

**Title of Clerkship:** Nicaragua Medical Mission Elective

**Elective Year:** MS4

**Department:** Family Medicine

**Type of Elective:** Clinical  Non-Clinical/Research  Basic Science

**Clerkship Site:** Leon, Nicaragua, and surrounding rural communities

**Course Number:** GLHL 755

**Blocks Available:** Variable – interested students must check with the UT Office of Global Health

**Number of Students / Block:** 10 maximum

**Faculty:** Linda French, M.D.; Andrew Casabianca, M.D.

**Elective Description / Requirements:** The health sector in the Nicaragua is managed by the Ministry of Health (MINSAs), which provides, coordinates, supervises, regulates and monitors all health activities. This responsibility is delegated to MINSAs in article 59 of Nicaragua’s Constitution, which states that all citizens have the equal right to health services and that the State is responsible for providing those services. There are 20 physicians and 72.5 nurses and midwives for every 10,000 Nicaraguans (WHO, 2005). In general, the country has high rates of maternal and child mortality and considerable morbidity as a result of communicable diseases that include diarrheal, respiratory, vector-borne, and sexually transmitted infections, with diseases of the respiratory system being the leading cause of morbidity. It is estimated that 20.4% of children suffer from chronic malnutrition and 5.1% experience severe chronic malnutrition. In recent years, there has been an increase in unhealthy lifestyle behaviors that has resulted in a 10% increase in the prevalence of diabetes from 8.9 to 18.98% per 100,000 people between 1992 and 2005. The prevalence of cervical cancer was 13.9% in women over age 15 in 2002, and it is currently the leading cause of tumor-related death in women. Additionally, one of the most vulnerable populations regarding disability and chronic disease is the increasing elderly population in Nicaragua. Ninety percent of this population has no social security coverage, and there are currently no programs in the country that are designed to meet their special health care needs (PAHO, 2009).

Students participating in this medical mission experience will work closely with MINSAs physician Dr. Alfonso Medina and pharmacist Mario Rivas to determine which villages will be served. Dr. Medina has a teaching appointment with the medical school in Leon and actively participates in student teaching, thereby affording medical students the ability to learn about cultural aspects unique to delivery of health care in Nicaragua. Both Dr. Medina and Mario will travel with the interprofessional health care team to all clinical sites, primarily serving rural communities within a 30- to 90-minute drive of Léon with limited access to national health services. Fourth-year student leaders will assist UT faculty in mentoring more junior students as they provide primary care services to adults and children, women’s health care, dental services, and physical therapy. Because of the collaboration with Dr. Medina and MINSAs, individuals in need of follow-up care will be referred to him for continuity of care. Cervical cancer screening for appropriately aged women will occur, again in coordination with the local healthcare administration and Dr. Medina to ensure appropriate follow-up. A pediatric dental team will accompany the group, and students will likely have an opportunity to spend one-half day assisting the dental team in providing preventive dental services, including fluoride treatments and dental sealants. Statistics will be maintained for all patient visits and will be monitored by both the team and MINSAs.

**Length of Clerkship:** 2 weeks

**Links to EPOs:** K12, K13, S9

**Educational Course Objectives:**

1. Explain the relationship between the degree of economic development in Leon, Nicaragua,

and the access to health care for individuals living in that community.

K3, K9, K10, K12, K13,  
K14, K15, S2, S8, S10

K5, K12, K13, K14,  
K15, S7, S8, S10

K9, K10, K12, K13,  
K14, K15, S2

**Professionalism:**

2. Discuss the relative impact of tropical diseases, poor access to healthcare, and lacking public health resources and initiatives on the health status of individuals living in Nicaragua.

3. Compare and contrast the available clinical and laboratory facilities in Toledo, Ohio, and Leon, Nicaragua.

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

The student must adhere to all professionalism standards and policies of the College of Medicine and Life Sciences M.D. Program.

**Instructional  
Methods:**

Ambulatory care experience, case studies, case write-ups, diagnostic test – use and interpretation, independent study, mentored clinical practice, clinical case presentation, and small group presentation and discussion.

**Evaluation Methods:**

Faculty assessment of case presentation, observation and assessment of clinical skills, review of journal entries/reflective paper, assessment of student presentation of assigned medical topic(s), and assessment of performance as a student team leader.

**Prerequisites:**

The student must be in good academic standing and must have successfully completed all required clerkships. In addition, all policies mandated by the UT Office of Global Health must be followed and all associated requirements completed.

**Clerkship Director:**

Paul Schaefer, M.D.

**Clerkship**

Margaret Lienhardt

**Coordinator:**

**Phone Number:**

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**Special**

**Requirements:**

The student is required to adhere to the UT Student Global Health Experiences Policy (Policy #3364-81-04-030-02). Please contact the UT Office of Global Health with questions related to this policy.

**AAMC Hot Topics  
Addressed in this  
Elective Clerkship:  
(please make  
selection from  
attached Hot Topic  
list)**

- Community Health
- Health Care Systems
- Medical Ethics
- Medical Socioeconomics
- Multicultural Medicine
- Patient Health Education
- Population-Based Medicine