



## **WHO ARE WE?**

Walking Palms Global Health (WPGH) works to meet the public health needs of historically vulnerable and low-income communities in the province of Manabí, Ecuador, an area frequently affected by natural disasters. We have ongoing partnerships with local communities, primary and secondary schools, collegiate research institutions, international NGOs, and the Ministry of Health Ecuador. With these partnerships, we've been able to develop research-based recovery initiatives and produce community-driven data in environmental health, disease, and mental health disciplines. Long-term, sustainable development is encouraged by providing employment opportunities and training to local community members, health workers, and global volunteers. Empowering communities to be self-sufficient, we also implement inter-sectoral educational health programs that are personalized in order to meet the unique needs of each community.

## **WHY LEARN WITH US?**

We are an inter-cultural and interdisciplinary team of experts working across the full spectrum of global health. Walking Palms Global Health staff are highly trained in emergency disaster relief and recovery and are bound by our passion for sustainability. We, along with our collaborators, offer perspectives and provide tools which empower leaders to use systems thinking in uncovering creative solutions to global health issues. Global Health dynamics are complex and ever evolving and that's why we use Systems Thinking to help simplify large issues. This approach looks at interactions between environment, biota, and social dynamics to explain health outcomes and disparities. With a combination of workshops led by our unique team members and local guest lecturers we create an environment in which students partake in inquiry-based learning. *Global Health in Action* not only gives students the skills needed for research and sustainable development but puts knowledge into action as students partake in our long-term community service projects and medical brigades. We trust that our students will use their learning experiences to impact and empower the future communities that they will serve in.

## **SITE DESCRIPTION:**

This learning opportunity takes place in the unique and charming beach town of Bahía de Caráquez, Manabí, Ecuador. Just south of the equator, the peninsula of Bahía is located five hours Northwest of Guayaquil International Airport. Home to one of the only remaining fragmented tropical dry forests in Ecuador, it includes some of the world's most diverse range of flora and fauna. Bahía transitions between lush green mountains during the wet season and a cool dry season. Although Bahía is still recovering from the 2016 earthquake, the area has vibrant murals, delicious food and rich Latin culture making it the perfect place to learn.



**OUR COURSE:** *Global Health in Action: “A Systems Approach “*

**Location:** Bahía de Caráquez, Ecuador

**Primary Instructor:** Avriel Diaz

**Clinical Lead:** Varies

**Email:** [avriel@walkingpalms.org](mailto:avriel@walkingpalms.org)

**Website:** [www.walkingpalms.org](http://www.walkingpalms.org)

**Prerequisites:** Global Health Travel and Training Online Course developed by Boston University  
[www. ebx.org/course/practioners-guide-global-health-bux-globalhealththx](http://www.ebx.org/course/practioners-guide-global-health-bux-globalhealththx)

**Materials & Supplies:** All students must come prepared with a travel journal, writing utensils, hiking shoes, field & clinical clothes (scrubs), and bug repellent. See student travel checklist for more details on specific clothing required.

**GOALS:** The objective of the *Global Health in Action: “A Systems Approach “* course is to 1) teach students the principles behind systems based thinking and apply these principles into clinical health practice, 2) learn holistic sustainable methods aimed at providing natural disaster relief and recovery in a culturally responsible manner, 3) engage in unique Latin American culture and apply new ideas to solve world issues and engage in global health policy.

#### **GUEST LECTURES**

Director & MD—Dr. Freddy Vera, Ministry of Health

Disease Ecologist —Avriel Diaz MA, Columbia University, WPGH

Music Therapist—David Cedeño, WPGH/ Instituto Ecuatoriano de Seguridad Social

President of Community Health HIV Initiative—Ismelda Cedeno, Ministry of Health

Storyteller—Rosa Loor, Community Member

Public Health and Research—Juliana Jeremiah MPH, SUNY Upstate, WPGH

Psychologist—Josué García, Ministerio de Inclusión Económica y Social

Women’s Health Advocate—Maura Jeffrey



### **Day 1: Intro to Systems Thinking and Community Health Work**

Introduction to Systems Thinking  
Introduction Student Project  
Introduction to Community Health Surveying  
Culture in a Global Age  
Your Health Matters  
Lecturers: Walking Palms Global Health Team

