

**First-Year Selective Course Descriptions  
AY 2017-2018**

**BASIC SCIENCE SELECTIVES:**

**Developmental Biology and Disease**

**Description:** (38 Students) Explores connections between basic research in developmental biology and disease. Students are expected to make a presentation based on current literature in the field and participate in class discussions.

**Frontiers of Leukemia**

**Description:** (No limit) Hematopoietic research is rapidly and in some cases dramatically changing the clinical management of patients with leukemia. Most notably, the development of Imatinib, a drug specifically designed to inhibit the bcr-abl oncogene, has fundamentally altered the way we treat patients with chronic myelogenous leukemia (CML) and next-generation sequencing has changed the way we understand leukemia classification and evolution. The objective of this course is to introduce students to scientific investigation in the molecular basis of human leukemia. We will focus on how research is advancing our understanding of the pathogenesis and treatment of this group of diseases. Specific topics will include acute myeloid leukemia, acute lymphoid leukemia, chronic myeloid leukemia, and the preleukemic syndromes, severe congenital neutropenia and myelodysplastic syndromes.

**MS I Journal Club**

**Description:** (20 Students) This course is a journal club for WUMS I students led by WUMS II students. Thus, it will focus on teaching and learning from peers. The material covered will be completely dependent on student input and participation. We expect that over the course of the journal club, students will become more comfortable with reading primary literature and presenting a scientific “story” in an engaging and coherent way.

Each week, 1-2 students will be expected to prepare a presentation and lead the discussion about a paper of their choice published in a peer-reviewed journal. The goal of the discussion will be to provide a brief overview of the field, introduce the experimental system and any new experimental techniques, discuss the scientific rationale, and discuss the experiments presented. Students not presenting will be expected to review the selected paper and prepare for the discussion by reading any background material selected by the presenter.

The first class meeting will have an example presentation given by WUMS II students. We will also discuss guidelines for paper selection.

**Simulations in Cardiovascular Physiology**

**Description:** (40 Students) The five sessions conducted in our Howard & Joyce Wood Simulation center include scenarios that provide students clinical correlates for preload (based on following a trauma patient with on-going hemorrhage), chronotropism (based on following a patient with

cardiac rhythm disturbances), inotropism (a patient with congestive heart failure) and myocardial oxygen supply and demand relationships (a patient with chest pain and myocardial ischemia).

**Simulations in Respiratory Physiology**

**Description:** (20 Students) Using full scale electromechanical mannequin, the course will explore the relationships between FIO<sub>2</sub>, pAO<sub>2</sub>, paO<sub>2</sub> and O<sub>2</sub> saturation in the healthy patient and in various respiratory conditions. The course will address a variety of concepts that such as oxygen therapy, apnea and disorders of acid-base balance using interactive scenarios.

**The Science of Learning and Teaching in Medicine: Truth, Lies, and Myths**

**Description:** (25 Students) Medical students constantly try to figure out what works and what doesn't as they look for the best ways to learn. This course will explore the scientific basis of learning in order to help you make sense of the learning demands that you face and give you tools to navigate them. In this six session course, we will discuss approaches to learning and teaching that are known to promote the effective acquisition, retention, integration, and mastery of learning. Through interactive, case-based discussion, we will explore the alignment – or sometimes, misalignment – between learning expectations and teaching methods used in the classroom and clinical environments. The course uses a wide array of learning activities. Each session requires some pre-work and readings, and students will develop education innovation projects in teams that will be presented to education leaders at the end of the course. By the end of this course, students will be able to draw on the science of how learning works to develop actionable learning plans to guide personal and professional growth and serve as the foundation for becoming a lifelong, master learner.

