

- **Our declaration of the future:** We are advancing human health as a diverse and inclusive community inspiring learners to create the future in medicine, science, and society.
- **Goal:** We will produce physicians who are leaders in medicine. Leaders in clinical care, science, education, and advocacy.
- The **primary guiding principles** of the curriculum are:
  - Competency-based and outcomes-oriented
  - Learning-centered
  - Integrated
  - Sustainable
- **Our values:**
  - Excellence
  - Learning
  - Care
  - Collaboration
  - Inquiry & innovation
  - Equity & Justice
- The curriculum consists of 3 phases over 4 calendar years.
  - Phase 1: Gateway to the Foundations
  - Phase 2: Gateway to Clinical Medicine
  - Phase 3: Gateway to Specialization
- **Phase 1 – Gateway to the Foundations** (16 months total, **62 weeks** of required content):
  - Phase 1 begins with a 1-week orientation/transition (**Gateway to the Curriculum**).
  - Then there are 7 **Foundational Science Modules** of various length (**46 weeks total**).
    - In this context, “foundational sciences” is specifically and purposefully intended to imply the traditional basic sciences (e.g., anatomy, biochemistry, physiology, etc.) **AND**, including but not limited to, clinical/communication skills, and the social, behavioral, and health system sciences.
    - Each Foundational Module centers on the functions (primary physiological organization) and forms (secondary anatomical organization) of the human body in an **integrated** fashion, including the basic and clinical sciences and the impact of the social, behavioral, and health systems sciences. The modules are:
      - **Molecules to Society:** An introduction to the individual experience of health which highlights applications across the bio-societal spectrum. Through a focus on health, students will learn about the structure and function of our bodies, our healthcare systems, our professional identity, and our community. Consistent with the guiding principles of the Gateway Curriculum, students will experience the integration of the critical dimensions of healthcare practice: foundational science, clinical science, health systems science, social science, and professional identity formation. The module is organized into three units: 1. Identity, 2. Communication & Relationships, 3. Balance.
      - **Defense & Response to Injury:** Introduction to disease with an emphasis on immune, infectious, and neoplastic mechanisms; individual units examine mechanisms of cell injury and death, innate and acquired immunity, microbial pathogenesis, hemostasis, and neoplasia. The module ends with the application of these subjects in relation to skin disease.
      - **Breathing & Circulation:** The functions of circulation (perfusion, vascular compliance, cardiac conduction and contraction) and respiration (air movement and gas exchange, including the role of erythrocytes).
      - **Ins & Outs:** The functions of nutrition, digestion, waste removal, and ionic balance.

- **Metabolism & Reproduction:** The functions of energy homeostasis and reproduction.
    - **Scaffolding & Movement:** The peripheral nervous system innervation of skeletal muscles, allowing movement of the body; other structural components of the body, including tendons, bones, joints, and ligaments will be featured.
    - **Brain & Behavior:** The functions of the central nervous system, including modulation of movement, somatosensation, consciousness, attention, sleep, speech/language, special senses, learning/memory, emotion, motivation, and reward.
  - Each module has a similar overall large-scale structure to facilitate consistency and familiarity.
  - Some important content areas are presented across multiple Phase 1 modules and also during Phases 2 and 3. These **curricular threads** have designated leaders and are cluster into three groups.
    - Basic sciences: anatomy & embryology/development, biochemistry, genetics & genomics, pathology & histology, pharmacology, physiology, and microbiology & infectious diseases (also clinical sciences).
    - Clinical sciences: clinical skills & diagnostic reasoning, laboratory medicine, microbiology & infectious diseases (also basic sciences) radiology, and women's & LGBTQIA+ health.
    - Social, behavioral, & health systems sciences: clinical epidemiology & evidence-based medicine, ethics & law, health equity & justice, health systems science, interprofessional collaboration, professional identity formation, and public/population health.
  - The majority of Phase 1 instruction occurs in the mornings, Monday through Friday.
  - **Evidence-based active learning strategies and educational technology** are intentionally used whenever it substantively augments medical student engagement and learning. For example:
    - Team-based learning
    - Cased-based learning
    - Flipped classroom strategies
    - Laboratories
- There are three 3-week **Clinical Immersions (9 weeks total)**.
  - Students will rotate through 3 clinical environments:
    - Inpatient
    - Outpatient (including urgent/emergent care)
    - Perioperative/Periprocedural/Procedural (including labor & delivery)
  - These experiences are meaningful, authentic, and consistent with the students' level of experience.
  - During these experiences, particular attention is given to clinical skills, professional identity formation, and the social, behavioral, and health systems sciences.
- Another 4-week immersive experience during Phase 1 gives students the opportunity to explore their interests early in training (see **EXPLORE** below).
- Phase 1 ends with a 2-week capstone module (**Gateway to the Clerkships**) to solidify and consolidate knowledge and skills and to further prepare students to perform successfully in the clinical clerkships.
- There will be 7 weeks of unscheduled time.
- **Phase 2 – Gateway to Clinical Medicine** (12 months total, **48 weeks** of required content)
  - Six, 8-week **Clinical Clerkships**
    - Internal Medicine
    - Surgery
    - Pediatrics
    - Obstetrics and Gynecology
    - Neurology
    - Psychiatry
  - **Each clerkship begins with 1 week of specialty-specific foundational science**, consisting of purposeful reiteration and expansion of prior material (helical learning) and new material. This

material is taught in a signs and symptoms framework (i.e., “patient presents with...”) in order to facilitate core knowledge transfer to clinical reasoning.

