical opportunities

Unit 4 – Obstetrics/Gynecology, Urology, Endocrine

- Emphasizing issues related to:
  - Obstetrics/Gynecology
  - o Urology
  - o Endocrine
- Small group process, self-directed study, and variety of learning resources
- Clinical medicine: basic history taking and physical examination skills; mentor program; clinical field experiences; elective clinical opportunities

Unit 5 – Renal, Endocrine, Metabolism, Nutrition

- Emphasizing issues related to:
  - o Renal
  - o Endocrine
  - o Metabolism
  - o Nutrition
- Small group process, self-directed study, and variety of learning resources
- Clinical medicine: basic history taking and physical examination skills; mentor program; clinical field experiences; elective clinical opportunities

# Year 2

Second-year medical students are immersed in an individualized learner-centered experience of the foundational practices of medicine.

The curriculum integrates the fundamentals of basic science and the foundations of scholarly medicine into the skills of clinical practice and professional development.

Core Curriculum: (Seven/ 7 Week Rotations) in an inter-professional clinical environment

- Emergency Medicine
- Family and Community Medicine
- Internal Medicine
- Neurology
- Obstetrics and Gynecology
- Pediatrics
- Psychiatry
- Surgery

Evaluations are administered at the completion of each clerkship on a pass/fail grading scale assessing Clinical Skills and Professionalism with an overall rating within the Reporter Interpreter Manager Educator (RIME) schematic.

A comprehensive Summative Clinical Competency Examination (SCCX) is administered during the Intersession Period existing of 14 cases assessing clinical reasoning, differential diagnoses, history and physical exam performance, planned management, patient satisfaction communication, and interpersonal skills.

## Year 3

In the 3rd year, the students are immersed in 46 weeks of individualized learner-centered experience. Materials integrate the disciplines of clinical medicine, immunology, microbiology, pathology, pharmacology, public health populations, and radiology into a student-focused study timeline for Step 1 and Step 2 of the USMLE. A Personalized Education Plan (PEP) runs throughout the year.

- Selective courses to improve clinical skill/professional development will be taken with guidance from a faculty advisor.
- Unit 1-HII (Hematology, Immunology, & Infection)

- Unit 2- CRR (Cardiovascular, Respiratory, & Renal)
- Unit 3- NMB (Neuromuscular Behavior)
- Unit 4-ERG (Endocrine, Reproductive, & Gastrointestinal).

Students will take Step 1 of the U.S. Medical Licensure Exam (USMLE) at the end of December in the third-year curriculum and Step 2 in the second six months of the curriculum.

Unit 1 – Hematology/Immunology/Infection (HII)

The general goal of this unit is for the student to acquire a molecular, cellular and clinical understanding of:

- the biological basis for infectious disease processes;
- the clinical and laboratory diagnosis of infectious diseases;
- the role of host defense mechanisms and immunization in limiting infectious disease processes;
- the treatment of infectious diseases; and
- the epidemiological, public health and psychosocial issues related to infectious diseases.

In addition, since hematology is central to all Year 3 Units, introductory objectives to the subject are included in the unit. The general approach will be to present the student with patient problems and other activities in a variety of formats including PBLM's, standardized patients, real patients, clinical case presentations and basic science resource sessions. Students will be required to develop and master learning issues necessary to understand infectious diseases and solve patient problems that arise from microbial infections.

Unit 2 – Cardiovascular/Respiratory/Renal (CRR)

- To reinforce core concepts taught during Year-One Circulation-Respiration-Renal Unit.
- To expand on and introduce new pathophysiology, pharmacology, immunology, microbiology, population science, and clinical concepts related to pulmonary, cardiovascular, and renal diseases.

Self-directed learning is the major underlying process guiding students as they identify learning issues generated by each case and their group work. It includes time spent with resource faculty and clinical consultants, as well as time using the variety of educational resources available.

Electronic Problem-Based Learning Modules (EPBLM's)

EPBLM's are actual patient cases provided by clinical faculty that are developed into a format that can be used for small group learning. The EPBLM cases will introduce concepts important to achieving the objectives of the second year by focusing on the pathophysiology associated with cardiovascular, renal, and respiratory diseases, while reinforcing basic science principles (anatomy, physiology, biochemistry) and mechanisms of pharmacology, immunology, and microbiology. Students will be guided toward the coexisting behavioral, ethical, and epidemiological issues associated with the care and management of patients.

Unit 3 - Neural/Muscular/Behavioral (NMB)

The NMB Unit is divided into three sub-units; Musculoskeletal, Neurology, and Behavioral. The general goals of the NMB Unit are:

- 12. To reinforce the concepts taught during Year-One NMB Unit.
- 13. To expand on and introduce new pathophysiology, pharmacology, immunology, microbiology and clinical concepts related to neurology, musculoskeletal, and behavioral disease processes.

The NMB unit will utilize a variety of complementary learning experiences. The basic educational elements of this unit are:

- 7. Small group sessions to integrate acquisition of basic science and clinical knowledge in a PBL format.
- 8. Resource sessions
  - a. Multidisciplinary, which use a case-based format and content experts to present basic science and clinical knowledge in a lecture format.
  - b. Single discipline, which cover a specific topic by a content expert.
- 9. Clinical activities to facilitate acquisition of clinical skills (see the unit schedule)
  - a. Clinical skills sessions
  - b. Radiology sessions
  - c. Mentor activities
  - d. Neuro Exam Patient Day
  - e. Psychiatric Patients Days
- 10. Self-assessment tools, which will allow you to evaluate your progress in acquisition of knowledge and skills.
- 11. Small group assessment which will allow the facilitator to evaluate your participation, active learning strategy and articulation, clinical reasoning, non-cognitive behaviors, and professionalism in tour group sessions.
- 12. End of unit assessment which will allow you to measure your knowledge, performance and non-cognitive behaviors.

Unit 4 – Endocrine/Reproduction/Gastrointestinal (ERG)

- Gain an integrated basic knowledge base of the pathophysiological basis of endocrine, reproduction, and gastrointestinal disorders, including aspects related to evidence-based medicine, epidemiology, preventive medicine, genetics, neoplasia, and infection.
- Understand the principles of clinical and laboratory diagnosis of these disorders.
- Gain knowledge of pharmacotherapy and pharmacogenetics to rationally select and use drugs in the medical management of various disorders.
- Demonstrate sensitivity and competency in performing history and physical exams involved in endocrine, reproduction, and gastrointestinal care.
- Demonstrate an ability to use principles of evidence-based medicine in critically reviewing current medical literature and all available resources to guide clinical reasoning.
- Enhance professional development skills.

Year 4

Fourth-year medical students enjoy a diverse range of experiences through which they can explore their medical interests, strengthen areas of weakness in knowledge, clinical skills, and/or clinical reasoning, and broaden their preparation for postgraduate training and practice.

The year comprises a required 30 weeks of elective credit (20 weeks required with SIU Faculty) and 1 week of Medical Humanities.

Students may also design their own elective if they are interested in a course or topic for which a regular elective does not exist. This Individual-Designed (ID) elective can include experiences with non-SIU faculty, or at a military or other health care setting. A student must be in good academic standing (determined by Student Progress Committee) to enroll in an elective experience with any non-SIU faculty.

Evaluations are administered at the completion of each elective on a pass/fail grading scale.

Upon graduation students must meet all fourth-year requirements, attain a passing score on USMLE Step 1 and have taken Step 2, students must successfully complete all SIU Medicine graduation requirements.