## CLINICAL SCIENCE SELECTIVES:

### **Advanced Medical Spanish I**

**Description:** (20 Students) This course is the first in a series of two selective courses for first-year medical students designed to prepare students with advanced or native Spanish proficiency to be certified bilingual providers. Content parallels that of the first-year Practice of Medicine course. Although signing up for one of the two courses is permitted, the courses are designed to be taken together and are a prerequisite for receiving mention of special achievement in medical Spanish in the fourth year Dean's letter to residency programs. The first course (Fall 2017 - session I) falls under the "clinical" category and the second course (Spring 2018 – sessions II & III) falls under the "humanities" category. At the end of the Fall and Spring selective sequence (and after completing M2 year), students should be prepared to take a certification exam for bilingual providers, such as the Kaiser Clinical Cultural and Linguistic Assessment.

The fall course will emphasize using Spanish vocabulary and phrases to carry out a history and physical examination. Students will also learn about effective cross-cultural communication and sensitivity, although the spring selective will cover cultural issues in more depth.

### **Alternative Careers for MDs**

**Description:** (15 Students) What does medical school prepare us for? At the surface and at a minimum, the curriculum teaches us how to diagnose and treat illness. Think a little more broadly though, and medical education teaches us how to assimilate information, think, and solve problems under incredible pressure. In fact, it prepares us for a wide array of cool career opportunities! This class is meant to expose students to some of these alternative, non-clinical careers that we might otherwise not consider. The course will bring in a total of 6 MDs that have interesting and diverse careers, including in areas such as hospital administration and law. This is a unique opportunity to get a broader understanding of what it means to be a physician.

### **Clinical Correlations in Neurosciences**

**Description:** (22 Students) This selective is fairly unstructured, consisting of opportunities to shadow a variety of physicians in the neurosciences, including adult or pediatric neurologists, neurosurgeons, or psychiatrists, neurointensivists, neuroradiologists, and neuropathologists.

In addition to opportunities to shadow in clinic or on rounds, you may choose to observe a brain or spine surgery, cerebral angiogram or interventional neuroradiological procedure, nerve conduction study/electromyogram, electroconvulsive therapy, brain cutting, or reading of neuroradiologic studies or videotapes and EEGs of patients being monitored for epilepsy or sleep disturbances. You may attend rounds or shadow a resident on call on neurology, neurosurgery, or psychiatry.

There are also many conferences occurring throughout the week that you may choose to attend.



### **Delivering Health Care to Underserved Patients in St. Louis**

**Description:** (10 Students) The goal of this course is to teach students about effective communication and provision of care for underserved patients, and to encourage students to consider careers in community-based healthcare. Students will be joined by SLU med students and College of Pharmacy students to learn content and applied skills on cultural sensitivity and trauma-aware patient interviews for underserved populations. They will then be given the opportunity to practice these skills in small groups with Standardized Patients. There will be two 4-hr sessions split between WashU and SLU locations, and facilitated by community providers. These will include a social component for collaboration and networking between all students. There will also be one 2-hr debrief and reflective session.

Students will have an opportunity to work closely with the St. Louis Integrated Health Network (IHN), whose mission is to strive for quality, accessible, and affordable healthcare services for all residents of Metropolitan St. Louis, with an emphasis on the medically underserved and uninsured. The IHN is designed to address systemic barriers and create innovative solutions to the region's safety net health care system through programmatic and collaborative quality initiatives that are derived from its strategic plan

### **Diet and Nutrition: A patient-based approach**

**Description:** (8 Students) The goal of this course is to provide fundamental training in clinical nutrition to medical students to improve their understanding of current nutritional guidelines, how to communicate this information effectively to patients, and basic behavioral techniques to facilitate lifestyle change. Students will learn in interactive, hands-on, small groups about 1) current diets that are widely used including 'fad' diets, 2) the pros- and cons- of contemporary diets that are followed and practical guidelines for teaching patients about dietary choices, 3) behavioral, clinical and social methods of managing obesity, 4) Culturally appropriate diets for health benefits, 5) an evidence-based approach to dietary prescription for patients and 6) a practicum on the nutritional management of hospital inpatients. It is expected that by the conclusion of this course you will be familiar with current dietary practices including the use of 'fad' diets, be able to use behavioral management techniques to help patients manage their body weight and metabolic problems such as diabetes, be able to provide practical advice on dietary choices in a non-offensive manner and know how to perform nutritional assessment and management of medical and surgical inpatients.

