



## **Global Health Symposium: International Medical Service Missions: Tools of the Trade**

Sponsored by the Wilderness Medical Society 3- 4 August 2018 as a prequel to the Annual Summer Meeting 5 – 8 August in Midway, Utah.

Supported by an unrestricted grant from [Health Corps Haiti – Medical Student Missions](#).

Registration for symposium and/or annual meeting is at <https://wms.org/conferences/midway18/>



**The Zermatt Resort**  
784 W. Resort Drive  
Midway, UT 84049

**August 3 - 8, 2018**

### **SYNOPSIS**

Global Health Symposium 3-4 August 2018 is a CME program for physicians, nurses, medical students, and allied health personnel which further provides credits within the Academy of Wilderness Medicine towards the Fellowship level (FAWM) . It is a pre-conference program in conjunction with the WMS Annual Meeting in Midway Utah. The course content will cover global health including travel and international medicine, infectious disease, and medical relief programs.

## **SCHEDULE**

### **DAY 1: 3 August 2018**

7:30 -8:00 William Forgey, M.D., FAWM, CCHP-P, CTH<sup>®</sup>

#### **Title: Global Health: The Role of Medical Volunteer Service Missions**

Description: Global Health consist of more than medical service missions. A brief overview of global health will be presented as a means of introducing one aspect – namely volunteer service missions. The goal of most service missions is to provide acute and chronic medical care to an under-served region. This introduction will discuss the ethics, training, logistics, and politics of preparing for these missions appropriately and will outline the seminar’s “tools of the trade” to help attendees organize and execute a successful program.

Objectives: After this presentation, participants will understand: 1) ethics of volunteer service missions, and 2) difficult training and logistics required for volunteer service missions and 2) tools for organizing and executing a successful volunteer service mission.

8:00 -9:30 John May, M.D., FACP

Co-Founder: [Health through Walls](#)

#### **KEYNOTE SPEAKER**

**Title: Keynote Address: Treating malnutrition, HIV, TB, cholera and chronic diseases in the most resource poor environment of all – The Health Through Walls Experience in the world’s poorest countries’ prison systems.**

Description: Dr. May will address infectious disease, particular those that are endemic and chronic including HIV, Tuberculosis, cholera and others that are endemic in the worlds poorest countries’ prison systems.

Objectives: After this presentation, participants will understand: 1) the role of chronic infectious disease in the world poorest countries’ prisons, 2) the role of malnutrition in incarcerated patients in the underdeveloped world, and 3) the role of Health Through Walls implementing medical relief.

Bio: John May, M.D., is the Founder of Health Through Walls. Health through Walls (HtW) is a nongovernmental organization based in the United States of America, whose mission is to assist low-income countries in implementing sustainable improvements in the health care

services of their prisons. A primary focus of this effort is to implement integrated HIV and cholera therapy; improve program management capacity for MDR-TB; develop a compendium of MDR-TB best practices in prisons and to facilitate collection and management of data relating to epidemiological trends, health system performance, and prison health policy. HtW works in partnership with correctional administrations and health care staff of developing countries to assist their efforts in delivering effective and quality health care in their prisons. HtW works to implement sustainable and replicable models in the delivery of prisoner health care. HtW's primary focus is the identification, prevention, and management of infectious disease, especially HIV/AIDS, cholera and TB. Its targeted focus is low and middle-income countries of the Caribbean ( Dominican Republic, Haiti, Jamaica), sub-Saharan Africa (Democratic Republic of Congo, Ghana, and Malawi,), eastern Europe (Romania).

It is with great honor that we have as our keynote speaker a true hero of global health, Dr. John May, who will not only initiate our symposium, but who will be our guest at the evening no-host dinner to which you are all invited, to be held in honor of Health Through Walls, for an opportunity of continue interaction to learn about and from this most successful and challenging of international medical service projects.

10:00 -12:00 James H. Diaz, M.D., MPH, DrPH, FACMT

Professor and Head Environmental and Occupational Health Service  
School of Public Health  
Louisiana State University Health Sciences Center – New Orleans

**Title: Man, Mosquitos and Flaviviruses: From Yellow Fever to Zika**

Description: Dr. Diaz will discuss the natural history of flaviviruses beginning with early identification of yellow fever, zika and others and continuning with the current outbreak of Yellow Fever and Zika in Brazil and the Caribbean.

