

RESPUESTA EN CLIMA Y AMBIENTE PARA LA SALUD EN LAS AMÉRICAS

Building a community in climate and health

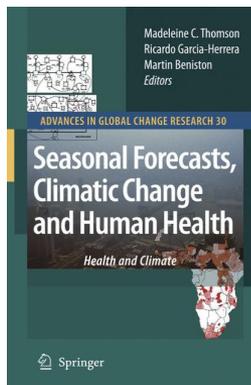
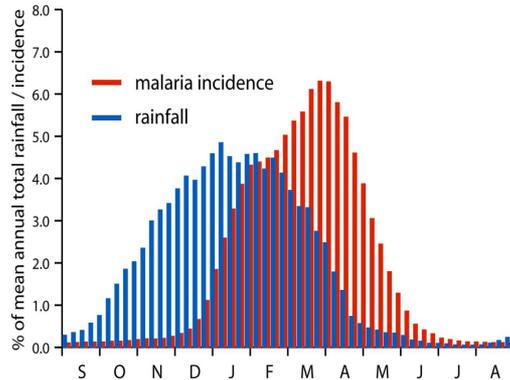
Gilma C. Mantilla C. MD

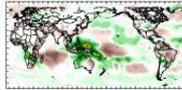
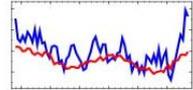
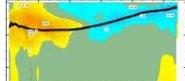
Profesora. Instituto de Salud Pública . Pontificia Universidad Javeriana
Investigadora Adjunta .International Institute for Climate and Society. Columbia
University



Manager: The International Research Institute for Climate and Society

Improve society's ability to understand, anticipate and manage the impacts of climate change to improve human and environmental well-being, especially in developing countries.



<p><i>The physical climate as seen through a series of maps and analyses ...</i></p> <p>Search the IRI Map Room</p>	<p>IRI</p>  <p>IRI MAP ROOM</p>	<p>CATEGORIES</p> <ul style="list-style-type: none"> Global Regional ENSO Health Food Security Fire International Federation
		

Diagnosis 2007

- Gaps in conceptual knowledge of climate, climate change, data and information, methodologies, and resources available to the public health community.
- Lack of connection between experts in this interdisciplinary field.
- Lack of a training curriculum





Madeleine Thomson, Judy Omumbo, Gilma Mantilla, IRI



Mark Becker, CIESEN

Team



Patrick Kinney, Mailman School of Public Health

- What? (health and climate, public health and climate or/and adaptation or mitigation)
- Why? (raise awareness, reduce impacts, solve local climate and public health problems, generate evidence)
- Who? (practitioners, decision-makers, undergraduate and graduate students, researchers, general public, specific communities)

Beginning



Beginning

- Where? (global, regional, local)
- How? (face-to-face, online, blended, multi- or interdisciplinary approach)
- Resources? (donors, governments, academia, institutions, mix)
- Monitoring? (process evaluation, impact evaluation)



Design 2008

- Objectives
- Target population
- Methodology
- Evaluation
- Funding/Financing



Objectives - Population

- Understand the role of climate in the burden of climate-sensitive diseases and events.
- Use new tools for analyzing climate and epidemiological data (Data Library -SIG)
- Understand how to improve the decision making process by making use of climate information.
- Understanding how to communicate and manage climate risk

Professionals: health, meteorology and climate (15 -25)

Institutions:

Universities

Governmental institutions

Nongovernmental institutions

Methodology

2 face-to-face weeks

4 components

- Conferences
- Practical sessions
- Individual projects
- Evaluation

4 modules:

- ✓ Module I: Basic Concepts in Public Health and Climate Change
- ✓ Module II: Sources and Tools for the Analysis of Climate and Public Health Data
- ✓ Module III: The use of climate information in climate-sensitive disease decision-making
- ✓ Module IV: How to write research proposals

1 community : Climate Information Use for Public Health Action (CIPHAN)



Evaluation

- Students
 - Survey of prior knowledge
 - Daily
 - Weekly
 - General Organizer es
- Teachers
- Support personnel



Implementation 2008 -2017



Funding: NOAA (2008), Earth Institute, Mailman School of Public Health
Ministries of Health,
Meteorological Agencies, PAHO,
WHO, WMO, IAI, Universities,
Institutes of Public Health.