### **Day 2: Health & Natural Disasters**

*Systems Concept 1: Disasters & Public Health*  
Stories of New Beginnings: 2016 Earthquake  
Market Excursion  
Medical Spanish  
Community Health Survey—Comunidad P. F. C.  
Project Time  
Lecturers: Director of the Ministry of Health, Dr. Freddy Vera, MD

### **Day 3: Mental Health**

*Systems Concept 2: Mental Health & Body*  
Meditation & Mindfulness  
**Clínica 1:** Children's Health—Comunidad Junco  
Trauma: Mind-Body Connection & ACE Test  
Mental Health in Manabí  
Project Time  
Lecturer: Psychologist, Josue Garcia

### **Day 4: Chronic Disease**

*Systems Concept 3 Diabetes & Hypertension*  
Music & Movement: Seniors  
**Clínica 2:** Diabetes Club—Leonidas Plaza  
**Clínica 3:** Publica General—Comunidad P.F.C.  
Lecturers: Music Therapist, David Cedeño

### **Day 5: Infectious Disease**

*Systems Concept 4:*  
Introduction to Mosquito Borne Diseases  
Mosquito Field Research  
Visit to Dengue Test Facility  
HIV in Manabí Activity  
Human Rights & Access to Healthcare  
Project Time  
Lecturers: Disease Ecologist, Avriel Diaz, MA  
President of HIV Committee of Manabí, Ismelda Cedeño, Public Health Expert, Juliana Jeremiah, MPH

### **Day 6: Climate Change & Vulnerable Populations**

*Systems Concept 5: Climate Change and Public Health Measures*  
**Clínica 4:** House Calls—Comunidad San Roque  
Mangrove Exploration—the effect of climate change on coastal health and economics  
Lecturers: Isla de Corazón Nature Reserve Team

### **Day 7: Women's Health**

*Systems Concept 6: Women's Health & Empowerment*  
Intro to WPGH Women's Health Program  
Women's Health Measures & Ethics  
**Clínica 5:** Women's Health—Comunidad Fanca  
Project Time  
Systems Approach to Health Planning & Policy  
Lecturer: Women's Maternal Health Advocate, Maura Jeffrey

### **Day 8: Final Day**

Final Project Presentations  
Closing Reflections  
Bus to GYE



## **Day 1: Intro to Systems Thinking and Community Health Work**

Introduction to Systems Thinking  
Introduction Student Project  
Introduction to Community Health Surveying  
Culture in a Global Age  
Your Health Matters

The first full day of class in Bahía, students will be introduced to the concept of systems thinking and how it guides the research and learning goals of Walking Palms. Systems thinking is a holistic approach that creates an interdisciplinary method for learning and focuses on how a system's parts are interrelated and how they work overtime in a larger context. This approach will allow students to connect health, the environment, culture and community and analyze them in the broader context of development in Latin America. Students will use the systems concepts they learn throughout the week to create their own systems-based project. All projects are created with feedback from our local collaborators ensuring cultural appropriateness. The idea behind the project is to create a useful product that will continue to benefit the Bahia community after the students leave. In the past students have created diabetes information packets, health documentaries, health challenges etc. Next, students will be introduced to community health surveying, which we will conduct throughout the week in our local communities. The class will end the day with a discussion of self-care in the context of public and mental health work, learning about how to promote and prioritize their own health while working in stressful environments.

## **Day 2: Health & Natural Disasters**

*Systems Concept 1: Disasters & Public Health*  
Stories of New Beginnings: 2016 Earthquake  
Market Excursion  
Medical Spanish  
Community Health Survey—Comunidad P. F. C.  
Project Time

The first systems concept will be focused on disasters and public health infrastructure. Students will learn about how disaster relief was conducted after the 7.8 magnitude earthquake that hit Bahía in 2016. We will hear personal stories from community members about their experiences after the earthquake and how it affects their lives today. Students will use this topic as a basis for conducting a community health survey. While conducting this survey students will uncover key parts of the system i.e. climate, water, roads, electricity, vegetation, erosion and more that are affecting public health. We will go over medical vocabulary and phrases in Spanish that will be useful for students during community clinic hours. We will end the day with time to work on the student's projects which will be presented on the last day of the course.



