RESEARCH AND ADVOCACY FOR HEALTH IN INDIA (RAHI): SUMMER IMMERSION EXPERIENCE FOR MEDICAL STUDENTS

GENERAL SUMMARY OF THE OPPORTUNITY

Research and Advocacy for Health in India (RAHI) is a collaborative effort by the University of Massachusetts Medical School (UMMS) and Charutar Arogya Mandal (CAM), a charitable organization that operates a tertiary care center and medical school in rural western India. In Hindi, ‘RAHI’ is a word used to describe a pathfinder. The vision of RAHI is to reduce health disparities in India through community-based research and advocacy for systematic changes that strengthen the existing health systems to support and promote the physical, mental, and socio-economical well-being of vulnerable populations.

One of the primary goals of RAHI is to create a platform for interested students to contribute to ongoing research and gain exposure to various healthcare systems globally. The student’s minimum commitment is outlined below and will span first year of medical school, summer between first and second year, and into the second year of medical school. The student’s responsibilities will align with what is expected of every medical student as part of their Capstone Scholarship and Discovery course. The intention of the framework of responsibility is to systematically guide the interested students to develop a Capstone project that they are passionate about and dedicated to while contributing to the ongoing scientific research. Our goal is to expose students who are interested in global health research to the methodology and challenges in conducting research in a foreign environment. The students will have opportunity to participate in one of the three RAHI projects that will be ongoing in summer 2015:

1. **Understanding Predictors of Maternal and Child Health** – A prospective cohort study to monitor 200 pregnant women from first trimester to six months postpartum and evaluate nutritional, clinical, and psychosocial risk factors for adverse maternal and child outcomes.

2. **Improving Trauma Outcomes** – Implementing Trauma Registry at a tertiary care center and conducting community based surveys to estimate community wide burden of mortality and long-term disability attributable to road traffic accidents.

3. **Pilot Data Collection for utility of an iPhone based app in conducting large-scale screening for the prevalence of atrial fibrillation in Western India** – A feasibility study to screen for presence of atrial fibrillation in clinic and community settings using iPhone based app developed by Dr. McManus, a UMMS faculty member, and his colleagues from WPI.
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<th>Time Period / Location</th>
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| Spring – MS1 / Worcester (3-5 hours/week) | • Understand study design and data collection by meeting with Apurv Soni (G1 MD-PhD) for MCH/A-Fib study or Dr. Abraham Jaffe (3rd year surgical resident)  
• Assist in data surveillance and quality checks  
• Literature search |
| Summer MS1→ MS2 (4-6 weeks) / India | **Research:** (60%)  
• Participate in the ongoing data collection efforts  
• Work with the research coordinators in India to 1) verify adherence to protocols and quality of the data (MCH and Trauma) or 2) screen for arrhythmia and hypertension using developed protocols  
**Clinical immersion:** (20%)  
• Shadow opportunities in the Pediatrics, Surgery, Cardiology, Cancer, OB/GYN, Medicine, and other clinical settings  
• Opportunity to round with CAM medical students and residents  
**Cultural immersion:** (20%)  
• Join the Community outreach department for the visits to the community extension centers |
| Fall MS2 / Worcester (3-5 hours/week) | • Participate in drafting of manuscript for peer-reviewed journal  
• Participate in team data analysis meetings  
• Define a Capstone project and identify primary mentor (Optional: If the student is interested in designing his/her capstone project related to RAHI activities) |
| Spring MS2 / Worcester (10-15 hours total) | • Help transition the first year students into the program and research responsibilities |
LEARNING OBJECTIVES

At the end of the summer between MS1 and MS2 year, students will be able to:

Research:
- Explain the rational for studying maternal and child health, and discuss the intricate details of the study
- Demonstrate the barriers and facilitators of conducting and monitoring international collaborative study that is multi-disciplinary in nature and is conducted in a non-English language

Clinical immersion:
- Understand the multiple and varied responsibilities of physicians in an international setting
- Recognize the cultural nuances in healthcare delivery and in decision making for plan of treatment

Cultural immersion:
- Identify the different sociocultural factors that affect healthcare seeking behavior and the consequences of postponing healthcare
- Demonstrate an understanding of how culture influences perspectives of patients regarding their personal health and the healing process

OTHER INFORMATION

Since the setting for this opportunity is in a rural area of Western India, the study participants and patients in the clinics will not speak or understand English. The language of the region is Gujarati. In order to address the language barrier, UMMS students will be paired with an undergraduate or graduate medical student(s) from CAM, or some other person who can speak Gujarati. English is the preferred language for communication at CAM. All faculty and students are fluent in English.

CAM operates a tertiary care center, a medical school, a physiotherapy school, and a nursing school within its campus. There is Wi-Fi internet access available upon registration with the institution’s IT department and accommodations will be arranged for the UMMS students to stay within the gated campus. CAM is a non-discriminatory institution on the basis of caste, race, color, religion (creed), gender, gender expression, age, disability, marital status, sexual orientation, or military status. However, notable cultural differences exist, including a strict no-alcohol policy in compliance with the law in the state of Gujarat.

HOW TO APPLY

Interested students are requested to contact Apurv Soni (Apurv.soni@umassmed.edu) and Dr. Michael Chin (Michael.Chin@umassmed.edu) for further details.