	Traditional		oln Scholars	-
CY = Calendar Year JUN CY1 JUL CY1 AUG CY1	r		ant Students atology, GI & Cardiology	
mid AUG CY1 SEP CY1 OCT CY1 mid OCT CY1 NOV CY1 DEC CY1 JAN CY2 FEB CY2 MAR CY2 MAR CY2 mid MAR CY2 APR CY2 MAY CY2 mid MAY CY2 JUN CY2 JUN CY2 JUL CY2 AUG CY2 mid AUG CY2 SEPT CY2 OCT CY2 mid OCT CY2 MOV CY2 DEC CY2 JAN CY3 FEB CY3 MAR CY3	Cardiology, Respiratory & Renal	Disease	ology, Infectious es, Pulmonology heumatology	Rural Mentor Clinic
			ogy, Behavioral, lusculoskeletal	
	Neuro, Muscular, & Behavioral		YN, Urology &	
	Endocrine, Reproduction & GI	Rena	al, Endocrine, olism, Nutrition	
			Break	
	Remediation or MPEE or Break			
	Hematology, Immunology & Infection		d, Peds, Neuro, Med, Surgery,	Family Med
	Cardiology, Respiratory & Renal		ch, OB/GYN ships & Break	Continuity Clinic
	Neuro, Muscular, & Behavioral			

Comparison of Curriculum Schedule Traditional vs Lincoln Scholars Students

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APR CY3 MAY CY3 JUN CY3	Endocrine, Reproduction & GI Remediation or USMLE Prep. Step 1 or Break			
JUL CY3 AUG CY3 SEP CY3 OCT CY3 NOV CY3 DEC CY3 JAN CY4	UL CY3 UG CY3 SEP CY3 OCT CY3 Int Med, Fam Med, Peds, Neuro, Emer Med, Surgery, Psych, OCV CY3 OB/GYN DEC CY3 AN CY4 Break		Summative Clinic Review Sessions, USMLE Prep. Step 1	
FEB CY4 MAR CY4 APR CY4 APR CY4 JUN CY4 JUN CY4 JUL CY4 AUG CY4 AUG CY4 SEP CY4 OCT CY4 NOV CY4 DEC CY4 JAN CY5 FEB CY5 MAR CY5 APR CY5 MAY CY5	Summative Clinical Competency Exam		Electives, USMLE Step 2	
	Personalized Education Plan, USMLE Step 2			
	Electives		Electives	

# Clerkships

## **Family and Community Medicine**

The required Year 3 Family and Community Medicine Clerkship offers a 4-week block immersion experience with community-based preceptors or faculty members from the department's 5 residency programs. Our goal is to provide an educational experience that emphasizes continuous comprehensive medical care within the context of the Patient-Centered Medical Home. Additionally, the curriculum promotes understanding of the core concepts of Family Medicine through elements of health policy, clinical epidemiology, preventive medicine, community-oriented primary care, health literacy, continuous quality improvement, medical informatics, practice management, health disparities, and biopsychosocial issues. Current and previous components of the curriculum have been presented at international and national education conferences. SIU medical students may also choose from many one to four-week selectives during the Personalized Education Plan (PEP) component of their third year of medical school. This allows the students to further investigate Family Medicine as a specialty and career choice. Some of these selectives include geriatrics, procedures, prompt care, hospitalist medicine, and rural experience. Details regarding our curriculum may be found on the clerkship's D2L page hosted by the Southern Illinois University School of Medicine.

The FCM Clerkship has utilized community-based preceptors since 1981 and currently has over 160 board-certified family physicians located throughout the state of Illinois. Our preceptors have been instrumental in the FCM Clerkship's achievement of excellent feedback and high ranking by medical

students. Additionally, our students have rated the clerkship most positively with regards to respect, professionalism, and role modeling. Past student remarks have also consistently identified the following clerkship strengths: clerkship organization, faculty contact, patient number and variety, clinical autonomy, functioning as a team member, patient continuity, working in a community-based practice, and the opportunity to learn outside Springfield's academic center. We believe these remarks to be reflective of the necessity to introduce the breadth and scope of the Patient-Centered Medical Home within a community-based block immersion experience.

## Goal:

The goal of the four-week Family and Community Medicine (FCM) clerkship is to introduce students to the Patient-Centered Medical Home through the breadth and scope of family medicine, including the psychosocial and procedural aspects, particularly as they apply to ambulatory care. The clerkship uses structured learning experiences in the actual task environment of practicing family physicians. It emphasizes integration of comprehensive ambulatory care with community health and resources.

## **Objectives:**

By the end of the FCM clerkship students will have been exposed to, gained experience in, and may be evaluated on the following clinical performance areas:

- 1. Performing a focused or complete history and physical examination and developing differential diagnoses, reasonable management plans, and appropriate follow-up for a set of symptoms and diagnoses. This clerkship will focus on obesity, smoking cessation and hyperlipidemia.
- 2. Performing technical and procedural skills commonly utilized in an ambulatory setting and interpretation or performance of related tests and procedures.
- 3. Giving oral presentations, charting in the electronic health record/dictation, and medical writeups that demonstrate good use of medical terminology, organization of information and; clear, accurate and logical thoughts/ideas. These vary per site and are not required.

## **Internal Medicine**

Students enrolled in our Internal Medicine Clerkship have the opportunity to explore a wide range of subspecialties such as sleep medicine, cardiology and critical care, and will get to experience both inpatient and outpatient settings within SIU Medicine's large network of clinics and affiliated hospitals.

Internal Medicine encompasses a broad spectrum of knowledge that is foundational for any subsequent specialty that a student chooses to pursue. Exceptional patient care requires not only medical knowledge, but the ability to work in multidisciplinary teams, an understanding of the social determinants of health, the importance of safe transitions of care, and operating within the healthcare system. Most importantly, it requires the delivery of compassionate patient care. The Internal Medicine Clerkship allows students to explore and learn about all of these aspects of medicine.

#### **Types of Patients Seen on Internal Medicine**

- New, acute condition of an undifferentiated problem, with emphasis on management.
- Chronic condition, with emphasis on management.
- Exacerbation of chronic condition, with emphasis on management.

- Asymptomatic patient, with emphasis on preventative care and screening.
- Patient with limited access to care.

The Internal Medicine Clerkship consists of a total of 6 weeks of clinical immersion in Internal Medicine. Students rotate on the inpatient wards for 4 weeks and in the General Internal Medicine clinic for 2 weeks. At the completion of each segment, students are assessed via a clinical skills exam.

## Goals:

During the Internal Medicine Clerkship, students will acquire the clinical skills, knowledge, and professional behaviors necessary to evaluate and care for adult patients with growing independence guided by careful and consistent supervision from residents and attending physicians.

The overarching goals of the Clerkship are:

- To give everyone a broad base of Internal Medicine that they will be able to use regardless of their ultimate specialty choice.
- To introduce students to the practice of medicine.
- To help to foster professional development in all students.

## **Objectives:**

## Clinical Skills

During the clerkship, the students will acquire and be able to demonstrate the clinical skills necessary to independently evaluate (with appropriate supervision) and care for adult patients with common medical problems. Specifically, the student will be able to do the following:

- Obtain an accurate focused or complete medical history based on the presenting complaint.
- Perform an accurate focused or complete physical examination appropriate to the clinical setting.
- Prioritize patients' problems, formulate appropriate differential diagnoses, and develop plans for diagnosis and management.
- Prepare and maintain in an accepted format the medical record of the evaluation and care of inpatients and outpatients, including a complete history and physical examination, progress notes, clinic visit notes, and physician's orders.
- Communicate orally with other members of the health care team regarding the evaluation and care of a patient. This includes giving case presentations to ward teams, attending physicians, and consultants, and verbal instructions to ancillary health care personnel.
- Communicate to patients, families and caregivers the diagnosis, prognosis and treatment plan for their condition, and educate them about beneficial lifestyle behaviors and preventive health measures.
- Become familiar with routine procedures commonly required for the evaluation and care of patients.
- Begin to develop the ability to assess and critique the medical literature to research clinical questions and further their understanding of patient problems.