### **Gun Violence as a Public Health Issue**

**Description:** (15 Students)

This course will cover the major aspects of gun violence as a public health issue, including: a background/review of significant policy and current data trends of gun violence in America and, in particular, in St. Louis; the relevance of firearm access and legislative efforts related to suicide and domestic violence; unintentional shootings involving children and the role of the primary care pediatrician in gun safety education; hospital violence intervention programs and community-based

violence prevention programs, particularly within the St. Louis area; and current approaches to policy changes and the physician's role in advocacy for gun violence prevention.

### **Hands-on Autopsy**

**Description:** (10 Students) This course will provide students with the chance to see and participate in an autopsy from beginning to end, including gross dissection, organ cutting with a pathology attending, and, if the students wish, microscopic evaluation of the organs. Although most medical students never see an autopsy, these students become residents who are expected to consent bereaved family members to this procedure. Witnessing an autopsy will help students understand the autopsy process and make them better prepared to answer questions about autopsy in the future.

In addition to any clinical benefit students will receive for the future, participating in an autopsy after completion of the first-year gross anatomy course will allow students to see the correlation between an academic endeavor and its application in a medical setting. Do not misunderstand, though; autopsy is nothing like your gross anatomy course.

### **Improving Healthcare**

**Description:** (20 Students) This course will introduce basic principles in patient safety (PS) and quality improvement (QI) through a combination of didactic lectures and small group activities. The principles of PS/QI will be highlighted using real-life examples of safety and quality initiatives at Barnes-Jewish Hospital and Washington University.

### **Introduction to Anesthesiology**

**Description:** (20 Students) This course aims to provide an introduction to Anesthesiology appropriate for first year students. The course will be taught through a combination of lectures, ICU shadowing, and simulation center exercises. The topics discussed will include the role of an Anesthesiologist in the OR, ICU, and pain management service. Students will be taught the basic mechanisms of different types of anesthesia and why each is used clinically. Students will have the opportunity to apply that knowledge through exercises in the simulation center and through ICU shadowing. The course seeks to provide a comprehensive introduction to a career in Anesthesiology and hopes to spark student interest. Summer research opportunities will be available for students in the course.



### **Introduction to Clinical Nephrology**

**Description:** ( 6 Students) The nephrology course will introduce students interested in clinical nephrology. The course will cover a urinalysis workshop (macroscopic and microscopic), hands on learning of the appropriate measurement of blood pressures, interpreting laboratory results in a renal patient, introduction to dialysis, as well as accompanying a renal patient and/or family dialysis visit and presenting their experience

### **Introduction to Clinical Neurosurgery**

**Description:** (20 Students) This selective will expose students to the field of neurosurgery and its subspecialties. Throughout the nine sessions, students will attend two case management/imaging conferences, two Grand Rounds, and five discussions sessions. The discussion sessions will delve into medical literature in highly interactive, student-run and neurosurgeon facilitated sessions. Discussion dates and leaders will be chosen at the introductory meeting. The course culminates with a cadaver lab experience where students receive a hands-on guided tour of neuroanatomy by neurosurgeons. There is also an opportunity to shadow in the operating room during the selective.

### **Introduction to Emergency Medicine I**

**Description:** (50 Students) Over six sessions we will review the physiology and clinical management of common emergencies: cardiovascular emergencies; trauma resuscitation and shock; environmental emergencies, such as high altitude cerebral edema and snake bites; pediatric emergencies; gynecological and urological emergencies; and toxicological emergencies. Each session will include a lecture followed by case studies that highlight critical aspects of a patient's history, physical examination, laboratory and radiological studies, as well as procedural intervention and pharmacological treatment. Group participation is encouraged. This class has received the "Selective of the Year" award.