Facilitators

Average: 20 - 30 from different regions and profiles

Profile

Meteorological and Climate Agency Professionals
University Professors (local, international)
Decision makers (Ministries, WMO, PAHO, WHO)

Disciplines

Public health, geography, agronomy, biology, bacteriology, entomology, dentistry, engineering, environmental sciences, physics, oceanography, medicine, statistics, mathematics, meteorology, climate, atmospheric sciences, anthropology, sociology, nutrition, epidemiology.

Locations

New York (global, 2008-2013)
Colombia (2008)
Ethiopia (2009)
Madagascar (2010)
Uruguay (Región Mercosur 2011)
Ecuador (Región Andina 2012)
Trieste (global, 2013 y 2017)
Brasil (2015)
Colombia (2015)

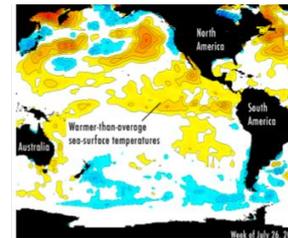


Results

English/French/Spanish Newsletter

Climate Information for Public Health Action
(CIPHA)

Summer Institute
News from the Ground
August 2009



(Source: IRI Web page)

Warmer sea surface temperatures in the equatorial Pacific predict El Niño event - ENSO!

From the Editor

Breaking News: The ENSO forecast

Recent IRI and WMO forecasts point to a higher than normal probability (56%) of an El Niño event developing this year.

The magnitude of this event is still not clear but it is necessary to develop an action strategy to help manage the potential risks and reduce impacts, both globally and at a regional level. Previous El Niño have been associated with negative global climatic and socio-economic impacts, including public health impacts in specific locations.

Seasonal forecasting methods and information can be used to far greater effect by the health sector. For example the beginning and progression of El Niño can now be forecast months ahead, and can give a timely seasonal indicator of malaria risk. In this context El Niño provides opportunities for early warning and could be used as an indicator to strengthen the role of the Ministry of Health in disaster preparedness programs as well as in disease surveillance and monitoring.

Please find more information at:

<http://iri.columbia.edu/climate/ensodocs/health1.pdf>

The 2009 Summer Institute on Climate Information for Public Health

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Knowledge sharing is the objective of this newsletter as is the need to support emerging networks of health and climate practitioners. In his recent address to the National Academy of Sciences, President Obama also underscored the need to create a "network of networks" to maximize the varied (public health) opportunities that may arise for further environmental sciences. We believe the Summer Institute for Climate Information for Public Health is a valuable platform for creating a global network of practitioners focused on policy and practice in public health and climate issues.

Building on the response of our 2008 Summer Institute alumni, and in order to continue to bridge the existing gap in providing climate information to the public health community, the IRI and its partners ([Maimon School of Public Health](#) and [CIESIN](#)) designed and implemented the second annual Summer Institute on Climate Information for Public Health (SI 09).

This year, 12 professionals from ten countries in the Americas, Europe and Africa were selected out of the 43 applicants to participate in SI 09 (see Updates). Participants hailed from Ethiopia (3), Kenya (1), Madagascar (1), Mali (1), Ghana (1), the United Kingdom (1), Sweden (1), Ecuador (1),

'Bridging the Gap between Climate and Public Health'



You are not logged in. (Login) English (en) ▼

Climate Information for Public Health Action Network

PAHO/WHO Collaborating Centre on Early Warning Systems for Climate Sensitive Diseases



[Home](#)
[Training Tools](#)
[Library](#)

Library

Searchable database of research on climate-sensitive diseases

By Region: ▼

OR

By Disease: ▼

[Advanced Search](#)