#### **Professional Behavior**

During the clerkship, students will acquire and be able to demonstrate the attitudes and behaviors necessary to provide patient evaluation and care and to further their own professional development. Specifically, the student will be able to do the following:

- Coachability:
  - Recognize personal limitations in knowledge and skills, and demonstrate willingness to improve them.
  - Develop personal SMART goals for improvement of clinical skills and professional behaviors. (SMART = Specific, Measurable, Achievable, Relevant, Timely)
  - Actively seek out direct observation of individual skills in order to obtain constructive feedback and utilize that feedback to improve performance.
  - Utilize encounters with patients and other team members to improve their skills identified in their SMART goals (Deliberate Practice).
- Teamwork:
  - Understand the importance of teamwork in patient care and how to function well on a clinical care team.
  - Recognize the importance of other healthcare professions in providing care and demonstrating respect for their roles.
  - Demonstrate initiative and reliability in completion of team tasks.
- Patient care:
  - Recognize the importance of patient preferences when selecting among diagnostic and therapeutic options.
  - Demonstrate respect for patient privacy and confidentiality.
  - Recognize potential sources of systemic and personal bias in patient care and actively work to minimize it. Approach patient encounters with cultural competence, integrity, honesty, and compassion.
  - Appreciate the impact of the patient's illness on his/her quality of life, well-being, ability to work, and the family.
  - o Identify opportunities to improve "Value in Healthcare."
  - Clinical Skills During the clerkship, the students will acquire and be able to demonstrate the clinical skills necessary to independently evaluate (with appropriate supervision) and care for adult patients with common medical problems.
  - Knowledge During the clerkship students will acquire and demonstrate knowledge of the basic and clinical science of medical problems of adult patients listed in the following core curriculum problems.
  - Professional behavior Students must understand and be able to demonstrate the attitudes and behaviors necessary to provide patient evaluation and care.

# **Obstetrics & Gynecology**

The required 3rd year Obstetrics & Gynecology Clerkship is a four-week clinical immersion experience that provides a high level of hands-on activities. Students' preceptors are OB/GYN generalists who care for both obstetrical and gynecological patients in ambulatory clinics, inpatient settings and in operating rooms. Students have a week on the labor and delivery floor working with the obstetrics team which includes attendings, residents and nursing staff. They follow laboring patients throughout their shift, evaluate patients who come into the triage unit and round on postpartum patients. Students are expected to give oral presentations of their patients at morning and evening sign out. The other three

weeks of the clerkship, the students have a mix of ambulatory clinics and surgeries. Responsibilities include thorough chart preparation for their clinic and surgical patients and to function as part of the team providing care.

## Goal:

The goal of the Obstetrics and Gynecology Clerkship is to provide students with learning experiences in the fundamentals of women's health care.

## **Objectives:**

After completing the Obstetrics and Gynecology Clerkship students should be able to:

- Obtain a comprehensive history and perform a thorough gynecologic examination using appropriate communication skills, maintaining confidentiality, and respecting patients' rights.
- Provide periodic health maintenance screenings for the routine detection and prevention of disease to individual women across their lifespan.
- Develop a differential diagnosis and management plan for common gynecologic problems considering benefits, risks, and treatment alternatives of the proposed interventions.
- Assess a pregnant woman for common obstetrical conditions that might adversely affect pregnancy and develop a plan for care.
- Demonstrate ability in basic clinical skills used in an outpatient clinic, a surgical suite and a labor room while complying with universal precautions and maintaining patient safety.
- Utilize awareness of and sensitivity to spiritual, cultural, ethnic, and lifestyle differences when providing care for women.

## **Emergency Medicine**

The Emergency Medicine Clerkship at SIU immerses medical students in a variety of settings and roles within the Emergency Department. Our aim is to promote and facilitate an active learning environment by placing students at the bedside. The wide range of pathology, acuity, patient demographics, and specialty care that is provided in our Emergency Departments provides a great learning opportunity for learners of all levels and desired specialties. Students will gain an appreciation for the role of Emergency Medicine as a resource for any patient at any time and its function in the greater healthcare system. We hope that our students leave their rotation able to appropriately establish a safety net for all patients, learn the initial approach to a wide variety of common Emergency Department chief complaints and experience the acute resuscitation and stabilization of the acutely ill patient.

Emergency Medicine offers the opportunity to see a wide range of clinical pathology in a fast-paced and active environment.

The goals for the Year 3 Emergency Medicine Clerkship are in line with the new structure of the Year 3 curriculum:

- Clinical Immersion
- Coaching
- Direct observation

- Targeted feedback
- Individualized Professional Development

At the end of the EM Clerkship, students should be able to:

- Perform a focused, high-quality H&P, and generate a DDX and initial workup for a patient who presents to the Emergency Department with Chest Pain.
- Perform a focused, high-quality H&P, and generate a DDX and initial workup for a patient who presents to the Emergency Department with Dyspnea.
- Perform a focused, high-quality H&P, and generate a DDX and initial workup for a patient who presents to the Emergency Department with Abdominal Pain.
- Perform a focused, high-quality H&P, and generate a DDX and initial workup for a patient who presents to the Emergency Department with Altered Mental Status.
- Provide a basic interpretation of EKGs.
- Provide a basic interpretation of a Chest X-ray.
- Demonstrate how to perform a simple interrupted laceration repair.
- Give an organized and focused oral case presentation for an undifferentiated patient presenting to the Emergency Department.
- Describe the unique challenges of managing a patient in Cardiac Arrest.
- Describe the unique challenges present in the assessment of a traumatically injured patient.
- Demonstrate the ability to place a peripheral IV catheter.
- Demonstrate the ability to place a patient on a cardiac monitor and obtain an initial set of vital signs.
- Demonstrate the ability to obtain a 12-lead EKG.

## Surgery

This clerkship is a unique and focused learning opportunity that allows surgical students to develop critical skills in the management and treatment of their patients.

During the 4-week surgery core clerkship each student is randomly assigned one faculty preceptor from one of ten surgical specialties. Each preceptor determines the students' daily schedules which includes clinic, surgery, and attending educational conferences. Students are allowed to work up to 80 hours per week which includes weekends and night call. Students are immersed completely in the clinical experience of being a physician.

Our supervising faculty emphasize direct observation and targeted feedback, which helps students develop their clinical skills, including history and physical exam, differential diagnosis, and development of diagnostic and therapeutic plans of care. Students have the opportunity to improve communication

and interpersonal skills essential for interacting with patients, families, caregivers and health care teams.

Specialties available to clerkship students include Cardiothoracic, Otolaryngology, Vascular, Urology, Plastic surgery, and Trauma/Critical Care.

## Goals:

Provide a clinically immersive surgical experience with a designated faculty preceptor who will through direct observation and targeted feedback, assist students to develop their clinical skills i.e. History and physical exam skills, differential diagnoses development, diagnostic justification, technical skills, and development of diagnostic and therapeutic management plans.

Provide the opportunity for development of communication and interpersonal skills i.e. oral presentation skills, patients, families, caregivers and healthcare teams, and documentation skills.

## **Objectives:**

- To become familiar with the role and function of a surgeon
- To determine if they have an interest in a career in a surgical specialty.
- To be able to assess (i.e. preoperative management) a patient that presents with a potential surgical problem.
- To be able to describe the indications for surgery vs other management options for the pathologies central to the student's specific surgical rotation.
- To be able to present patient findings on rounds and in clinic.
- To be able to identify and understand the management of common postoperative complications.
- To be able to demonstrate proper OR Etiquette, including maneuvering the sterile field, scrubbing, gowning and gloving.
- To become familiar with the roles and functions of all members of the healthcare team in a surgical environment.
- To become familiar with how to perform simple suturing techniques.

## Neurology

The Neurology Core Clerkship is a two-week clerkship rotation. Day One starts with a highly interactive orientation session at Memorial Learning Center where students are placed in a Simulated Patient Care Room and hands-on practice focused on the complete neurologic examination along with funduscopic examination, aided by panoptic ophthalmoscopes, begins. A lumbar puncture practicum follows. A debriefing session follows the physical exam exercises and the structure of the clerkship is explained and expectations are discussed. A question and answer period ends this half-day orientation session. On Day Two, students are immersed in clinical settings and have an opportunity to discuss progress and solidify goals for the clerkship experience. Throughout the core clerkship, students are scheduled with a preceptor and expected to see patients as well as attend Grand Rounds and Neuro-Radiology Rounds. Attendance and participation in deep brain stimulations, intensive care procedures, acute stroke management, electromyography and other key experiences are incorporated as opportunity allows. The final day of the clerkship is spent on the inpatient or outpatient areas during the morning hours. By

afternoon, students are expected to return examination tools and educational materials that may have been provided. In addition, the final day of the clerkship ends with students reflecting and providing feedback regarding the experience utilizing the Core Clerkship Evaluation process.