Objectives: After this presentation, participants will understand: 1) the orgins of flaviviruses including yellow fever and zika, 2) the current pandemic of flaviviruses and 3) strategies for treating and global containment.

12:00 – 1:15 Lunch

1:15 – 2:15 Marc Gurwith, M.D., JD  
Executive Vice President, Scientific Affairs  
[PaxVax Pharmaceuticals](#)

**Title: New Developments in Zika and Other Vaccines (Part 1)**

Description: Dr Gurwith will discuss the ongoing development of vaccine development in the United States and Europe, including the current process of developing a vaccine for Zika and the efforts to develop typhoid vaccine.

Objectives: After this presentation, participants will understand: 1) the challenges at development, testing, and implementing vaccines in the developing world, and 2) the difficulty at distributing vaccines to the developing world.

Bio: During his 30 years in industry at major pharmaceutical companies (Boehringer Mannheim, Wyeth Ayerst Pharmaceuticals) and biotechnology companies (VaxGen, Genelabs, and Sequus), Dr. Gurwith has directed the clinical development of 20 therapeutic drug candidates in the areas of infectious diseases, cardiovascular, cancer, inflammation, and metabolic disorders. He played a pivotal role in the regulatory submissions in the U.S. and Europe, ultimately securing the approval of five new agents: RotaShield® (vaccine), Amphocil® (antifungal), Demadex® (antihypertensive), Retavase® (cardiovascular) Currently, he is at PaxVax where directed development of vaccines, including the recently approved oral cholera vaccine, Vaxchora®. Dr. Gurwith has authored 111 publications and served as a reviewer for several prestigious peer-reviewed journals, such as Vaccine and The Journal of Infectious Diseases. Dr. Gurwith has an M.D. from Harvard University, Board certifications in internal medicine, infectious diseases and microbiology, and a J.D. from Temple University School of Law.

2:15 – 3:00 Zakir Murtaza, MS, Ph.D.  
Chief Scientist  
[Applied BioMedical LLC](#)

**Title: Point-of-care testing available for overseas medical service trips, including the science behind lateral flow technology, currently available tests and those on the near horizon.**

Description: Dr. Murtaza will discuss point of care testing. This will include those currently available such as for HIV, malaria and others and those currently in development for infectious disease. The technology for lateral flow testing will be discussed. The challenge, convenience, and cost will be discussed, especially for use on overseas medical service trips.

Objectives: After this presentation, participants will understand: 1) the science behind lateral flow point of care testing, 2) use of the current available test, and 3) point of care tests to be soon available for use on medical service tests.

Bio: Developed glucose monitoring system, HIV and Zika Rapid Test and other immunoassays based on lateral flow platform, developed fluorescence based protein assays and sandwich immunoassay, Co-inventor of patent on probes and production activities of lateral flow tests and tests based on enzymatic reaction and electrochemistry, co-inventor of a patent to detect Prion (Mad cow) Protein and three provisional applications, developed a rapid test for Prion (mad cow disease). Developed a rapid test to detect Anthrax Developed a rapid test for glucose

based on enzymatic reaction and electrochemistry, supervised and completed several projects on lifetime based fluorescence immunoassay, synthesized and designed long-lifetime (1-20 ms) and high quantum yield (up to 70%) fluorescence polarization probes and metal ligand complexes, synthesized luminescent sensor molecules for pH, carbon dioxide in blood, development of formulation for dry film/strips for clinical chemistry, presented seminars for companies interested in technology on "Applications of long lifetime probes for lifetime based sensing and immunoassays," inventor and co-inventor of three provisional patent applications.

3:00 – 3:15 Break

3:15 – 4:15 Marc Gurwith, M.D., J.D.  
Executive Vice President, Scientific Affairs  
[PaxVax Pharmaceuticals](#)

**Title: New Developments in Zika and Other Vaccines (Part 2)**

4:15 – 5:00 Max J. Mondestin, MD, MPH  
Spécialiste Senior en santé Publique  
Consultant International

**Title: The Cholera Experience in Haiti: What Host Counties Expect of Visiting NGO services**

Description: The sudden emergence of cholera in Haiti in October 2010 was the result of contamination introduced into the country by UN Forces at a time of severe vulnerability in health resources caused by the recent earthquake and in the face of infrastructure challenges due to sewage and water purification shortages. The Haitian government was faced with multiple NGO responses, the need to develop a national coordinated effort, the coordination with local indigenous healers for education, and variations in treatment protocols that resulted in various clinical outcomes.