About the Climate Information for Public Health Action Network



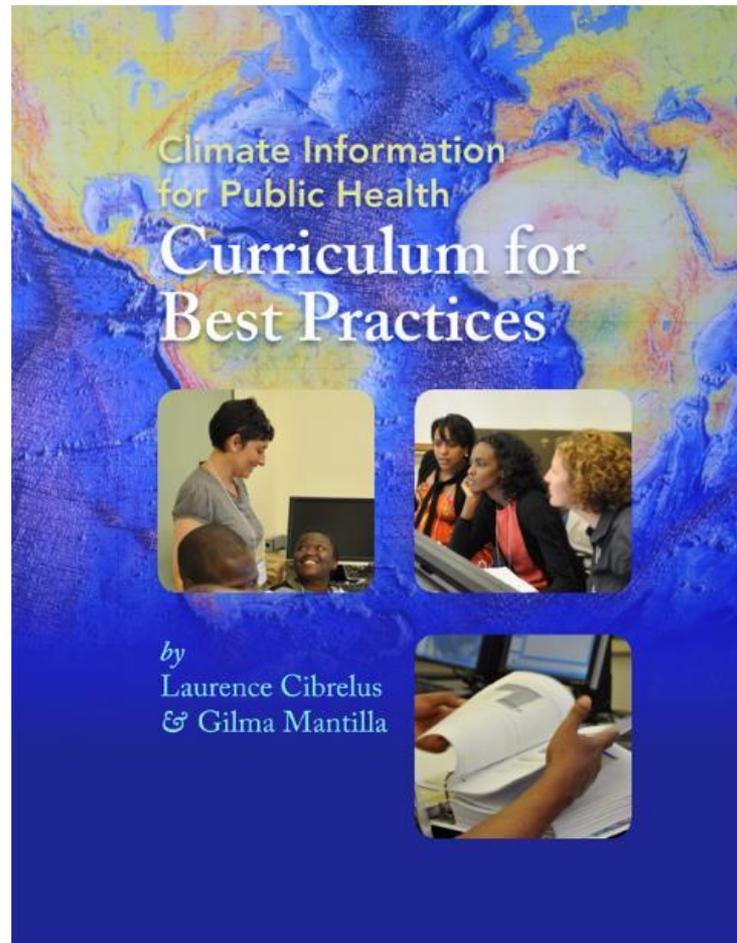
THE CIPHAN has been developed to provide public health professionals with knowledge, methodologies, tools, and data to better manage climate sensitive diseases* toward improving health outcomes. It acts as a web portal to guide the learner towards other sources of information, as well as a source of learning resources, such as educational modules and exercises. This site's library also contains a directory of published material to give the reader opportunity for further investigation.

This portal is subdivided into three sections: the Climate Sensitive Disease Library, Courses and Training Tools. The portal is currently still under construction and various sections are regularly updated.

Available Courses

- 2010 Summer Institute on Climate Information for Public Health

Results



Authors: Laurence Cibrelus; Gilma Mantilla. IRI

Participants in the development:

IRI facilitators and tutors who participated in the courses 2008-2010: Pietro Ceccato; Judy Omumbo; Megan Sheremata; Madeleine Thomson.

Students that participated in the course 2008- 2010

Review:

Dionisio Herrera - Director of the Field Epidemiology and Public Health Interventions Training Program. Atlanta. US..

Ulisses Confalioni. Professor of Public Health . FIOCRUZ

Moïse Desvarieux. Director of Chronic Diseases. Columbia University School of Public Health.