### **Introduction to Emergency Medicine II**

**Description:** (42 Students) This class is a second session on emergency medicine (in response to student requests!) exploring topics not covered in the fall session. Although it would be beneficial to take the Introduction to Emergency Medicine-01 course offered in the fall, it is not a pre-requisite for this class. Six sessions will review the physiology and clinical management of abdominal emergencies, ophthalmic emergencies, obstetric emergencies, endocrine emergencies, neurologic emergencies, such as stroke, renal and orthopedic emergencies, and environmental emergencies, such as lightning and hypothermia. Each session will include a lecture with case studies that highlight critical aspects of a patient's history, physical examination, laboratory and radiological studies, as well as procedural intervention and pharmacological treatment. Group participation is encouraged. This class has received the "Selective of the Year" award.



### **Introduction to Interventional Radiology**

**Description:** (8 Students) The selective course in Vascular and Interventional Radiology is designed to introduce first year medical students to the scope of clinical practice in VIR. The selector will better understand the indications, risks and benefits, and scope of interventions performed by the Vascular and Interventional radiology team.

### **Introduction to Public Health in St. Louis**

**Description:** (18 students) This course will provide students the fundamental tools needed to assess, implement and evaluate community-based public health programs that address some of the leading health indicators in the St. Louis region. Topics addressed include asthma in the inner city, lead toxicity, childhood obesity, STIs, mental health and Trauma-Informed Care. The course will highlight the history of public health in St. Louis, chronic disease epidemiology and the social determinants of health, and the behavioral and sociological factors contributing to health disparities. References and resources will be provided for students who desire more extensive exposure to other public health disciplines. Upon completing this selective the student will be able to apply public health principles to addressing critical public health issues, and consequently describe the procedures for planning, implementing and evaluating public health programs, policies and interventions locally or globally. Students enrolled in the Public Health may apply the credit to the MD/MPH degree.

### **Introduction to Newborn Medicine**

**Description:** (12 Students) The purpose of this course is to provide an introduction into neonatal medicine not otherwise offered in the first-year curriculum. Students will review embryology and functional organ system development and correlate normal physiology with pathologic conditions in newborn infants. Students will have the opportunity to work with clinical specialists, observe in both the delivery room and neonatal unit, and interview and follow patient families.

The course is designed to allow students to discuss both the physiologic and psychosocial aspects of neonatal medicine as well as gain a better understanding of the collaborative nature of neonatal care.

### **Introduction to Surgery**

**Description:** (40 Students) This Clinical Selective offers an overview of surgical training and of various surgical specialties. Faculty members from the following surgical specialties participate: General Surgery, Plastic and Reconstructive Surgery, Oncologic Surgery, Orthopedic Surgery, Urologic Surgery, Vascular Surgery, and Acute/Critical Care Surgery. One session is led by WUSM surgery residents. One session is a basic suturing/knot-tying workshop. Most discussions include professionalism/ethics challenges associated with the specialty.

### **Medical Spanish**

**Description:** (30 Students) Learn basic medical Spanish terms to help when working with Spanish speaking patients.

### **Olin Grand Rounds**

**Description:** (70 students) The course provides an introduction to the current business issues facing the health care field. This course was first offered in 2006 and has become a popular course for undergraduates and the MBA's. More medical students should take this class! The information is invaluable for any person pursuing a career in medicine or in the health care sector of business. This class focuses on the business of medicine with business case study discussion, complemented with several clinical patient presentations. Topics covered usually include health care reform; healthcare

systems comparisons from the United Kingdom to Germany, from France to Japan; the insurance industry; concierge medicine; department compensation distribution in practices and academic departments; analysis of walk-in clinics (i.e. Walgreens); medical malpractice: mental health care and cost to society; organ transplantation and the rationing of healthcare; marketing of pharmaceuticals - including research and development of AIDS drugs; care to the underserved – sickle cell anemia – a patient’s perspective; management of Medicaid; the business of cosmetic surgery and private ophthalmology practice, local biotech startups, to name a few. There is a tour of Express Scripts included.