- **Each clerkship ends with 1 week dedicated to Assessment, Reflection, Coaching, and Communities (ARCC).**
- For those students particularly interested in a career in science and who are not in the MSTP, the option exists to complete 8 – 16 weeks of research beginning in January of Phase 2.
- There is 4 weeks of unscheduled time during Phase 2.
- **MSTP students:**
  - Enter the PhD phase of their training directly after the conclusion of Phase 1.
  - At the conclusion of PhD training, MSTP students will begin Phase 2 and complete all the clinical clerkships.
- **Phase 3 – Gateway to Specialization** (16 months total, **56 weeks** of required content)
  - Students take the NBME USMLE Step 1 Examination during Phase 3, soon after completing Phase 2.
  - Students also take the NBME USMLE Step 2 exam in Phase 3 on a more flexible schedule.
  - Up to 4 weeks of credit-bearing study/preparation time is available for the USMLE exams. Students have the option to take 4 additional weeks for this purpose if necessary.
  - All students’ schedules are unique during Phase 3 and tailored to their particular passions and career aspirations.
  - **All students are required to complete a 4-week Internal Medicine Advanced Clinical Rotation** (ACR, a.k.a. subinternship) sometime during Phase 3.
  - **All students are required to complete three additional 4-week ACRs** sometime during Phase 3, **2 must occur prior to the last possible date for inclusion in the Medical Student Performance Evaluation (MSPE)**. The ACRs will include most other specialty subinternships. One subinternship-like experience at another institution may count towards this requirement.
  - **All students are required to complete three 4-week Keystone Integrated Science Courses (KISCs)** sometime during Phase 3. These courses provide deep explorations into the science of a broad array of topics (basic, clinical, social, behavioral, and health systems science), ideally are transdisciplinary, and take students from cell to society around an important or emerging area. Current KISCs include:
    - Diabetes Care from A to Z
    - Integrated Approach to Oncology
    - Infectious Diseases and Health Equity
    - Introduction to Addiction Medicine
    - Comprehensive Approach to Disability
    - Advancing End-of-Life Care
    - Science, Medicine, and the Societal Effects of Pain
    - Pediatric Neurocritical Care
    - Multidisciplinary Adult Neuro-Oncology
  - All students are required to complete a **4-week Gateway to Residency Course** (a.k.a. capstone) early in their graduation year.
  - The remaining 7 months are entirely **elective**.
  - There is no limit on the amount of elective time that can be dedicated to **research activities** (excepting MSTP students who have completed PhD training) and it is anticipated that the majority of our students will do some form of research early in Phase 3.
  - 4 weeks of university holiday time occur during Phase 3, and students may elect to take up to 8 additional weeks of unscheduled time.
  - **MSTP students:**
    - May not proceed to Phase 3 clinical electives (inclusive of ACRs) without completing the entirety of Phase 2.
    - Receive Phase 3 credit for:
      - One 4-week KISC.
      - 20 weeks of research elective.

- Are required to **complete 32 weeks of actual Phase 3 credit**, including 4 weeks Internal Medicine ACR, 12 weeks other ACRs, 8 weeks KISCs, 4 weeks Gateway to Residency (a.k.a. capstone), and 4 weeks elective.
- **EXPLORE Curriculum**
  - An additional unique aspect of the Gateway Curriculum is EXPLORE, which provides students with longitudinal and immersive experiences in four specific academic career pathways: **Research, Education, Advocacy/Global Health, and Innovation**.
  - Building on the outstanding opportunities that already exist for our students, the EXPLORE curriculum provides enhanced structure and support for career development as an academic physician.
  - Students have the opportunity to participate in longitudinal programming throughout the 4-year curriculum. This will include exposure to physician role models and mentors, core training in the knowledge and skills necessary for the respective career pathway, and experiential learning.
  - A **4-week immersive experience during Phase 1** gives students the opportunity to explore their interests early in training. MSTP students have specifically designed activities within the research track of EXPLORE during Phase 1.
  - In Phase 2, students have the ability to defer up to 16 weeks of clerkships in order to have a second early immersive experience.
  - Phase 3 provides significant opportunities to explore career interests through electives, extended study, and yearlong and dual degree programs. Current programs include the MD/PhD (the MSTP Program), MD/BMI (Master of Science in Biomedical Informatics), MD/MSCI (Master of Science in Clinical Investigation), MD/MPHS (Master of Science in Population Health Sciences), MD/MPH (Master of Public Health), MB/MBA (Master of Business Administration) and yearlong research programs. Additional dual degrees are being explored in collaboration with our WashU Danforth campus-based colleagues.
- **Program of Assessment**
  - The program of assessment for the Gateway Curriculum is competency-based, in accordance with the Liaison Committee on Medical Education (LCME).
  - The domains of competence mirror those of the Accreditation Council for Graduate Medical Education (ACGME) to facilitate the transition from undergraduate to graduate medical education and include
    - Foundational knowledge for practice
    - Patient care
    - Interpersonal and communication skills
    - Professionalism
    - Systems-based practice
    - Practice-based learning improvement
  - The Medical Educational Program Objectives of the medical program are organized within these domains. Course-level and individual session-level learning objectives and assessment elements map directly to the Educational Program Objectives.
  - Evidence of competence for each Medical Educational Program Objective is collected across curricular elements in the phases. A judgment of competence is made at the end of each phase and ultimately prior to graduation.
  - Traditional grades are not given. Instead, students receive a determination of credit/no-credit for each course and competent/not-yet-competent for each Medical Educational Program Objective with the potential for competence with distinction in selected domains.