Objectives: After this presentation, participants will understand: 1) the natural history of the cholera outbreak in Haiti in 2010, 2) efforts in containment, 3) treatment strategies employed by the Haitian government and NGOs, and 4) clinical outcomes and the current status of cholera in Haiti.

Bio: Dr. Mondestin is a gynecology and public health specialist who returned to Haiti from assignment with the World Health Organization (WHO) after the January 2010 earthquake, to help rebuild his country. He is a consultant for multiple NGO's operating in Haiti and is currently running multiple volunteer and public health clinics in Haiti.

No host dinner will be arranged for the evening of August 3<sup>rd</sup>. This will be a remarkable opportunity to meet all of the speakers for further interaction

**DAY 2, 4 August 2018**

7:30 – 8:15 Christopher Vantilburg, M.D.

Symposium Co-Chair

Editor, Newsletter International Society of Travel Medicine

Director CME, Health Corp Haiti

**Title: An overview of Medical Service Missions – can they do more harm than good?**

Description: Dr. Van Tilburg will provide an overview of benefits and detriments of medical service missions. He will review potential areas of harm, exemplified by disaster relief, short term missions, and long term projects. He will provide a list of seven key ingredients in successful medical relief missions.

Objectives: After this presentation, participants will understand: 1) potential detriments of short-term medical missions, and 2) seven key components of successful medical relief missions.

8:15 – 9:00 Tullia Marcolongo, CTH®

Executive Director,

[International Association for Medical Assistance to Travelers](http://www.iamat.org)

**Title: Evaluating Medical Insurance for International Travel**

Description: Ms. Marcolongo will provide a detailed overview of insurance for travel.

Objectives: After this presentation, participants will understand: 1) understand differences between travel, medical, evacuation and rescue insurance, and 2) understand how to access health care and insurance in country.

Bio: Ms. Marcolongo is executive director of IAMAT. **IAMAT** is a non-profit membership that maintains a network of physicians - general practitioners and specialists, hospitals and clinics around the world - who have agreed to treat **IAMAT** members in need of medical care during their journey. It runs an active scholarship program for young international physician scholars. Their aim is also to advise travelers about health risks, the geographical distribution of diseases, immunization requirements, sanitary conditions of water, milk and food, and environmental and climatic conditions around the world. Its website, <http://www.iamat.org>, contains unique, non-government filtered disease risk information and specific recommendations for international immunization compiled by its international scientific advisory board. Membership in IAMAT is free and access to the website is immediate even without membership. IAMAT is not an insurance program, nor does it have financial interests with any organization or project which it evaluates or endorses. For over 50 years it has provided thorough analysis of travel related medical and social risks. It has recently published a thorough analytic of

travel/evacuation insurance plans. Presenting this analysis is the Executive Director, Tulia Marcolongo, CTM®

9:00 – 10:15 Seth Perlman, JD  
[Perlman and Perlman, LLP](#)

**Title: The legal implications of NGO operations overseas – complying with financial regulation of soliciting money in the US and over-seas activities.**

**Description:** Mr. Perlman will review legal implication with medical service trips, particularly financial regulations for receiving donations.

**Objectives:** After this presentation, participants will understand: 1) legal issues applying to medical service trips, and 2) financial regulation for receiving donations for medical service trip.

**Bio:** Based in New York City, Seth Perlman has been providing legal counsel to the philanthropic sector for more than thirty years. He works with large public charities, private foundations, fundraising professionals, for-profit businesses engaged in philanthropy, international NGOs and social enterprises. Perlman & Perlman specializes in nonprofit law and nonprofit compliance. Their attorneys have expertise in several practice areas including nonprofit governance, fundraising compliance, legal counsel on charitable registration, cause marketing, and lobbying, and cyber security issues.

10:15 – 11:30 James Moss, JD  
[Recreation Law](#)

**Title: Risk management issues implied by advertising and recruiting overseas team members and school programs into over-seas medical service programs.**

**Description:** Mr. Moss will review legal implications and risk management strategies for organizers of medical services trips. This will include advertising the trip, recruiting overseas members, organizing school programs, taking both health care and lay participants.

