Global Health – Kitwe, Zambia Elective Curriculum

Title of Clerkship: Global Health – Zambia Elective Clerkship
Elective Type: Fourth-Year Elective Clerkship
Department(s): Psychiatry, Medicine, Public Health and Homeland Security
Clerkship Site: Company Clinic and Mine Hospital, Kitwe, Zambia
Course Number: 
Blocks available: Potentially, Blocks 13, 14, 15, 16 and 22, but students must first check availability with the Psychiatry Clerkship Coordinator, then get additional necessary approvals PRIOR TO enrolling. Please see “Special Requirements” section below.
Number of students per block: Two maximum (but, must check availability with Psychiatry Clerkship Coordinator prior to enrolling in this course).
Faculty: Mary Kay Smith, M.D., John Chisela, M.D.

Elective Description/Requirements:

This elective clerkship will enable two fourth-year medical students to gain three to four weeks of clinical experience in both inpatient and outpatient clinical settings in Kitwe, Zambia. The students will stay in a furnished guesthouse at Kafakumba Training Center, located approximately 20 miles from Company Clinic and Mine Hospital in Kitwe, and will be driven to and from their clinical assignments each day.

Students will be working with physicians in Company Clinic, a community-based outpatient facility, and Mine Hospital, a private hospital that serves individuals with “middle incomes”. A variety of illnesses and diseases will be encountered, including HIV/AIDS, Tuberculosis and Malaria, as well as Diabetes Mellitus, Coronary Artery Disease, and other diseases seen at increasing rates in developing countries.

Length of Clerkship: Four Weeks, including approximately four days (total) traveling to and from Zambia.

Links to EPOs: Educational Course Objectives (ECOs):

| K12, K13, S9, P6, P7 | 1. Explain the structure of Kafakumba Training Center, located midway between Kitwe and Ndola, Zambia, including its creation in 2000, the underlying conceptual and economic development frameworks, and the role it has played in the economic revitalization of the local community. Discuss what, if any, impact it has had on access to health care for individuals in surrounding villages. |
2. Discuss the impact of Neglected Tropical Diseases (NTDs), Malaria, Tuberculosis and HIV/AIDS on (a) the population served by Company Clinic and Mine Hospital in Kitwe, and (b) the population in rural villages near Kitwe. Include prevalence, impact on disability-adjusted life years (DALYs), mortality, economic impact and major initiatives currently underway to address the needs related to these diseases.

3. Compare and contrast the clinical and laboratory facilities available at The University of Toledo Medical Center (UTMC), Company Clinic and Mine Hospital. Include relative strengths and challenges for each site as they pertain to diagnosis and treatment of NTDs, Malaria, Tuberculosis and HIV/AIDS.

4. Discuss the clinical assessment and treatment of an individual suspected of having Malaria in each of the following two scenarios:
   (a) The individual is unemployed, lives in the local village of Baluba, and has only K40,000 (~$11.00) in available cash, and
   (b) The individual is employed as a manager at Kafakumba Training Center, lives in the local village of Baluba and is taken to Company Clinic by someone residing at Kafakumba Training Center, who has K800,000 (~$220.00) with him/her to offset potential initial costs.

5. Discuss the impact of participating in medical care in a developing country on your professional identity and development as a medical student in the U.S.

6. Discuss the potential role of The University of Toledo College of Medicine (UT COM) in working with partners in Central Africa to collaboratively address three pressing issues:
   (a) The need to provide medical students and physicians with improved clinical experience in the recognition, diagnosis and treatment of the diseases / medical conditions currently affecting a large portion of the world's population.
   (b) The desire of an increasing number of medical students to participate in medical care in developing countries.
   (c) The desire/need to share cultural frameworks, medical
Knowledge and advances in diagnosis and treatment with medical professionals currently being educated in the U.S. and Zambia.