### Goal:

To learn the principles and skills underlying the recognition and management of neurologic diseases that a general practitioner is most likely to encounter in practice, with special emphasis on the neurologic emergencies.

#### **Objectives:**

- Demonstrate competence in presenting and documenting a neurologic history and physical examination.
- Demonstrate competence in conducting a complete neurological examination.
- Recognize neurological symptoms and localize lesions.
- Demonstrate and apply knowledge of neurosciences to the understanding of the mechanisms of neurological disease and their treatment.
- Generate neurological differential diagnoses.
- Develop experience in funduscopic examinations.
- Recognize neurological emergencies and the need for immediate patient management.
- Exhibit independent and self-directed learning.
- Display professionalism by adhering to dress code, being punctual, and contributing to an atmosphere conducive to learning.

## **Pediatrics**

Our 4 week clerkship is a combination of inpatient, general practice and subspecialty experiences. We assign each student to a small team of physicians who assess student performance and provide feedback. Each student has an average of 30 half days of clinic experience over the course of the 4 weeks. Some schedules require students to round on their patients on weekends or nights. All schedules are set up based on physician clinical schedules.

Our students' clinical skills and professionalism are evaluated at least weekly by their faculty preceptors. At the end of the clerkship, the clerkship team meets to review evaluations submitted for each student and to discuss improvements the student has made through the course of the clerkship. All of this information is compiled by the clerkship office to create the summative evaluations.

At the end of the clerkship, each student will also participate in two standardized patient (SP) cases known as the CCX exam. 20 minutes will be spent with the Standardized Patient and 60 minutes completing the exam in a computerized data base. Each student is required to provide a justification for each differential diagnosis created during the case; referred to as a Diagnostic Justification (DxJ).

These exams are reviewed and scored by the Nurse Educator based on criteria established by the Clerkship Director.

## Goals:

Students will have the basic skills, attitudes, and knowledge to safely and compassionately care for children.

#### **Objectives:**

- Gain basic knowledge of growth and development (physical, physiologic and psychosocial) and of its clinical application from birth through adolescence.
- Demonstrate the knowledge necessary for the diagnosis and initial management of common pediatric acute and chronic illnesses.
- Analyze the approach of pediatricians to the health care of children and adolescents.
- Evaluate the influence of family, community and society on the child in health and disease.
- Develop communication skills that will facilitate the clinical interaction with children, adolescents and their families and thus ensure that complete, accurate data are obtained.
- Demonstrate competency in the physical examination of infants, children and adolescents.
- Demonstrate clinical problem-solving skills.
- Develop strategies for health promotion as well as disease and injury prevention.
- Develop the attitudes and professional behaviors appropriate for clinical practice.

## Psychiatry

The Psychiatry Clerkship offered at SIU Medicine is a four-week, third-year psychiatry rotation that combines inpatient and outpatient experiences within a range of clinical settings.

Our students get a chance to work within interdisciplinary teams that evaluate and treat patients experiencing both chronic and acutely distressing mental and psychological illnesses. We emphasize an approach of compassion, clinical expertise and collaboration to ensure the best possible outcomes for our patients and their families.

The four-week psychiatry third-year rotation is a combination of inpatient and outpatient experiences in a range of clinical settings. During the inpatient assignment, students work within an interdisciplinary team to evaluate and treat patients who are suffering from acutely presenting mental illnesses. The lives of these individuals are so disrupted by emotional difficulties that they require the intensive setting of the hospital. During outpatient clinic assignments, students will interview and examine a variety of patients to diagnose and craft treatment strategies which may involve further diagnostic studies; referral to inpatient, partial hospital, or outpatient settings; and pharmacological, neuromodulatory, or psychosocial interventions such as individual or group psychotherapies.

#### Goals:

- 1. Learn basic psychopathology, psychopharmacology and other therapeutic interventions.
- 2. All students will be expected to understand the following:
  - ADHD
  - Anxiety Disorders
  - Dementia
  - Developmentally Disabled
  - Mood Disorders
  - Personality Disorders/Traits
  - Psychotic Disorders
  - Sexual Dysfunction
  - Sleep Disturbances
  - Substance Use Disorders
  - Suicidal Ideations
- 3. The students will demonstrate proficiency in clinically-relevant empathetic interviews with the mental status examination.
- 4. Formulate H&Ps which should include diagnostic assessments with a comprehensive treatment plan.
- 5. There is an opportunity to observe ECT, TMS, and psychotherapies.

## **Medical Humanities**

This program helps students gain a deeper understanding of complex elements of the human condition, including illness, suffering and belief systems.

Our mission is to help doctors-in-training gain deeper insights into their own assumptions, beliefs and perspectives so they can hone their empathetic as well as medical expertise, thus creating more effective patient/provider relationships.

To do this, we draw from the wisdom and data of humanities fields such as philosophy, religion, anthropology, sociology and the arts. This knowledge is then incorporated into a comprehensive curriculum that will influence and enhance the humanistic awareness of a future generation of health care providers.

#### Goal:

We aim to create dialogue and stimulate reflection that aids in nurturing compassionate healers.

#### **Objectives:**

The Year 3 Medical Humanities Clerkship focuses on the physician as self and the physician-patient dyad. Physician as Self Learning Objectives

- Reflect and discuss about self in community and self as community
- Reconnect with parts of your identity that may have been lost or dormant through your journey in medicine and/or carve out an identity that is separate but related to medicine
- Express what you are feeling in ways that enhance connection

- Grow interpersonal and communication skills and empathy through collaboration
- Develop a plan for thriving through a commitment to self-reflection, self-awareness, self-compassion, and self-care.

Physician-Patient Dyad Learning Objectives

- Learn about clinician/patient relationship models and how to apply them
- Learn about and how to employ moral theories to resolve clinical ethical dilemmas
- Learn how to identify ethical situations in medical practice and how to navigate and traverse through ethical scenarios commonly encountered in medical practice
- Discuss and begin to identify the impact of bias in medical practice
- Learn and improve bedside interactions with patients and families

Students will also create a project that reflects their understanding of how the humanities and medicine interact

# **Objectives for Graduation**

Objectives for graduation have a number of important functions. They provide:

- 1. A description of the basic skills, knowledge, and behavior expected of graduates of the School of Medicine;
- 2. A basis for assessment and evaluation of performance;
- 3. A blueprint for curricular development and implementation;
- 4. A framework for life-long learning.

## I. THE PATIENT ENCOUNTER – CLINICAL SKILLS

When the student encounters a patient with a presenting complaint (or complaints), the student should be able to:

- A. Obtain an accurate medical history. When using an HER or in a Telehealth encounter, do so in a manner that does not interfere with the patient-doctor relationship.
- B. Perform a complete and appropriately focused organ system specific physical examination, including a mental status examination.
- C. Accurately interpret patient responses and physical findings.
- D. Develop a problem list that includes the consideration of all psychosocial and social variables.
- E. Demonstrate an investigatory and analytic approach to the information obtained to reach a working or provisional diagnosis (clinical reasoning).
- F. Develop a plan for any necessary investigations to confirm the diagnosis. The following should be considered:
  - a. Availability, reliability, and validity of the requested tests or procedures.
    - i. Appropriately use sensitivity, specificity, and predictive values of the test.
    - ii. Understand the importance of the prevalence of disease in interpretation of tests.
    - iii. Estimate pre-test and post-test probability of disease.
  - b. Risks and complications