**Objectives:** After this presentation, participants will understand: 1) legal implications of medical service trips, 2) risk management pitfalls for organizers of medical service trips and 2) strategies for protection for organizers.

**Bio:** James Moss is well-known to most practitioners in the field of adventure travel and outdoor education. His expertise in defense planning includes insights on participation advertising, appropriate waivers and releases and developing risk management plans. His workshop will focus on appropriate recruiting techniques with appropriate risk content and understanding the differences between waivers and releases, and their implementation in practice.

11:30 – 12:45 Lunch

12:45 – 1:45 William Forgey, M.D., FAWM, CCHP-P, CTH®

**Title: Integrating mobile clinics using skilled and lay volunteers in rural Haiti with the Haitian Health Department: The Medical Student Mission/Health Corps Haiti experience.**

Description: Dr. Forgey will discuss the Health Corps Haiti experience, an NGO started from scratch in 2010 to address disaster relief and public health in Haiti. He will discuss using medical providers and lay volunteers, students, and local medical providers and interpreters. He will discuss integration with the public health department.

Objectives: After this presentation, participants will understand: 1) starting a successful medical relief program, 2) involving education of medical students, and 3) coordinating lay and professional volunteers in successful medical relief programs.

1:45 – 2:30 Max Mondestin, M.D.

**Title: Treating Malaria in Haiti: Complying with a national treatment plan.**

Description. Endemic to Haiti, *Plasmodium falciparum* is one of the world's deadliest diseases. In response to epidemiological studies, the country of Haiti developed a specific country treatment plan that differs from WHO and US CDC guidelines. The history of malaria in Haiti, the success of the new treatment strategies, and challenges of outside NGO nonconformity with the national plan will be evaluated.

Objective: After this presentation, participants will understand: 1) the natural history and vectors of *plasmodium falciparum*, 2) method of vector control, and 3) treatment modalities.

2:30 – 3:15 Tulia Marcolongo, CTM®

**Title: Managing Psychological Emergencies Amongst International Volunteers and Travelers**

Description: One of the most expensive, most dangerous, and least discussed issue in wilderness and travel medicine are psychological emergencies, how to prepare for them, how to prevent, and what resources are available for international travelers, especially those working in high-risk medical volunteerism situations. IAMAT has taken the lead in these issues and identifying resources for organization planners.

Objectives: After this presentation, participants will understand psychological emergencies including: 1) how to recognize, 2) how to treat, and 3) indications for evacuation.

3:15 – 4:15 Kari Fitzmorris Brisolaro, ScD., MSPH, QEP  
Associate Professor of Environmental and Occupational Health  
School of Public Health  
Louisiana State University Health Sciences Center – New Orleans

**Title: Sustainable Sanitation Solutions for Mosquito Vector Control: Infrastructure and Public Health on a Global Scale**

Description: While the global health worker is familiar with the importance of immunizations and nutrition, the greatest human health achievement is in the management of waste water and the prevention of the vector breeding which improper water storage frequently causes. Dr. Brisolaro is presenting an exciting project that many organizations can adapt to their programs world-wide.

Objectives: After this presentation, participants will understand: 1) the role of drinking water sources in vector control in public health, 2) strategies of water storage, and c) tools for assisting with vector control in developing countries.

4:15 – 5:00 Panel of all presenters and Chairs of WMS Committees relating to emergency relief and international health

**Title: Using the tools of the trade: Let's Go**

Description: this talk will put theory to practice and provide a round-table discussion and question/answer session.

Objectives: After this presentation, participants will understand: 1) How to choose and join a volunteer opportunity, 2) critical skills you need to bring to the field, and 3) validation of the volunteer opportunity.

All participants are invited to join the reception for members and guests of the Wilderness Medical Society at the evening reception.

## **PROFESSIONAL PRACTICE GAP ANALYSIS**

This course teaches the most up-to-date evidenced-based approach to the recognition, treatment, and prevention of medical issues that pertain to wilderness and international medicine, including disaster and travel medicine, and global health. In planning this symposium, the course directors Drs. Van Tilburg and Forgey, and selected speakers, who are recognized experts in their respective fields, have identified numerous practice gaps in preparation of this conference.