### **Day 3: Mental Health**

#### *Systems Concept 2: Mental Health & Body*

Meditation & Mindfulness

***Clínica 1:*** Children's Health—Comunidad Junco

Trauma: Mind-Body Connection & ACE Test

Mental Health in Manabí

Project Time

This day will focus on mental health. We will begin with meditation in the classroom and then move on to conducting children's health checkups in one of the local communities. Students will then learn about trauma from two perspectives. We will talk about the connection between the body and the mind and how both deal with trauma, relevant to a developing country. Next, students will learn about the ACE test for trauma and chronic disease that is used by medical professionals to assess the specific needs of individuals that have experienced trauma. Students will connect mental health to physical health by learning about how trauma can increase the spread and severity of chronic disease in vulnerable areas. We will finish the day with time for students to work on their projects.

### **Day 4: Chronic Disease**

#### *Systems Concept 3 Diabetes & Hypertension*

Music & Movement: Seniors

***Clínica 2:*** Diabetes Club—Leonidas Plaza

***Clínica 3:*** Publica General—Comunidad P.F.C.

Day four will focus on the diabetes and hypertension health crisis that is prevalent throughout much of Latin America. The basis of this concept will be nutrition, exercise and the influence of globalization on local diets and health practices. We will host a music and movement session at the senior center, including dancing to encourage them to be active in a fun, engaging way. Next, we will have diabetes patient checkups. In the second half of the day, we will host another clinic that will be open to the general public of one of our communities.



## **Day 5: Infectious Disease**

### *Systems Concept 4:*

Introduction to Mosquito Borne Diseases  
Mosquito Field Research  
Visit to Dengue Test Facility  
HIV in Manabí Activity  
Human Rights & Access to Healthcare  
Project Time

Class on this day will learn about mosquito borne disease including zika, chikungunya and dengue. We will have a lecture on mosquito field research methods including trapping mosquitoes to survey for disease and household health surveys. We will then put these methods to practice collecting eggs, larvae, pupae and adults then learn lab processing skills during a visit to a dengue test facility. We will end with a discussion of human rights access and health care and how global inequality affects public health access. This discussion will be led by Ismelda Cedeño, who is the president of the HIV Committee of Manabí. She will lead a workshop to map barriers to health access including social barriers involved in diseases that carry social stigmas such as HIV.

## **Day 6: Climate Change & Vulnerable Populations**

### *Systems Concept 5: Climate Change and Public Health Measures*

**Clínica 4:** House Calls—Comunidad San Roque

Mangrove Exploration—the effect of climate change on coastal health and economics  
This day will focus on how climate change affects public health and vulnerable populations. We will make clinical house calls in the community of San Roque. Next, students will visit a mangrove site and learn about the effect of climate change on coastal health and local economies that depend on coastal resources. Our speaker for the day from Isla de Corazón Nature Reserve Team will talk about the connection between climate change and public health.



## **Day 7: Women's Health**

### *Systems Concept 6: Women's Health & Empowerment*

Intro to WPGH Women's Health Program

Women's Health Measures & Ethics

**Clinica 5:** Women's Health—Comunidad Fanca

Project Time

Systems Approach to Health Planning & Policy

This day will focus entirely on Women's Health and how the healthcare system is often lacking in the specific resources that women need from nutrition to reproductive and sexual health. We will talk about WPGH's Women's Health program and create a systems map to understand the links between culture, education, and politics around women's health rights. We will then discuss Ecuador's shift in women's health policy over the last decade focusing on health screenings, in-hospital births, and abortion. Students will go through a women's health training before participating in a clinic for women's health.

## **Day 8: Final Day**

Final Project Presentations

Closing Reflections

Bus to GYE

The last day in Bahia, we will have final project presentations and time to share our reflections on the trip as a group together. Students will take a bus back to Guayaquil for their flights home.