The final grade is based on four out of six case study write-ups (done in groups), plus a group project presentation (usually partnering with a key company in the health care industry), plus the final exam which is a take home case study write-up done individually. The rest of the grade pertains to participation and attendance. Medical students are all graded P/NP.

To better understand what is covered and what other medical students who completed the course said, here are some of their comments:

*“The material in this course is highly relevant to anyone working in healthcare. The lecture-style based learning was a highly effective way of sharing this critical information with students. I wish there was a 'Part II' and 'III' to the course, so that I could continue to learn about the financial component of healthcare in the U.S. Also, the class involved a lot of group work with several other M1's, and these discussions were highly beneficial to my own learning/understanding of the concepts taught in class. Overall, one of my favorite courses of the semester.”*

*“I thought many students were unwilling to take this course because it’s A) so many more hours than other selectives, B) off campus, and C) there is homework. Olin Grand Rounds exposed me to so many leaders in healthcare both in St. Louis and nationally. I had the opportunity to hear so many perspectives on health care reform, biotechnology, business/entrepreneurship, etc. that I would not have otherwise. I truly think that this is a course that all medical students would tremendously benefit from!”*

*“I think that the only downfall of the course is how few M1's elect to take it. This is clearly due to the amount of work involved in the course compared to the other selectives. The five M1's who did take the course all enjoyed it and didn't think it was too much work. Many students were put-off by the amount of course hours, but it was totally worthwhile and very fascinating!”*

*“Amazing course! All medical school students should take a class like this.”*

### **Pain Management**

**Description:** (10 Students) Pain is the most common reason for patients presenting in both the primary care setting and to the hospital. In this rotation, students will get experience on how to evaluate a patient in pain both in regards to history and physical. They will learn the diagnostic tests and imaging needed to evaluate these patients. There will be exposure to the different multi-disciplinary therapies and when to use them including medications, physical therapy, interventional procedures, and psychological therapies. The students will also learn the different areas of pain management including acute postoperative, chronic, pediatric, cancer-related, and palliative care.



Proper use of opioid pain medication will also be reviewed. Students will also be required to shadow in our pain clinic and to see the evaluation of a new patient.

### **Saturday Neighborhood Clinic – A Lesson in Healthcare Management**

**Description:** (27 Students) This course offers an introduction to health administration, policy, and economics as they relate to medical care for the underserved. Using Washington University's student-run Saturday Neighborhood Health Clinic as a case study, students will learn how to run a free clinic, from daily clinic flow to patient follow-up to informed quality improvement; explore the landscape of healthcare services available to uninsured adults in the St. Louis area as well as the SNHC's relationship with these providers; and begin to unpack the structural and political complexities of health insurance. With this toolkit, students will assume responsibility for running the day-to-day operations of the SNHC. **Participation in this selective entails full involvement in the SNHC organization. In addition to required course hours in the fall, students will be expected to coordinate Saturday and Wednesday clinics at least five times over the course of the full academic year and assist the current Board with ongoing projects. If you do not get a spot in the selective, you can still volunteer at the clinic and apply for a 2016-2017 Board position; however you will not be able to coordinate at the clinic.** If you have any questions about the selective or its requirements, please don't hesitate to contact Damini Tandon at [damini.tandon@wustl.edu](mailto:damini.tandon@wustl.edu).

### **SPOTS – Sun Protection Outreach Teaching by Medical Students**

**Description:** (30 Students) Medical students will be trained to teach secondary school students about skin cancer and sun protection.

