• **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:
  o Competency-based and outcomes-oriented
  o Learning-centered
  o Integrated
  o Sustainable

• **Our values**:
  o Rigor
  o Care
  o Community
  o Collaboration
  o Inquiry & innovation

• The curriculum consists of 3 phases over 4 calendar years.
  o Phase 1: Gateway to the Foundations
  o Phase 2: Gateway to Clinical Medicine
  o Phase 3: Gateway to Specialization

• **Phase 1 – Gateway to the Foundations** (16 months total):
  o Phase 1 begins with a 1-week orientation/transition (*Gateway to the Curriculum*).
  o 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 **Physicians, Patients, Systems & Society content** (inclusive of professional identity formation, health equity & justice, social, behavioral, and health systems sciences).
    ▪ Each 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 to health and disease, highlighting the perspective from molecules to society (molecules → genes → cells → organs → organ systems → body → individual → society); blueprint/architecture of the human body, the different systems and their normal functions; introduction to the means by which the different parts of the body operate in harmony to maintain homeostatic conditions; overview of all curricular threads and the way in which they are integrated throughout all modules.
      □ **Defense & Response to Injury**: Introduction to the pathologic mechanisms of disease, with a focus on infectious, autoimmune, and neoplastic mechanisms; specific topics included: host defense and innate and acquired immunity,
hemostasis, response to injury, microorganisms and responses to infection, regulation of cell growth and differentiation, neoplasm.

- **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.
- The majority of instruction will occur 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, 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.
- Particular attention is given to the clinical skills, the social, behavioral, and health systems sciences, and professional identity formation during these experiences.

- 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 5 weeks of unscheduled time.

**Phase 2 – Gateway to Clinical Medicine** (12 months total)
- 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.

- 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 the Clinical Clerkships.

- **Phase 3 – Gateway to Specialization** (20 months total)
  - 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 Subinternship sometime during Phase 3.
  - All students are required to complete three 4-week Advanced Clinical Rotations (ACRs) sometime during Phase 3 (2 prior to the last possible date for inclusion in the Medical Student Performance Evaluation [MSPE]). The ACRs will include most other specialty subinternships. ACRs are also inclusive of subinternship-like experiences at other institutions.
  - 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. Reasonable examples include (accepting that none of these currently exist):
    - Dementia
    - Precision medicine
    - Targeted-cancer therapies
    - The opioid crisis
    - The gut microbiome
    - Artificial intelligence in medicine
    - Gun violence
The social determinants of health

- All students are required to complete a **4-week Gateway to Residency** (a.k.a. capstone) **Course** early in their graduation year.
- The remaining 8 months are entirely **elective**.
- There is no limit on the amount of elective 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 (as opposed to the summer between the current 1st and 2nd years).
- 4 weeks of university holiday time occur during Phase 3 and students may elect to take up to 4 additional weeks of unscheduled time.
- **MSTP students:**
  - May not proceed to Phase 3 clinical electives 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 36 weeks of actual Phase 3 credit (including 4 weeks Internal Medicine Subinternship, 12 weeks ACR, 8 weeks KISC, 4 weeks Capstone, and 8 weeks elective).

**EXPLORE Curriculum**

- An additional unique aspect of the Gateway Curriculum will be EXPLORE, which provide students with longitudinal and immersive experiences in four specific academic career pathways: **Research, Education, Advocacy**, 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, MSCI, MPHS, MPH and yearlong research programs. Additional dual degrees are being explored in collaboration with our Danforth-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.
  - Foundational knowledge for practice
- Patient care
- Interpersonal and communication skills
- Professionalism
- Systems-based practice
- Practice-based learning improvement

The Program Objectives or standards of the medical program are organized within these domains. Course-level and individual session-level learning objectives map to the Program Objectives.

Evidence of competence for each Program Objectives is collected across curricular elements and in each of the 3 phases. A judgment of competence is made at the end of each phase prior to progression in the medical program and ultimately prior to graduation.

Traditional grades are not given, though for some curricular elements there is the potential for competence with distinction.