- c. Discomfort and inconvenience to the patient
- d. Cost and its impact on the patient and society
- e. The patient's wishes and values.
- G. Accurately interpret the results of all tests ordered and modify the problem list and the differential diagnoses accordingly.
- H. Design and implement a comprehensive management plan for the patient. The following should be considered:
  - a. Therapeutic goals;
  - b. Informed consent, including benefits, risks, and treatment alternatives of the proposed interventions;
  - c. Discomfort and inconvenience to the patient;
  - d. The patient's goals, expectations, and ability to adhere to treatment proposals;
  - e. The patient's cultural and religious values;
  - f. The indications, contraindications, and side effects of the therapies involved;
  - g. Available resources (including patient, family, health care system, and community);
  - h. Legal and ethical requirements;
  - i. The structure and function of health care delivery and payment systems, and how payments for medical care affect decision-making and care provision.
- I. Consult other health care professionals to enhance the quality of care.
- J. Arrange for follow-up on all problems identified.
- K. Monitor the effectiveness of therapy and modify when indicated.
- L. Recognize patients with immediate life-threatening conditions and institute initial care.
- M. Identify and design plans to manage situation that require on-going support: chronic, complex illness; chronic pain, permanent disability; death and dying.
- N. Provide appropriate health maintenance, health counseling and disease-prevention strategies.
- O. Comply with infection control guidelines and the use of universal precautions.
- P. Perform common technical procedures.
  - a. Venipuncture
  - b. IV catheter insertion
  - c. Suturing of lacerations
  - d. NG tube insertion
  - e. Foley catheter insertion
  - f. Arterial puncture

#### II. KNOWLEDGE

Students should be highly knowledgeable about medicine to provide the best possible care for patients; they should demonstrate:

- A. An understanding of the importance of the scientific foundation upon which medicine is based and a commitment to the need for lifelong reflection and learning for the purpose of maintaining and enhancing professional competence.
- B. Knowledge of the normal structure and function of the body and each of its major organ systems.
- C. Knowledge of the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.

- D. Knowledge of the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases/conditions/patient presentations. (Appendices A and B)
- E. Knowledge of the rational use, risks, and benefits of medical therapies.
- F. Apply established and emerging principles of clinical sciences to diagnostic and therapeutic decision-making, clinical problem-solving, and other aspects of evidence-based health care.
- G. Apply principles of social-behavioral sciences to provision of patient care, including assessment of adherence, and barriers to and attitudes toward care. Such factors include:
  - a. Specific cultural, ethnic, and societal beliefs and behaviors;
  - b. Patients' age, education, primary language, finances, and family resources;
  - c. Alternative or complementary medical practices.
- H. Apply principles of epidemiological sciences to the identification of health problems, risk factors, treatment strategies, resources, and disease prevention/health promotion efforts for patients and populations.
- I. Knowledge of the capabilities and limitation of information technology and the management of knowledge, including:
  - a. Searching, collecting, organizing, and interpreting health and biomedical information from different databases and sources;
  - b. Retrieving patient-specific information from an electronic health record;
  - c. Using information and communication technology to assist in diagnostic, therapeutic, and preventive measures, and for surveillance and monitoring health status;
  - d. Maintaining practice records for analysis and improvement.

## III. INTERPERSONAL AND COMMUNICATION SKILLS

Demonstrate interpersonal and communication skills that result in the effective change of information and collaboration with patients, families, health care professionals/teams.

- A. Communicate with patients, families, health care professionals, and the public as appropriate with respect, sensitivity, and compassion in a culturally sensitive a jargon-free manner.
- B. Provide a well-organized, concise, and thorough oral presentation of a patient's problem.
- C. Produce comprehensive and timely written documentation to facilitate patient care, including initial history and physical examination, follow-up notes, physician orders, and prescriptions.
- D. Function as an effective member of the health care team through cooperative interaction with health and social service professionals, families, and other caregivers.
- E. Demonstrate sensitivity, honesty, and compassion in difficult conversations, including those about death, end of life, adverse events, bad news, disclosure or errors, and other sensitive topics.
- F. Demonstrate insight and understanding about emotions and human responses to emotions that allow one to develop and manage interpersonal interactions.
- G. Apply negotiation and conflict resolution skill sin interpersonal relationships.

#### IV. COMMUNITY/PUBLIC HEALTH/PREVENTIVE MEDICINE

Students should be highly knowledgeable about community and public health to provide the best possible care for populations. Students should be able to:

- A. Articulate the importance of public health measures in promoting health and wellness and preventing disease.
- B. Advocate for quality patient care and optimal patient care systems.
- C. Describe the health status of a defined population and identify subgroups whose health status differs significantly form the population at large.
- D. Define specific public health problems in terms of incidence, prevalence, risk factors, and socioeconomic impact.
- E. Define the roles for the physician in relation to other service providers and community agencies in preventing health problems or maintaining health.
- F. Participate in identifying system errors and implementing potential systems solutions.
- G. Apply the principle of preventive medicine, including screening and case findings, for individual patients and populations.
- H. Know when and how to report incidents of domestic violence, including child, elder, and spousal abuse.
- I. Describe other legal and regulatory reporting responsibilities.

#### V. SELF-ASSESSMENT/PROFESSIONAL DEVELOPMENT SKILLS

Students should be able to assess their own skills, those of their colleagues, and those of the programs in which they participate. This assessment should provide thoughtful, appropriate, and constructive feedback for professional development. Students should be able to:

- A. Evaluate their own skills, deficiencies, and limits in their own practice patterns, fund or knowledge and communication abilities. In areas that are lacking, the student should have the ability to commit him/herself to making a chance, set learning and improvement goals and seeking appropriate resources and guidance to do so.
- B. Assess the practice patterns, teamwork, and communication skills of their colleagues and offer meaningful formative feedback as appropriate.
- C. Continually identify, analyze, and implement new knowledge, guidelines, standards, technologies, products, or services that have been demonstrated to improve outcomes.
- D. Critically analyze the medical literature using the principles of evidence-based medicine.
- E. Participate in the education of patients, families, students, trainees, peers, and other health care professionals.
- F. Provide leadership skills that enhance team functioning, the learning environment, and/or the health care delivery system.
- G. Demonstrate healthy coping mechanisms to respond to stress.

#### VI. PROFESSIONAL AND ETHICAL BEHAVIOR

The student should demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in all activities, both with patients and all members of the health care team. The student be able to demonstrate:

- A. Treatment of the patient as a person, not a disease.
- B. Respect of the patient's rights, autonomy, and privacy, and maintaining confidentiality of patient information.
- C. Compassion, integrity, and respect for others.
- D. Accountability to patients, society, and the profession.

- E. Self-motivation; self-discipline; and personal integrity, including both honesty and reliability.
- F. A professional image that is consistent with the medical professions' accepted contemporary standards in the community.
- G. Sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, socioeconomic status, culture, race, religion, disabilities, and sexual orientation.
- H. Recognition of personal biases and steps taken to disallow personal bias to interfere with care.
- I. Recognition of personal limitations (intellectual, physical, or emotional) and work with, accept help, or otherwise adapt to them.
- J. Recognition of the importance of personal and family roles and the need to balance them with professional demands.
- K. Recognition that personal self-care is vital to the health of the student and the care he/she provides.
- L. Application of principles that govern critical decision-making to common ethical dilemmas faced by physicians.

## **Grade Review Process**

#### Purpose

The assignment of grades for units, clerkships, and electives is an academic function, and is the ultimate responsibility of the chair or director of the appropriate academic unit. The Student Progress Committees receives reports of the grades for the units, clerkships, and electives, but is not responsible for the assignment or review of grades for the individual units, clerkships, or electives. **Year 1 Grade Review Process** 

Students will receive notification when the final Year One grade (Pass/Fail) is assigned and officially recorded. All students shall be entitled to ask for review of a final Year One grade and receive a timely response according to the following guidelines.

If a student believes there has been an error in the evaluation process, or believes the final unit evaluation does not accurately reflect their performance, the student may speak informally with the Year One Curriculum Director to find a resolution.

The student is not required to pursue an informal review, but instead may request a formal review. To begin the formal review process, a student must provide the Year One Curriculum Director with a written document that outlines the basis for the request. Unless there are unusual or compelling circumstances, the written request, along with any supporting documentation, must be filed by the student within 10 working days of the official recording of the intermediate evaluation. The Year One Curriculum Director will consider the request for review, will consult with appropriate faculty members and/or the Year One Doctoring Director, and will issue a written decision to the student on the request. The Year One Curriculum Director must respond to the request for review within 10 working days of receipt of the formal request for review.