**Expert Opinion** – This course enjoys the position of having organizers and speakers that involved in the practice of global health. We hear feedback regularly from members in wilderness and travel medicine organizations about the experiences and issues and concerns and the challenges they face in the field.

**Meeting History** – This course is sponsored by the Wilderness Medical Society (WMS) and Health Corps Haiti. The WMS has a history of requiring international, travel and disaster medicine credits for the Fellow of Academy of Wilderness Medicine (FAWM) program. The history and archive of data from course evaluations filled out by conference attendees in the past was reviewed to make sure the topics are up to date and presenters are knowledgeable in their content area, and effective educators. Past conference evaluations, attendees asked for more information on non-mountain medicine topics, especially to fulfill the FAWM credits in global health. Furthermore, after the WMS- and Health Corps Haiti-sponsored Haiti CME in 2012 and 2017, there was a clear need for more specialized global health education.

**Global Health Committee.** The WMS has started a Global Health Committee specifically to address further education.

**Clinical Practice Guideline** – The Wilderness Medical Society has published six editions of the Clinical Practice Guidelines now in the journal Wilderness and Environmental Medicine. The Centers for Disease Control published the “Yellow Book” the definitive practice guidelines for travel and international medicine, which include chapters on the topics covered in the course. Updated regularly, these demonstrate a need for education on these topics. This particularly pertains to emerging and re-emerging tropical infectious vector-borne disease where topic coverage can be outdated quickly.

**Peer reviewed medical literature review** – The meeting committee and the program chair reviewed the current medical literature to ascertain clinical practice gaps which will be addressed in the conference.

**Institute of Medicine and ABMS Competencies** - CME activity is developed in the context of a desirable physician attribute (e.g., IOM competencies, ABMS competencies, specialty specific competencies). The chair has developed a program in agreement with the Institute of Medicine Core Competencies. In planning for the learning objectives for this course we have used the IOM core competencies with an emphasis on Patient Centered Care, Interdisciplinary Teams, Evidence Based Practice, and Quality Improvement.

## **NEEDS ASSESSMENT**

More and more individuals are traveling to remote and international destinations to participate in medical relief projects or for adventure travel. With the increase in travel, medical professionals need to be able to handle not only working “in the field” when they are asked to accompany a group, but also need to be able to advise patients planning an exotic trip or returning from one. In addition, widespread natural disasters in urban areas, like Japan, Haiti, New Orleans, Iceland, and Indonesia require medical professional to be prepared for triage and first responder medical care in urban settings.

Much of the material presented in our course is not covered in standard medical school curricula, nor is it covered in most residency training programs.

This course offers credits towards the completion of fellowship in the Academy of Wilderness Medicine (FAWM), an adult education program that organizes the diverse fields of knowledge that make up the discipline of wilderness medicine in a standardized manner. The core curriculum of the Academy of Wilderness Medicine includes topics such as heat illness, emergency airway, trauma, and travel medicine that are offered in our course. The curriculum was devised, and is being continuously updated, by recognized experts in these disciplines.

Fellowship in the Academy requires the completion of a major number of the educational programs in the core curriculum. Individuals who achieve the status of Fellow have received instruction in the basic principles of all aspects of wilderness medicine.

The attendance of applicants for fellowship in the Academy at programs such as ours, and their participation in other activities, is recorded.

This program addresses topics that are not commonly presented at standard WMS/FAWM courses. We used comments generated from past WMS courses to further refine course content to better meet the needs of participants. The course also presents topics in travel medicine and global health not covered by standard travel medicine courses, which are usually geared toward personal, small group travel. This course will cover natural disasters and large group settings. This particularly pertains to emerging and re-emerging tropical infectious vector-borne disease, such as zika, chikungunya, and dengue.

The course faculty convened in Haiti in 2017. We sought input from medical student focus groups, reviewed the literature, reviewed the WMS practice guidelines, reviewed evaluations from past conferences, and reviewed select topics presented in the Centers for Disease Control and Prevention “Yellow Book.”

## **DISCLOSURES**

This program will use the standard disclosure system at [wms.org](http://wms.org).

## **EVALUATIONS**

This program will use the standard online evaluation system at [wms.org](http://wms.org).