| K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, K15, S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, P3, P5, P6, P7 |
| 7. Describe the three most common infectious diseases seen at the hospital and clinic and the pathogenesis, differential diagnoses, assessment and recommended treatment for each. |

| K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, K15, S7, S8, S9, S10, S11, P3, P5, P6, P7 |
| 8. Describe diseases that have become more prevalent in individuals with increasing socioeconomic status / resources over the past decade. Include common diagnostic and treatment approaches and any public awareness initiatives that have been undertaken as a result of the increased prevalence of each. |

**Professionalism:** UT COM students will meet or exceed the institutional standards for professionalism as stated in the current Educational Program Objectives (EPOs) and the current Educational Course Objectives (ECOs) for the sponsoring departments.

**Instructional Methods:**
- Case write-ups
- Clinical case presentations / discussions
- Diagnostic tests – use / interpretation
- Independent study
- Inpatient rounds
- Interpretation of lab data
- Mentored clinical practice
- Teaching rounds

**Evaluation Methods Employed:**
- Attendance
- Case presentation
- Case write-up
- Clinical log
- Faculty observation and assessment of clinical skills
- Narrative
- Reflective paper
- Self-assessment
Prerequisites: Successful completion of all third-year required clerkships

Clerkship Director: Mary Kay Smith, M.D.

Clerkship Coordinator: Dawn Scarberry-Sass
Phone Number: 419-383-5694
Email: dawn.scarberry-sass@utoledo.edu

Special Requirements:
Students participating in this elective will need to fulfill ALL requirements set forth by the UT COM International Travel Committee and gain approval from that body (a) PRIOR TO enrolling in this elective, and (b) at least four months prior to anticipated departure from the U.S.

Each student will be responsible for securing funding for his/her own air transportation, entry visa to Zambia, exit fees and other costs associated with travel between the U.S. and Zambia. Upon arrival at Ndola International Airport in Zambia, costs associated with transportation, food and lodging will be partially offset by Kafakumba Development Fund, Inc.

While English is the official language in Zambia, many local people (particularly those living in rural villages) speak Bemba. Medical personnel at Company Clinic and Mine Hospital speak English fluently.

The students will have one dedicated mobile phone available for their use should the need arise. Wireless internet access is available in the main building at Kafakumba and is fairly consistent, barring excessive server activity, attempts to send or receive extremely large files and Zambia’s (infrequent) losses of electrical power and “rolling blackouts”. Students are advised to take their own laptop computers with them if they wish to access the Internet.

Dr. M.K. Smith will meet with the students for a series of discussions about common traditional beliefs, cultural issues, etc. prior to students traveling to Zambia. It will be expected that these discussions will continue with the local people once the students arrive in northern Zambia.

All policies of the UT COM will be followed from the time of departure to return unless otherwise stated.

AAMC Hot Topics Addressed in this Elective Clerkship:

**General Hot Topics**
- Biostatistics
- Clinical pathology
- Clinical problem solving / decision making
• Communication skills  
• Community health  
• Cultural diversity / multi-cultural medicine  
• End-of-life care  
• Epidemiology / population-based medicine  
• Evidence-based medicine  
• Family violence / abuse  
• Geriatrics  
• Health disparities  
• Health care financing  
• Health care systems  
• Human development / life cycle  
• Human sexuality  
• Medical ethics  
• Medical socioeconomics  
• Nutrition  
• Occupational health / medicine  
• Pain management  
• Palliative care  
• Patient health education  
• Prevention and health maintenance / preventive medicine  
• Rehabilitation / care of disabled  
• Substance abuse  
• Women’s health  

**Hot Topics Related to Clinical Prevention and Population Health**

• Counseling for health risk reduction  
• Disease screening tests  
• Environmental health  
• Health determinants  
• Health policy development processes  
• Health services financing  
• Health surveillance strategies  
• Health care workforce  
• Immunization  
• Public health systems

**Additional Hot Topics**

• Health literacy  
• Racial / ethnic demographics of illness

May 19, 2009