Should the student wish to have further review of the Year One Curriculum Director's decision, a written request for evaluation review will be submitted to the Chair of the SPC within 10 working days of the decision of the Year One Curriculum Director. The Chair of the SPC must respond, in writing, to the request for review within 10 working days of receipt of the request for review. The decision of the Chair of the SPC will be submitted as the final evaluation.

## Year 2 Grade Review Process

All students shall be entitled to ask for review of a Unit grade and receive a timely response. All Unit faculty members shall be required to substantially comply with the following guidelines.

When the final Unit grade is assigned, students will receive e-mail notification that the evaluation has been officially recorded and is available for student review; this notification will include a reminder of the Grade Review Process.

If a student believes there has been an error in the grading process, or believes the final unit evaluation does not accurately reflect the performance, the student may speak informally with the faculty to find a resolution. However, the student is not required to pursue an informal review, but instead my request a formal review.

To begin the formal review process, a student must provide the Unit Coordinator with a written document that outlines the basis for the request. Unless there are unusual or compelling circumstances, the written request, along with any supporting documentation, must be filed by the student within 10 working days of the official recording of the final grade. The Unit Directors(s) will consider the request for review, will consult with appropriate faculty members and/or the Director of Doctoring, and will issue a written decision to the student on the request. The Unit Directors(s) must respond to the request for review within 10 working days of receipt of the formal request for review.

Should the student wish to have further review of the Unit Directors(s)' decision, a written request for grade review will be submitted to the Year 2 Curriculum Director within 10 working days of the decision of the Unit Directors(s). The Year 2 Curriculum Director must respond, in writing, to the request for review within 10 working days of receipt of the request for review. The decision of the Year 2 Curriculum Director will be submitted as the final grade.

## **Clinical Clerkship Grade Review Process**

NOTE: This Policy shall apply to all Clerkships taken during Year 3 and Year 4, including the Medical Humanities Clerkship.

All students shall be entitled to ask for a review of a final clerkship grade or a grade received for remediation activities by the department and receive a timely response. All departments shall be required to substantially comply with the following guidelines.

When the final grade for the clerkship is assigned, students will receive e-mail notification or a memorandum from the department indicating that the evaluations are complete and have been sent to the Office of Education and Curriculum. This notification will include a reminder of the Grade Review Policy.

If a student believes there has been an error in the grading process, or believes the final evaluation does not accurately reflect the performance, the student may speak informally with the faculty to find a resolution. However, the student is not required to pursue an informal review, but instead may request a formal review.

To begin the formal review process, a student must provide the Clerkship Director with a written document that outlines the basis for the request. Unless there are unusual or compelling circumstances, the written request, along with any supporting documentation, must be filed by the student within 30 working days of the official recording of the final grade. The request for review will prompt a review of the student's portfolio. The outcome of this review will be shared with the student before any change in evaluation is submitted to the Office of Student Affairs. The Clerkship Director, in writing, must respond to the student's request within 10 working days of receipt of the request for review.

Should the student wish to have further review of the Clerkship Director's decision, a written request for grade review will be submitted to the Chair of the Department within 10 working days of the decision of the Clerkship Director. The Chair of the Department must respond, in writing, to the request for review within 10 working days of receipt of the request for review. The decision of the Chair of the Department will be submitted as the final grade.

#### **Elective Grade Review Process**

NOTE: This Policy Shall Apply to Electives Taken During Year 4.

All students shall be entitled to ask for a review of a final elective grade or a grade received for remediation activities and receive a timely response. All elective faculty members shall be required to substantially comply with the following guidelines.

When the final grade for the elective is assigned, students will receive e-mail notification that the evaluation has been officially recorded and is available for student review in the Office of Student Affairs; this notification will include a reminder of the Grade Review Policy.

If a student believes there has been an error in the grading process, or believes the final evaluation does not accurately reflect the performance, the student may speak informally with the responsible elective faculty member to find a resolution. However, the student is not required to pursue an informal review, but instead may request a formal review.

The student shall have 30 working days in which to commence the formal review process; the 30 working day time period will begin with the date the e-mail notification is sent that the evaluation has been officially recorded and is available for student review in the Office of Student Affairs.

The student's request must be addressed to the responsible elective faculty member, must be in writing and must include written documentation of the rationale for the request for the review. The faculty member must respond in writing within 10 working days of receipt of the student's request.

If the student wishes further review, the student must, within 10 working days of receiving the response, ask for a grade review by the Elective Coordinator for the Department in which the elective was taken. The Elective Coordinator will consider the rationale for the request and the faculty member's

response, and make a decision on the matter, which will be transmitted to the student in writing within 10 working days of receipt of the written request.

Should the student wish to have further review of the Elective Coordinator's ruling, a written request for grade review will be submitted to the Year 4 Director within 10 working days of the ruling of the Elective Coordinator. The Year 4 Director must respond in writing to the request for review within 10 working days of receipt of the request for review. The decision of the Year 4 Director will be submitted as the final grade.

# M.D. /J.D. Degree

Recognizing the heightened level of interaction between medicine, law and health policy, SIU's Schools of Medicine and Law offer an MD/JD dual-degree program to accommodate the increasing number of individuals seeking a carefully structured, interdisciplinary education. The program leads to the awarding of degrees in medicine and law at the completion of a unique, six-year program of academic and clinical study. Students seeking to enroll in the MD/JD program are required to meet admission standards established by the School of Medicine and the School of Law. Students are admitted separately to each of these schools, filling a limited number of places available in the program. Students must apply concurrently to both schools for admission.

## Overview:

The MD/JD program requires students to spend their first year at the School of Law in Carbondale, where they will complete 32 credit hours of prescribed first-year course work. Students then will enroll in the law school summer session and complete six credit hours of advanced course work. During the second academic year, students will continue in Carbondale as full-time law students, completing an additional 32 credit hours of course work with concentration in health law.

Enrollment in a second summer session will be required, during which time students will complete six credit hours of course work. This session may include legal research and clinical experience in state or federal agencies involved in the regulation of public health and the activities of the medical profession. Students will spend their third academic year enrolled as freshmen in the School of Medicine in Carbondale, where they will complete all requirements of the first year of the medical school curriculum. Students then will move to Springfield, where they will continue as full-time medical students, completing the sophomore and junior years of the curriculum.

During the senior year of medical school, students will be required to take a specially designed set of law, medicine, and health policy electives lasting 14 weeks, full-time. In completing degree requirements for both the MD and JD degrees, this 14-week elective sequence will serve to fulfill 14 credit hours of course work required for attainment of the JD degree and 14 weeks of elective course work required for attainment of the JD degree.

## How to Apply:

Students seeking to enroll in the M.D. /J.D. program are required to meet the admission standards established separately by the School of Law and the School of Medicine. Application to each of these

schools is an independent process and students must ensure timely completion and submission of separate applications to the School of Medicine and the School of Law. Admitted students will fill a limited number of places available in the dual degree program. To be competitive, applicants to the School of Medicine should present better than a B grade point average and competitive MCAT scores. Law school applicants generally should present better than a B grade point average and a competitive LSAT score. Interested students should request application materials from the Director of Admissions (School of Medicine) and Director of Admissions (School of Law). Out-of-state applicants are encouraged to apply.

# M.D. /M.P.H. Degree

The principles of preventive medicine, public health and health policy are gaining prominence in the area of health and health care. We are progressive in training physicians to have an understanding of the interplay of outside factors in the health of individuals. SIU's School of Medicine and College of Education and Human Services offer a concurrent degree program leading to the degrees of Doctor of Medicine (MD) and Master of Public Health (MPH).

Students seeking to enroll in the five-year program are required to meet the admission standards established by the School of Medicine and the Graduate School. Application to the program is competitive, with only three individuals admitted per year. Inquiries for further information should be directed to Admissions in the Office of Student Affairs at the School of Medicine or the SIU Graduate School.