The medical student will be taught how to identify basal cell, squamous cell, and melanoma skin cancers. He or she will learn the causes, risk factors, and treatment of skin cancer. Additionally, students will be trained in hands-on demonstrations of sun protection products and methods, learn alternatives to tanning, and learn to use a skin analyzer machine. Students will be taught strategies for reaching and teaching teens, and learn theories of behavioral science and communication in order to understand patient's motivations/behaviors and how to encourage them to change. Finally, students will teach a medical subject out in the community before their clinical year, and attend two evening (two hours each) training sessions to learn above.

The 85 minute SPOTS program consists of

- teaching one 20 minute lecture on early detection of skin cancer showing a 14 minute video (local teens with melanoma telling their stories and a simple mole removal done by a Mohs surgeon)
- teaching a second 20 minute lecture on prevention and protection, giving out brochures, handouts and worksheets
- helping the teens to use a skin analyzer machine, a prepared PowerPoint lecture with a written script will be given to each medical student. SPOTS medical student teachers will receive a SPOTS t-shirt (to wear as their uniform when teaching and then keep), and teach in pairs four times (may teach two times on the same trip).

Medical students can teach SPOTS on a volunteer basis (non-elective, no credit) to add to their CV. Attending the training sessions is required. For more information go to <http://spots.wustl.edu/>



**Tackling Emerging Global Infectious Disease Problems**

**Description:** (16 Students) Emerging and re-emerging infectious diseases (IDs) pose major challenges to global health. The strategies used to prepare for, respond to, and mitigate against these threats are tiered, complex, and coordinated. Common principles underlie the approach to all ID global health problems, yet there are also unique aspects associated with specific ID threats that must be addressed. This course will explore common principles and threat-specific strategies being used to tackle the global ID problems of Bioterrorism, Pandemic Influenza, Epidemic Arboviruses (e.g. Zika), Ebola Virus, and Antimicrobial Resistance. This course will be complementary to the Session II Selective “Major Epidemics in the History of Medicine”. Students who take the Session II Selective may be interested in a deeper dive on how to address some of the problems introduced there, however the Session II Selective will not be required to take the Session III Selective.

**Terminal Illness and Death**

**Description:** (16 Students) This seminar will provide an introduction to topics relevant to the care of patients dealing with illnesses that are potentially terminal, and end-of-life care. We will explore the following topics: 1) Psychological, social, and professional responses to terminal illness and death; 2) Communicating bad news to patients; 3) Grief and bereavement; 4) Palliative and hospice care. Teaching sessions will include brief didactic presentations by faculty, discussion of assigned readings, a role-playing exercise, discussions with patients and family members, and a home hospice visit.

## HUMANITIES SELECTIVES:

### **Advanced Medical Spanish II**

**Description:** (20 Students) This course is the second in a series of two selective courses for first-year medical students designed to prepare students with advanced or native Spanish proficiency to be certified bilingual providers. Content parallels that of the first-year Practice of Medicine course. Although signing up for only one of the two courses is permitted, the courses are designed to be taken together and are a prerequisite for receiving mention of special achievement in medical Spanish in the fourth year Dean's letter to residency programs. The first course (Fall 2017 - session I) falls under the "clinical" category and the second course (Spring 2018 - sessions II & III) falls under the "humanities" category. At the end of the Fall and Spring selective sequence (and after completing M2 year), students should be prepared to take a certification exam for bilingual providers such as the Kaiser Clinical Cultural and Linguistic Assessment.

The Spring course emphasizes effective cross-cultural communication and sensitivity. Students will also continue to review Spanish vocabulary and phrases for the history and physical examination, which will be taught primarily in the Fall session.

### **Art and Medicine**

**Description:** (12 students) In this course, students will visit museums and galleries across St. Louis to view art and improve observational skills. We include pieces from many time periods and mediums to practice close looking, and perform several different exercises to enhance our skills. Detailed observation is important in all fields of medicine, so this course is applicable to students pursuing any specialty after medical school.