Andy Robinson. Climate Manager. IRI

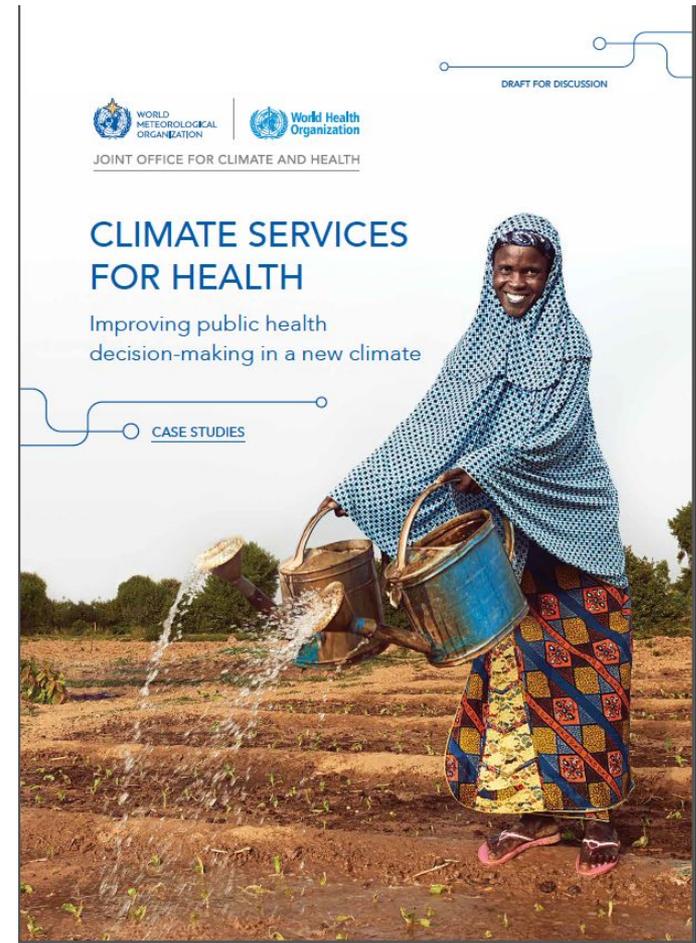
Wayne Elliot. Meteorological Agency Director . UK

Domains and Competencies

Dominio	Competencia
1. Conceptos Básicos en Salud Pública y clima	Entender los marcos básicos para el análisis de la salud pública, los factores que impulsan el sistema climático y la diversidad de métodos utilizados para la recoger información de salud pública y clima
2. Métodos y herramientas para el análisis de los datos climáticos y de Salud Pública	Analizar en el espacio y el tiempo la relación entre el clima y los datos de salud pública usándolos métodos estadísticas y matemáticos adecuados
3. El uso de la información climática en la toma de decisiones de enfermedades sensibles al clima	Aplicar la información del clima para mejorar la vigilancia de la salud pública, la alerta temprana, la prevención y el control de eventos sensibles al clima
4. Informática y Tecnología de Información	Usar software para aplicaciones relevantes en la información climática para la salud pública
5. Comunicación en Salud Pública y el clima	Desarrollar medios eficaces de comunicación y herramientas para la salud pública y la información sobre el clima
6. Capacitación en salud y clima	Asesorar, capacitar y monitorear profesionales de salud pública y clima en el uso de información de clima

Results

- More than **250** graduates and **35** facilitators
- **4** national courses led by graduates
- **3** regional courses (Mercosur and Andean region) and **one** global course (graduates and facilitators)
- Technical reports, video and publications
- Alumni research projects and publications in scientific journals.
- Training material in 3 languages (English, French and Spanish)
- Alumni network generating training initiatives in their country or region
- Alumni assuming leadership roles at international and national level



Results



TR12-01
TECHNICAL
REPORT



INFORME FINAL:

Instituto de Capacitación en Clima y Salud. Mercosur 2011 Informe Técnico

Gilma Mantilla (IRI), Catherine Vaughan (IRI), Marcella Ohira (IAI),
Carmen Ciganda, Ministerio de Salud Pública de Uruguay

Región Mercosur 2011

Uruguay
Paraguay
Brasil
Chile
Argentina.

Región Andina 2012

Ecuador
Colombia
Venezuela
Bolivia
Perú
Chile

Project 1: Strengthening the technical and scientific capacities of Ecuador, Panama and Peru for the development of applications in the area of climate and health.

Project 2: Climate variability and its probable impacts on health in Latin American cities: Buenos Aires, Santiago, Montevideo, Salto and Manaus.

Project 3: Development of a health and climate integration and management system for the district level.

Project 4: Diagnosis of the behavior of communicable diseases in relation to climate variability in border cities between Brazil and Uruguay.

Project 1: Climate variables and parameters in water quality monitoring in the Metropolitan District of Quito, Guayaquil in Ecuador and Santiago de Chile.

Project 2: Creation of a Binational Network for Dengue Surveillance and Control relating the use of climate and health information in the Peruvian-Ecuadorian border area.

Project 3: Relationship between diarrheal diseases and climate variables in the Eloy Alfaro and Tumaco Canton in the Ecuadorian-Colombian Border Zone.