## Overview:

The program takes place on both the SIU Carbondale and Springfield campuses. Students will first study a public health curriculum for three semesters in the Department of Health Education and Recreation at SIU Carbondale. Following the year of public health training, students will remain in Carbondale during the second year of the program, when they will begin their medical school training. The remaining three years will continue the medical curriculum in Springfield, with the fifth and final year of the program being a combined MD/MPH year.

## **Electives:**

Each MD/MPH student is required to complete a total of 15 hours of electives, including the practicum, while on the Springfield campus during the fourth year of medical school. Each SIU School of Medicine elective is worth an equivalent number of credit hours for each week in length. Thus, a 1-week elective is worth 1 credit hour. The following electives are divided into "Required" and "Optional," from which the student may choose to fulfill their 15 total hours.

## **Required Electives**

## Practicum in Community Health Education: Part 1 of 2 (2000013)

Students are immersed in a community agency with a strong public health focus. This four-week practicum is focused on developing the relationship with the agency, developing the program to be carried out and initiation of the program. Prior to the start of the practicum students will thoroughly investigate the agency's mission, programs, and resources to determine how well it will meet their

career goals. Students will also meet with the SIUC's MPH coordinator to arrive at professional objectives for the practicum, based on the Health Educator's Areas of Responsibilities and personal developmental objectives.

## Practicum in Community Health Education: Part 2 of 2 (200023)

These two weeks will include the completion and evaluation of the project began in part 1.

#### Biological (and other WMD) Terrorism Preparedness and Response (15533)

The medical skills associated with biological terrorism identification and response are quite similar to those already possessed by many physicians as pertaining to other infectious disease. Though chemical and radiological events differ in terms of delivery, physiological effects, medical treatment options and response, physicians are integral partners from the local to national level. Individual physicians can much more effectively participate in both the health and healthcare of local individuals and to national security through a more thorough knowledge of the characteristics of potential agents and an understanding of the mechanisms in place for their surveillance and response. To that end, this elective will provide an overview of: biological, chemical and radiological agents; how these agents may be disseminated and their physiologic effects; treatment strategies; surveillance activities at the state and national level (e.g. NEDSS); preparedness activities to include infrastructure-boosting cooperative agreements to state health departments and healthcare surge capacity; command and control and lines of authority as they pertain to event response (e.g. NIMS); and an overview of planning and exercises.

## **Clinical Epidemiology (15453)**

This course will include didactic presentations and clinical epidemiology problem sets to provide students with a well-rounded set of activities designed to present the fundamentals of clinical epidemiology. Topics include: introduction to epidemiology; basic measures and disease occurrence; medical surveillance, disease outbreaks and role of the physician in epidemic detection and response; testing and screening technologies; clinical trials; epidemiological study designs; and genetics. From this course, the student will gain a working knowledge of epidemiological principles, how they are used to study populations for questions of clinical significance, and how these principles may be applied to patient care.

## **Emerging Trends in Public Health (15543)**

This course is designed to be an overview of the more recent trends in public health practice and research. There will be a combination of selected in-depth readings and discussion on 3-5 specific topics during the week. Discussions will complement the readings by providing more depth and background and allowing the exploration of potential solutions, whether at the individual physician or national policy level. Potential topics include: obesity and chronic disease care and management; terrorism preparedness and response; infectious and foodborne disease, outbreak response; vaccination strategies, needs and policies; racial and other minority health disparities; environmental determinants of health; social and cultural determinants of health; health promotion versus health mandates. Readings and discussion will be complemented by the student performing a more in-depth review of a topic and developing a proposed intervention. This will be presented to the elective faculty and students.

#### **Optional Electives**

### Public Health Leadership (15563)

This course is designed to be an overview of the opportunities and challenges associated with leadership in the field of public health. The student will become familiar with the workings of national and global agencies such as the Centers for Disease Control and Prevention (CDC), The United States Preventive Services Task force (USPSTF), the Public Health Service (PHS), the World Health Organization (WHO), and the United Nations. The role of the physician in these and other agencies will be explored, as well as the more specific roles of health officer, epidemiologist, health scientist, health expert, advocacy champion, and program administrator. Readings on identified agencies and individuals will be complemented by case reports and articles on specific programs and individuals who have made significant impact in population health. This will be complemented by a presentation by the student to the elective faculty and students on the topic of a national or global public program or prominent practitioner.

#### Issues in Minority Health Care (15303)

This elective will allow the student to explore minority health issues through readings and informal discussions with faculty and various agency staff. Investigations of the areas outlined in the objectives may be library-based or agency-based. Students are expected to use faculty as tutor and present investigation results on course book assignments to faculty at the end of the week. Textbooks will be provided to students to guide knowledge and questions. Face to face meetings with faculty will occur twice, once at the beginning and once at the end of the elective.

#### Statistics in Medical Research (15664)

This elective will focus on the statistical and research design skills physicians need to have in order to be intelligent users of research results. Activities will include lecture/discussion, review of articles, and working with data sets, both in class and independently. Topics will include reading tables and graphs; understanding and using means, medians and standard deviations; estimation and hypothesis testing (confidence limits, t-z tests, chi-square, correlation and regression); methods used in analyzing survival data (life-tables, logistic regression); detecting sources of bias in different types of study designs (case-control, cohort, cross-sectional, clinical trials); interpreting p-values; estimating sample sizes, and any other student-initiated topic.

## **Clinical Ethics Consultation (35143)**

Ethics may be regarded as the study and application of right conduct in matters of behavior where there is a large potential for harms or benefits or where people have duties and obligations to others. Ethical dilemmas arise when an individual's or a profession's code of ethics is silent with regard to a particular issue (i.e. cloning, stem cell research) or different values come into conflict (e.g., patient's right to confidentiality conflicts with ability to provide best care for the patient). This elective is designed to expose students to ethical issues that arise in the clinical care of patients. Students will become familiar with common medical ethical issues through short readings in medical ethics and involvement in the Clinical Ethics Consultation Service. Students will be expected to be available on an on-call basis for Ethics Consultation during the entire period of the elective. This may require availability during evenings or on weekends. Students will attend the Springfield Memorial Hospital's Human Values and Ethics committee monthly meeting, should it occur during the period of the elective.

### Service Learning Part 1 of 2: Introduction to the Community Health Needs Assessment Process (15713)

This course is developed to provide an introduction into performing and understanding a community needs assessment. Over the course of one week, students will meet for a minimum of 8 hours with faculty to review core community outreach principles addressing topics such as policy, research, needs assessments, and will review trainings on completing a community health needs assessment as well as evaluation of current community health needs assessments in the area.

### Service Learning Part 2 of 2: Experiential Work Related (15723)

This course is developed to provide an experiential service learning curriculum opportunity. Students must complete Service Learning Elective Part 1 before taking Part 2. Students will spend 1 week working with community and health care partners that address an area of student identified interest from Part 1 of the elective.

## **Office of Student Affairs**

Students will interact frequently with Student Affairs staff from the time they apply to the School through graduation and beyond. The office handles new student admissions and current student issues like registration, financial aid, residency applications, student activities and career counseling.

## **Student Organizations**

We support and encourage you to be active in student organizations, such as the American Medical Student Association, the Student National Medical Association, the Latino Midwest Medical Student Association, the American Medical Women's Association, the Medical Student Section of the American Medical Association and state and county medical societies. A chapter of Alpha Omega Alpha Honor Medical Society was established in 1985. The Medical Student Assembly serves the student body as an advocate group for student interests. Medical students also serve as voting members on a full range of University and School of Medicine committees including Graduate and Professional Student Council, Admissions, Student Progress, Curriculum and Educational Policy.

## Counseling

Counseling services are available for all medical students, with an emphasis on academic and personal counseling for students with special needs.

## **Office of Alumni Affairs**

With assistance from the Alumni Society's Board of Governors, our Alumni Affairs Office works closely with students on various activities and services, including the HOSTS (Helping Our Students To Succeed) program that connects alumni with fourth-year medical students while students are interviewing for residencies, the Alumni News section in the School's aspects magazine, communication through social media and the alumni website, assistance with the annual Alumni Fund Campaign, class reunions and other social events. For further information, contact the Office of Alumni Affairs.