### **Doctors on Film**

**Description:** (16 Students) This course will explore the relevant social themes of films in which physicians and/or the medical profession are the main focus. There are countless portrayals of physicians in the cinema. There are also many films that deal extensively with various features of health care delivery. For good or for bad, viewers of these films outside our profession are strongly influenced by these portrayals. Common stereotypes are perpetuated—"If it's in the movies there must be some truth to it." Depictions of physicians and major medical themes have evolved with time and under the influence of social and scientific developments. The course will investigate these depictions and themes using a selection of films (from the classic era to more modern films) to provoke thought and discussion. Some discussion of film craft is also included. ***Emphasis is given to older movies, 1940s to 1970s. Those not interested in film craft or classic films should consider these latter points very carefully.*** The essence of this selective is the collective group experience of watching the movies and the discussion that follows. Some of the films are not readily available for rental or purchase and lending of the VHS tapes or DVDs is not practical. For these reasons, ***attendance at 5 of the 6 sessions is required (all students must attend the introductory session).***

***Absences are intended for illness and unavoidable emergencies.*** Each session will run from 3:15PM to 4:55PM (1 hour 40 minutes).

### **Health and Human Rights**

**Description:** (15 Students) There is a strong belief among many physicians that our responsibilities extend beyond our individual patients to our communities, countries and even to our entire world. This humanities selective is an excellent forum for interested students to actively learn and discuss the impact of human rights violations on health. Topics include reproductive and pediatric health rights, communication issues and interactions with interpreters. Each meeting will consist of a brief presentation and a discussion on the topic. There will be a different presenter for each topic. Readings will be provided.

### **Introduction to The History of Medicine**

**Description:** (13 Students) This is a survey course on the history of medicine, concentrating on the contributions of some of the major figures in the historical development of medicine. The objectives will be to explain how medical science developed from antiquity to the 20th century. The figures to be discussed are as follows:

Session I - Ancient Medicine: Hippocrates and Galen

Session II - The Beginnings of Modern Medicine: Andreas Vesalius and William Harvey

Session III - Great Developments in Internal Medicine: René Laennec and Ignac Semmelweis

Session IV - The Rise of Pathology: Giovanni Morgagni and Rudolf Virchow

Session V - The Development of Modern Surgery: The Discovery of General Anesthesia and Joseph Lister

Session VI - Medical Science in America: William S. Halsted, Helen Taussig and Alfred Blalock.  
The Origin of Washington University School of Medicine.

### **Major Epidemics in the History of Medicine**

**Description:** (14 Students) Points to be emphasized include the world-wide effects of such epidemics (bubonic plague), the discovery of vaccination and the ability to completely eradicate a major disease (small pox), the importance of insect vector diseases, such as malaria and yellow fever, as well as the emergence into the developed world of new insect-carried diseases such as dengue fever, chikungunya and Zika, venereal disease, and epidemics of modern times such as influenza and AIDS. This course will be complementary to the Session III Selective "Tackling Emerging Global Infectious Disease Problems". Most of the diseases to be discussed are still prevalent, and patients suffering from these diseases will be seen and treated by the medical students during their medical career.

### **Major Religious Traditions and Healthcare**

**Description:** (15 students) Major Religious Traditions and Healthcare is presented in such a way as to provide overviews of the World's Major Religious and how these belief systems may impact medical professionals and care plans for treatment. Students are provided an opportunity to dialog with leaders from various faith traditions as well as learn about how these faith traditions contribute to the ways in which people approach illness and injury. This course will provide

resources to be used in future medical practices that will enable the integration of faith traditions to the care plan of patients and families.

