

**IAI Training Institute on Climate and Health in the Americas  
University of the West Indies, Kingston, Jamaica  
November 7 – 18, 2005**

**Joan L. Aron, Ph.D., Science Program Coordinator  
Simon R. Young, Ph.D., Applications Program Coordinator**

**Monday, November 7, 2005**

**9.00 – 10.30**

**Opening Ceremony**

*Dr. Dianna Ashley, Director of the Health Promotion and Protection Division  
Ministry of Health, Jamaica*

*Prof. Ronald Young, Dean of the Faculty of Pure and Applied Sciences  
University of the West Indies, Mona, Jamaica*

*Dr. Joseph Skobla, Head of the Department of Physics  
University of the West Indies, Mona, Jamaica*

*Prof. Anthony Chen, Department of Physics  
University of the West Indies, Mona, Jamaica*

*Ms. Celine Leite, Inter-American Institute for Global Change Research*

**10.30 – 10.45** Coffee Break

**10.45 – 12.00**

**Keynote Lecture**

Climate Change, Climate Variability and Weather: Overview  
*Prof. Anthony Chen, Department of Physics  
University of the West Indies, Mona, Jamaica*

**12.00 – 12.30**

**Introduction to Training Institute**

Introductions of the coordinators and management staff  
Overview of timetable, logistics and expectations  
Introduction of participants

**12.30 – 13.30** Lunch

**13.30 – 14.30**

Climate and Health in Relation to Global Change: Overview  
*Joan L. Aron, Training Institute Science Program Coordinator*

Natural Hazards, Social Vulnerability, Adaptive Capacity, Early Warning, and  
Communicating with Decision-Makers: Overview  
*Simon R. Young, Training Institute Applications Program Coordinator*

**14.30 – 15.30**

Participant Presentations (Part I)

**15.30 – 15.45** Coffee Break

**15.45 – 17.30**

Participant Presentations (Part II)

**Tuesday, November 8, 2005**

**Session: Natural Hazards, Early Warning and Social Dimensions**

**8.30 – 10.30**

Climate Change and the Frequency/Severity of Geological and Meteorological Hazards  
*Simon R. Young, Training Institute Applications Program Coordinator*

Climate Change Hazards and Emergency Preparedness  
*Don MacIver, Environment Canada*

**10.30 – 10.45** Coffee Break

**10.45 – 12.10**

Community-based Natural Disaster Assistance in the Caribbean  
*Alan Ross, Consultant to USAID (Caribbean Region)*

Roundtable Discussion - Session Lecturers

**12.10 – 12.30**

Introduction to Training Institute Seed Grant program  
*Celine Leite, Inter-American Institute for Global Change Research*

**12.30 – 13.30** Lunch

**Session: Diverse Aspects of Climate and Health**

**13.30 – 15.30**

Monitoring and Forecasting Mosquito Abundance and Encephalitis Virus Transmission Risk in California

*Forrest Melton, California State University, Monterey Bay & NASA, U.S.A.*  
*Chris Barker, University of California, Davis, U.S.A.*

Eutrophication, Harmful Algal Blooms and Health in Coastal and Estuarine Systems Under Increasing Climate and Human-Driven Environmental Changes

*Gustavo J. Nagy, Universidad de la Republica, Uruguay*

**15.30 – 15.45** Coffee Break

**15.45 – 17.30**

African Dust Clouds Associated with Increased Pediatric Asthma Accident and Emergency Admissions on the Caribbean Island of Trinidad

*Michele Monteil, University of the West Indies, St. Augustine, Trinidad*

Stratospheric Ozone Depletion and Human Health

*Janice Longstreth, Institute for Global Risk Research, U.S.A.*

**Wednesday, November 9, 2005**

**Session: Climate and Mosquito-Borne Diseases -- Malaria and Dengue**

**8.30 – 10.30**

The Effect of Climate Variability on Dengue in Mexico

*Horacio Riojas-Rodriguez, Instituto Nacional de Salud Pública, Mexico*

The Effect of Climate Variability on Malaria and Dengue in Venezuela

*Yasmin Rubio-Palis, Ministerio de Salud y Desarrollo Social (MSDS)  
& BIOMED, Universidad de Carabobo, Venezuela*

**10.30 – 10.45** Coffee Break

**10.45 – 12.30**

The Effect of Climate Variability on Malaria in Colombia  
*Guillermo L. Rúa, Universidad de Antioquia, Colombia*