# Tuition and Fees / Financial Assistance

The types and amount of tuition and fees charged to students are established by the Board of Trustees and are subject to change. Nearly all SIU School of Medicine students receive some form of financial aid. Financial need is determined by completion of the Free Application for Federal Student Aid (FAFSA). The financial aid office provides short-term emergency loans, debt counseling and help securing loans and scholarships.

Eligibility: A Free Application for Federal Student Aid (FAFSA), which uses a standard need analysis formula to calculate financial aid eligibility, must be completed each year. An expected family contribution (EFC) is calculated for each students based on their income, net worth, resources, family size, the number of family members attending postsecondary education and other factors. Financial aid is "packaged" as a combination of loans and, if applicable, scholarships to meet the financial need.

Application Procedures: To apply for financial aid at SIUSOM, a FAFSA must be completed each year.

The FAFSA should be completed as soon as possible beginning October 1st.

Students must submit a copy of their Student Aid Report (SAR) via email, fax, or mail to the Springfield Office.

Students who are applying for financial aid for the first time at SIUSOM are also required to complete our Financial Aid Institutional Application (sent in their "welcome" email).

Students who have applied for aid during the previous year should complete a Renewal FAFSA.

You can view information about federal loans you have received in the past at www.nslds.ed.gov.

The FSA ID, which consists of a user-created user name and password, replaced the PIN effective May 2015. It allows users to electronically access personal information on Federal Student Aid web sites as well as electronically sign a FAFSA.

Application Results and Changes: A Student Aid Report (SAR) is provided to the student when the FAFSA is processed. The SAR should be reviewed for accuracy and completeness. If the SAR has errors, or you did not list SIUSOM as a school choice, electronic corrections are made at the FAFSA web site by using the PIN and the Make Corrections link. When a corrected SAR is received, the student should retain it for his/her records, and forward a copy to the financial aid office at SIUSOM.

Electronic Connection: Additional financial aid information is available from our web site. The student can obtain specific information about his/her own financial aid on SalukiNet. If you have questions and want to discuss your financial aid further, our office can be contacted via e-mail or by calling 217-545-2223.

## **Scholarships**

Numerous scholarships are available, but you must be willing to make the effort to search for them. A sample of scholarships can be found here, https://www.siumed.edu/studentaffairs/scholarships.html. Students interested in seeking a private grant or scholarship should check as many sources as possible, including high school guidance offices, local clubs and civic organizations, businesses, employers, church

groups, alumni organizations, public libraries and financial institutions. If you have been a hospital volunteer, contact the hospital auxiliary to inquire if any scholarships are available for volunteers.

## **Student Budget and Tuition Rates**

Please visit the website for the most up-to-date information on tuition rates and estimated student budgets, https://www.siumed.edu/studentaffairs/student-budget.html

## **Health Issues and Medical Insurance**

Information regarding student medical insurance and medical student health issues can be found here, https://www.siumed.edu/studentaffairs/health-resources.html

## **Select Policies and Guidelines**

Students at SIU School of Medicine are expected to follow all policies and guidelines found on the web site and in the Student Handbook (https://www.siumed.edu/oec/policies/student-handbook.html). This section only highlights a few of these policies.

## **Criminal Background Check Policy**

PURPOSE:

The Southern Illinois University School of Medicine (SIU SOM) is committed to provide the public with well-trained physicians who possess the traits of high moral character and standards. The purpose of this policy is to help ensure a safe environment for patients, employees, fellow students, visitors and the general public as well as to protect property by conducting criminal background checks on all matriculants.

## SCOPE:

This policy applies to all applicants receiving offers of acceptance from the SIU SOM on the effective date shown on the acceptance letter.

Authorization: Illinois law authorizes the SIU SOM Admissions Office to conduct criminal background checks on accepted medical students who plan to matriculate to SIU SOM, based on the expected patient population, which may include children or vulnerable adults.

## POLICY:

The SIU SOM requires a criminal background check as part of the acceptance process for all incoming medical students.

Background checks will be performed only after the applicant has received an offer of acceptance.

Matriculation is contingent upon satisfactory results of a criminal background check.

Criminal background information released to the SIU SOM will be used only for purposes of assisting in making acceptance decisions and/or clinical rotations at affiliated hospitals.

If a background check identifies issues, which may preclude acceptance, the case will be referred to the Dean with counsel from the Associate Dean for Student Affairs and the General Counsel's Office.

#### PROCEDURE:

Application: The supplemental application includes an inquiry about convictions. The supplemental application will be shared with the Admissions Committee. Applicants, who refuse to complete this section or do not answer truthfully and completely, will have their offers of acceptance reviewed.

Waiver/Consent: The acceptance letter to the SIU SOM will include a consent form for a Criminal Background Investigation. Refusal to provide adequate/correct information or to provide consent for investigation will result in withdrawal of offer of acceptance.

#### Inquiry:

The SIU SOM Admissions Office will initiate the background check through an external company, as part of the routine procedure for medical students prior to matriculation.

A copy of the informed consent form will be faxed to the company authorized to perform the background check.

The authorized company will be instructed to provide results to authorized individuals only.

## Convictions:

The existence of a conviction does not automatically disqualify an individual from eligibility for acceptance. Relevant considerations may include, but are not limited to: the date, nature and number of convictions; the relationship the conviction bears to the duties and responsibilities of the medical student; and successful efforts toward rehabilitation. Any decision to reject or accept an applicant with a conviction is solely at the discretion of the SIU SOM.

#### **RESULTS:**

Confidentiality: Reasonable efforts will be made to ensure that results of criminal background checks are kept as confidential as possible with limited number of persons authorized to review results.

Access to Results: The Associate Dean for Student Affairs will review all criminal background checks. If adverse information deemed to be relevant to the applicant's acceptance as a medical student is contained in the background check, the Associate Dean for Student Affairs will notify the applicant in writing.

Information Available through Background Checks: The criminal background check will include a record of all arrests and convictions. In almost every case, only conviction information will be considered.

Ability of Applicant to Review Information: The applicant may review the criminal background check received by the University by contacting the Associate Dean for Student Affairs in writing.

Right to Respond to Adverse Report: The applicant will be asked to review any adverse information and to provide a written response to the Associate Dean for Student Affairs. When appropriate, the applicant may be asked to meet with the Associate Dean for Student Affairs in person to answer questions.

Right to Change and/or Terminate Policy: Reasonable efforts will be made to keep applicants informed of any changes in the policy. However, the SIU SOM reserves the right, in its sole discretion, to amend, replace, and/or terminate this policy at any time.

## **Outside Activities**

You are requested to notify the Office for Student Affairs/Carbondale or Springfield before participating in any type of employment, research, or classes other than medical school. This information serves two major purposes: 1) it gives the office a record of participation in non-curricular activities, and 2) it provides information for future first year students about the kinds of enrichment activities available in Carbondale. You should take under advisement the recommendation made by the Assistant Dean for Student Affairs/Carbondale before making a final commitment to any outside activity.

The following procedures are recommended for entry into each of the activities:

#### Employment

You must clear all employment with the Office of Student Affairs/Carbondale or Springfield prior to making a commitment. They will approve the work activity if you are in good standing academically, and it appears that the work activity will not conflict with upcoming curricular activities.

#### **Basic Research**

You may participate in laboratory research with faculty members when time is available for your enrichment or other purposes. Faculty permission and specification of the number of hours per week to be spent in the laboratory are required for participation.

## Contacts

## CARBONDALE

Office of Student Affairs Lindegren Hall, Room 132 Mail Code 6503 Southern Illinois University Carbondale 600 Agriculture Drive Carbondale, IL 62901 PHONE: 618-453-1531 FAX: 618-453-3144

#### SPRINGFIELD

Student Affairs: 217-545-2860Admissions: 217-545-6013Financial Aid: 217-545-2224Registrar: 217-545-0890registrar@siumed.edu