Introduction to the three students’ team projects at Emory

There are potentially as many as three projects that could be appropriate for adding a student from Xiangya.

***The first project will take place in the U.S. Virgin Islands.***

**Project title: “**U.S. Virgin Islands (USVI) HIV Project”; in partnership with University of the Virgin Islands and Virgin Islands Department of Health (DOH), Communicable Diseases Division.

**Emory Faculty Mentor:** Safiya George Dalmida, PhD, Assistant Professor, School of Nursing

**Disciplines of the other team members:**Public Health, Nursing, and Sustainable Development Practice

**Background:**For over a decade, the U.S. Virgin Islands (USVI) has consistently had one of the highest prevalence rates of HIV infection in the nation. The USVI had the highest rate of adults and adolescents (per capita) living with a diagnosis of HIV in 2005, the second highest rate from 2006 through 2009, and currently has the third highest rate (685.1), since 2010 (667.1). According to the President’s National HIV/AIDS Strategy (NHAS), the USVI is a geographic hot spot for increased HIV risk.Majority of people living with HIV (PLWH) in the USVI are: AA/Black (56.9%), age 25-54 years (75.6%) and exposed through heterosexual contact (34.6%) or unknown (40.2%). Half are male. The USVI also has the 3rd highest rate (365.5/100,000) of adults/adolescents living with an AIDS diagnosis in the U.S. Recent local USVI news reportshighlight the territory's alarming rates of some sexually transmitted infections (STIs), including HIV, Chlamydia, and gonorrhea, which are also among the highest in the nation (among females ages 15 to 24 years). Moreover, local experts believe the rates of HIV and STIs in the USVI are significantly higher,but current data are not available to support this due to insufficient testing, data collection and reporting.

**Objectives and Methods:**

Based on needs identified by USVI leaders and HIV experts, the goals of this project are to:

1. **Identify HIV-specific and STI-related:  a) perspectives and practices, b) educational and testing needs, and c) community resources.***Methods:* Conduct an HIV-focused community needs assessment (CNA) with key informants, stakeholders and community members.
2. **Evaluate progress made on select USVI HIV/AIDS Prevention Plan goals:***Methods:*

1) Use VI DoH HIV data & CNA data to analyze gaps in: (a) HIV and STI knowledge; (b) HIV testing rates/ frequency (lifetime, annually); (c) barriers to HIV testing; (d) HIV/STI prevention practices; and (e) HIV/STI prevention services/education received, among people with HIV-negative or unknown status and high risk groups; and (d) PLWH’s engagement in HIV care/treatment; and 2) Employ quality improvement evaluation strategies/ tools.

1. **Map local HIV education and testing needs and HIV community resources identified in the CNA and gap analysis.** *Methods:*Pilot data on island maps and use geospatial mapping.

**Outcomes/Benefits/Deliverables:**

This project will extend our ongoing collaboration with the University of the Virgin Islands and our four year collaboration with the USVI DOH Communicable Diseases Division to allow for interdisciplinary exchange and student engagement. The project will also serve as foundation for future HIV/STI research in the USVI. This project will benefit our USVI partners by providing a written HIV-focused Community Needs Assessment report and USVI Prevention Plan evaluation report and oral presentation of key findings to USVI partners and community members/ stakeholders. We will work with our partners to draft a Development Plan with recommendations and key focus areas to foster continued progress on achieving USVI Comprehensive HIV/AIDS Prevention Plan goals and ideas for future GHI teams. Our team and USVI partners will prepare and submit two (or more) co-authored manuscripts to refereed journals within 6 months after completion of the project.

**A few initial thoughts for the role of medical student from Xiangya :**

There are only two trained infectious disease specialists in the USVI and about one primary care physicians with HIV training. Therefore, it would be great if a medical student could evaluate physicians' (and nurses and social workers')

1) practices of: a) providing HIV education and prevention counseling b) encouraging their patients to get HIV testing and

2) HIV training or continuing education activities

3) HIV treatment and referral practices

4) extent of knowledge of the status of the HIV/AIDS epidemic in the USVI, and goals/recommendations in the President's National HIV/AIDS Prevention Plan or the USVI Comprehensive HIV/AIDS Prevention Plan.

5) perspectives on factors contributing to and possible solutions to address the local HIV/AIDS epidemic (& associated needs).