### **Medical Discovery and Progress from War**

**Description:** (14 Students) As long as history has been recorded, human societies have physically attached each other for various reasons. As destructive as wars have been, military history has played important roles in improving treatment of trauma, sanitation, drug development, and the understanding of many aspects of medical science. This selective will consider medicine from United States military and national history in the following areas:

Week I - The Early Frontier, 1800-1850: William Beaumont, the first American medical researcher

Week II – Scurvy; the discovery of vitamins and the development of controlled clinical trials

Week III - The Spanish-American War: Walter Reed and Yellow Fever; The First World War: Infectious Diseases in War

Week IV - The Second World War: Antibiotics and Blood Transfusion

Week V - From Shell Shock to PTSD: The History of Psychotraumatology

### **Music & Medicine**

**Description:** (15 Students) Music and medicine intersect in several fascinating ways. During this selective, we will examine several facets of this interaction, including how illness is depicted in music, how diseases influenced famous musicians and their works, what music therapy is, and how to evaluate work-related injuries seen in Performing Arts Medicine. 15 students will participate in this highly interactive 6-session course which will include lively discussions, listening sessions, and demonstrations.

Previous musical training is not a prerequisite!

### **Physician Writers: Introduction to Reflective Writing**

**Description:** (8 Students) - From Anton Chekov to Atul Gawande, Arthur Conan Doyle to Abraham Verghese, John Keats to Khaled Hosseini, physicians have a long and interesting history of writing. Historically most physician writers have produced works of poetry, philosophy, or fiction. In the last 20 years a new type of physician writer has emerged in the genre of creative non-fiction. One form of creative non-fiction rapidly increasing in popularity, especially in medical schools, is called Narrative Medicine, and is thought to help students and physicians improve in everything from self-assessment to quality improvement and to reduce “compassion fatigue.”

In this course we will start with a look at the current world of physician writers, then move to learning about the world of narrative medicine. One way we will explore these topics is by in-class writing assignments that we share with one another.



### **Queer Theory**

**Description:** (25 Students) - A discussion-based course that utilizes queer theory as a tool to critically investigate cultural normativities relating to sexuality, sex and gender. By understanding how queer theory developed as a field and applying fundamental concepts to the investigation of how individuals define their identities, this course aims to increase understanding of how LGBTQ+ health disparities arise in modern society. By exploring a theoretical perspective of queer approaches to sex, gender and intersectional identities, students will be better prepared to help ameliorate the disparity in the quality of care attributed to discrimination, prejudice, and lack of specific knowledge in healthcare settings, related to sexual orientation, gender identity, and sexual behavior.

### **The Healer's Art**

**Description:** (50 Students) The Healer's Art is a 10-15 hour course for WUMS I students that combines seed talks and experiential exercises in a large group setting along with small group experiential exercises. The course engages students in a discovery model of community of inquiry focusing on the meaning of physicianhood and the practice of medicine. Faculty participates in the discovery model process on an equal footing with students as well as facilitating the process of the small groups. The course is designed to encourage medical students to trust the power of listening and presence to heal, formulate a personal, comfortable, and compassionate response to loss, experience the healing power of grief, recognize that who they are is as important to the healing relationship as what they know, recognize awe and mystery in the daily practice of medicine, explore the concept of calling, write a personal mission statement, and explore the personal meaning of physicianhood. The Healer's Art facilitates students in clarifying, strengthening and making a personal commitment to medicine as their life's work. Students also have the opportunity to explore their personal values, and commit to developing and preserving their personal values, such as service, harmlessness, compassion, altruism, self-care, equality, justice, respect, and nurturing wholeness.

The Healer's Art course encourages students to:

- Identify, strengthen, and cultivate the human dimensions of the practice of medicine
- Recognize the commonality of personal concerns among their peers and gain support of personal development from peers and faculty
- Accept the universality of loss and pain
- Recognize grief as a self-care strategy for physicians, and identify strategies and tools of grieving
- Recognize the importance of community for the healing of grief
- Trust the power of listening and presence to heal others
- Recognize that who they are is as important to their patients as what they know
- Recognize the legitimacy of awe in medicine, and develop the capacity for awe
- Recognize that community develops when peers listen to one another generously and compassionately

- Legitimize openness and dialogue with colleagues and patients in the areas of service, mission, and calling