Project 4: Pilot Project for the use of meteorological and climatological information to improve the health intervention in the topic of Dengue, to be carried out in the Tropic of the Department of La Paz, Bolivia.



**Ministries of
Health-Meteorological
Institutes-Academia**



GLOBAL CONSORTIUM ON CLIMATE AND HEALTH EDUCATION 2016....



Columbia University
MAILMAN SCHOOL
OF PUBLIC HEALTH

Survey on Climate Change Teaching in Medical Schools . Colombia 2017

RESULTADOS PRIMERA ENCUESTA SOBRE EDUCACIÓN DE CAMBIO CLIMÁTICO Y SALUD EN COLOMBIA

59 universidades con Facultad de Medicina

47 (80%) respondieron la encuesta sobre educación de cambio climático y salud



Para mayor información:
Gilma Mantilla, mantilla_g@javeriana.edu.co
y Christina Li, cl3527@columbia.edu

¿QUÉ HAY EN LOS PLANES CURRICULARES?

25 (54%) de las universidades incluyen el tema en el programa de pregrado de medicina

El tema se viene dictando desde hace 8 años, con un promedio de 60 estudiantes por clase

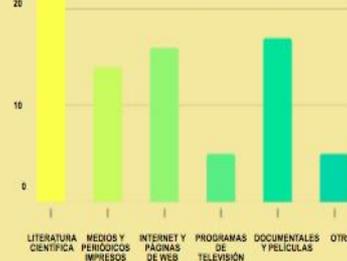
La Pontificia Universidad Javeriana es la única que tiene en pregrado como en posgrado incluido el tema

Ninguna universidad tiene un curso específico para cambio climático y salud

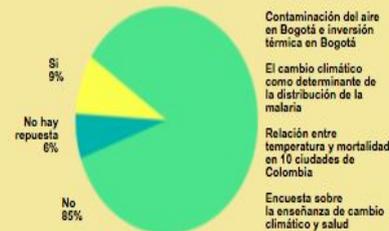
El tema se da de forma presencial en el 100% de las universidades y hace parte de cursos regulares de:



LOS RECURSOS QUE SE UTILIZAN PARA ENSEÑAR CLIMA Y SALUD



LAS UNIVERSIDADES QUE HAN INICIADO PROYECTOS DE INVESTIGACIÓN EN EL ÚLTIMO AÑO



¿POR QUÉ NO SE INCLUYE EL TEMA EN LOS PLANES CURRICULARES?



¿CÓMO AVANZAR EN LA INCLUSIÓN DEL TEMA EN LOS PLANES CURRICULARES?

- 100% de las universidades les gustaría capacitar a los docentes en el tema
- 100% les gustaría que su universidad fuera parte de una red que apoya el desarrollo de currículos y proyectos de investigación
- 97.8% tendría interés en suscribir un acuerdo y/o convenio con otras universidades iberoamericanas para desarrollar capacidades en el tema

Climate and Health

Integration in the
Undergraduate Medical
Curriculum - PUJ

Introduction
Action plan
Progress



Transdisciplinary actions

- Integration between disciplinary fields (meteorology, climate, epidemiology, environmental sciences, anthropologists, geographers, oceanographers, engineers, physicians, biologists, bacteriologists, dentists, agronomists, among others).
- Inclusion of non-academic actors (governmental and non-governmental institutions, specific communities).
- Solution-oriented and context-based knowledge production: local and regional courses adapted to the geographical, social and cultural context. Application in public policy. Publications
- Creation of new national and international working groups (Argentina, Brazil, Bolivia, Colombia, Mexico, UK, Ecuador).
- Institutional arrangements with funders (allocating funds, in-kind collaboration and funding from all parties).
- Communication : Development of native language products (Spanish, English, French).

Challenges

- Increase coverage in the climate and health training process.
- Strengthen the application of research project results.
- Strengthen the capacity of trainees in statistical/modeling skills.
- Continue to encourage publication of scientific evidence
- Effectively communicate the results of the initiatives.
- Strengthen the management of financial resources from governmental entities.

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CLIMATE INFORMATION FOR PUBLIC HEALTH ACTION

ROUTLEDGE STUDIES IN ENVIRONMENT AND HEALTH



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Questions??

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