**All of the Xiangya students must be fluent in English (writing and speaking).**

***The second potential project will take place on the Island of Tobago, Trinidad and Tobago.***

**Project title:**  “Salt Reduction Strategy for Tobago”; in partnership with the Public Health Services Department, Division of Health and Social Services, Tobago House of Assembly.

**Emory Faculty Mentor:** Neil K. Mehta, MA, MSc, PhD, Rollins School of Public Health, Hubert Department of Global Health

**Disciplines of the other team members:**Public Health, Nursing, and Medicine

**Background:** Hypertension is a leading cause of morbidity and mortality worldwide and in CARICOM (Caribbean Community and Common Market) countries. This field experience will provide a multi-disciplinary team of students with an opportunity to work in collaboration with officials from a local health authority in the island of Tobago to initiate a dietary salt consumption reduction program. The field experience will comprise of two primary components: (1) an education component involving patient health promotion and education and working with local food establishments and other stakeholders to educate about and promote low salt food options, and (2) a data collection component to assess hypertension awareness. This summer field experience will be a pilot project of a larger endeavor by health officials in Tobago to reduce dietary salt consumption in Tobago to less than 5g per day per person by 2020, as recommended by the Pan American Health Organization (PAHO).

**Objectives and Methods:**

**1**: To sample patients attending Tobago’s primary care clinics and implement a questionnaire asking about: (a) knowledge about hypertension and their hypertension status, (b) knowledge about the relationship between salt consumption and hypertension, (c) whether patients attempt to control dietary salt, (d) barriers to reducing salt intake, (e) hypertension medication knowledge and compliance (among those with hypertension). The team will also sample from local food establishments asking business owners about the salt content of their food and the availability of low salt menu options

**2:**To develop population-based and culturally-relevant health promotion materials that will be displayed in primary care clinics and in the community containing information about hypertension and dietary salt intake

**Methods**

**Objective 1**: Prior to the Field Experience, the students will develop a survey instrument in conjunction with the Emory and Field Supervisors. The instrument will include the collection of quantitative information about hypertension awareness, the relationship between salt intake and hypertension, whether patients have attempted to reduce their salt intake. We will additionally develop a set of qualitative questions around dietary behaviors, preferences, and barriers to dietary change that will be administered by the BSHE student (Theresa Pringle).

Sampling will take place in Tobago’s primary health clinics and will be based on current data collection efforts conducted by Dr. Hoyte as part of her recent Directed Study.

For the restaurant component, we initially take a census of populate local food establishments and implement a short (10 minute) survey ascertaining information about the salt content of their menu options and if low salt menu options are available.

**Objective 2**: We will develop culturally appropriate materials (posters, advertisements, fliers, etc.) around hypertension awareness to be posted and distributed in primary health care centers and other health related facilities in Tobago.

**Outcomes/Benefits/Deliverables:**

The proposed project will make at least two key contributions:

(1)   In collaboration with the County Medical Officer of Health, students will develop a hypertension education awareness program to patients attending the primary clinic of Tobago. We foresee this initial work as an important first step for the island to meet PAHO and WHO dietary salt intake recommendations. Tobago’s population is small (~60,000 individuals) and this project has the potential to have a tangible impact on the health of the island’s population. Trinidad and Tobago is also politically stable with an established public health infrastructure.

The collaboration between Emory and local government officials is novel and will benefit both parties. Emory can provide technical expertise in developing intervention strategies and rigorous collection of monitoring and prevalence data. Emory will gain by providing opportunities for students and faculty to participate in global chronic disease prevention efforts.

(2)   The data collection effort has direct scientific relevancy. To date, there is little information on prevalence of hypertension, dietary behaviors, and hypertension awareness in the Caribbean and in Trinidad and Tobago. This project will develop current evidence that can inform priority settings and future planned interventions. We will aim to publish 1 article on the topic of hypertension and hypertension prevalence in an international peer-reviewed publication at the completion of the summer project.

**An initial thought for the role of medical student from Xiangya :**

The assessment of provider’s communication with patients on the importance of a low-salt diet, providing hypertension screenings, and laying the groundwork for establishing Tobago’s first chronic disease registry, inclusive of hypertension. This role will be expanded as more specific aspects of the project and roles with our collaborators in Tobago develop.

***The third potential project has not been confirmed at this point. The title of that project is “Evaluating a new model of comprehensive care for Ethiopian survivors of Gender-Based Violence: A follow-up study on implementation and barriers to care”***

**All of the Xiangya students must be fluent in English (writing and speaking).**