Moving Average Temperature Index for the Potential Onset of Dengue Epidemics in the Caribbean

*Dharmaratne Amarakoon, University of the West Indies, Mona, Jamaica*  
*Anthony Chen, University of the West Indies, Mona, Jamaica*

**12.30 – 13.30** Lunch

**13.30 – 15.30**

Early Warning Systems for Climate Sensitive Diseases

*Stephen J. Connor, International Research Institute for Climate Prediction, U.S.A.*

Ecohealth Approach to Malaria Control

*Juan Eugenio Hernandez, Instituto Nacional de Salud Pública, Mexico*

**15.30 – 15.45** Coffee Break

**15.45 – 17.30**

Vector-Borne Disease Control Programs in the Americas

*TBD: PAHO*

Ecohealth Initiative on Vector-Borne Disease

*Roberto Bazzani, International Development Research Centre (Canada), Uruguay*

*Roberto Bazzani will be available in the evenings of November 9/10 to discuss the forthcoming IDRC/Ecohealth solicitation for vector-borne disease projects. The details will be announced at the Training Institute.*

**Thursday, November 10, 2005**

**Session: Climate and Mosquito-Borne Diseases -- Malaria and Dengue (cont.)**

**8.30 – 12.30**

Field Trip in Kingston Vicinity on Entomology in Dengue Surveillance and Control

*Dave Chadee, University of the West Indies, St. Augustine, Trinidad*  
*Sherine Huntley, Ministry of Health, Jamaica*

**12.30 – 13.30** Lunch

**13.30 – 15.30**

Analyze data collected in the field.

Discuss what was learned in the field trip in the context of climate and disease studies as well as natural hazards responses.

**15.30 – 15.45** Coffee Break

**15.45 – 17.30**

Breakout groups discuss assigned topics on mosquito-borne disease. Breakout groups report in plenary session.

*Facilitator: Joan L. Aron, Training Institute Science Program Coordinator*

**Friday, November 11, 2005**

**Session: Project Development and Training Institute Seed Grants**

**8.30 – 10.30**

Interdisciplinary Team Formation: NSF Research and Practical Recommendations  
*Leigh Abts, Johns Hopkins University, U.S.A.*

**10.30 – 10.45** Coffee Break

**10.45 – 12.30**

Breakout groups discuss assigned topics on interdisciplinary challenges and report in plenary session.

*Facilitator: Leigh Abts, Johns Hopkins University, U.S.A.*

**12.30 – 13.30** Lunch

**13.30 – 14.30**

Review of Climate and Health Projects in the Americas  
*Marco Alcaraz, Organization of American States*

**14.30 – 15.30**

Participants form teams to develop proposals for Training Institute Seed Grants.

*Facilitators:*

*Marco Alcaraz, Organization of American States*  
*Leigh Abts, Johns Hopkins University, U.S.A.*  
*Joan L. Aron, Training Institute Science Program Coordinator*  
*Simon R. Young, Training Institute Applications Program Coordinator*

**15.30 – 15.45** Coffee Break

**15.45 – 17.30**

Participants continue to work on proposals in teams and report in plenary on concerns.

**Saturday, November 12, 2005** Participants interact informally over the weekend.

**Sunday, November 13, 2005** Participants interact informally over the weekend.

**Monday, November 14, 2005**

**Session: Natural Disasters and Climate Change – Case Studies**

**8.30 – 10.30**

Caribbean Natural Hazards: Overview  
*Rafi Ahmad, University of the West Indies, Mona, Jamaica*

Early Warning Systems and Vulnerability  
*Allan Lavell, Facultad Latinoamericana de Ciencias Sociales y La Red de Estudios Sociales en Prevención de Desastres en América Latina-LA RED, Costa Rica*

**10.30 – 10.45** Coffee Break

**10.45 – 12.30**

El Niño, Seasonal Climate Forecasts and Monitoring Climate Change  
*Michael Taylor, University of the West Indies, Mona, Jamaica*

Roundtable Discussion - Session Lecturers

**12.30 – 13.30** Lunch

**13.30 – 15.30**

Computer Lab on Geographic Information Systems and Remote-Sensing Tools for Monitoring Climate Change, Hazard Mapping, Early Warning and Disaster Management  
*Parris Lyew-Ayee, University of the West Indies, Mona, Jamaica*

*Simon R. Young, Training Institute Applications Program Coordinator*

**15.30 – 15.45** Coffee Break

**15.45 – 17.30**

The computer lab continues.

**Tuesday, November 15, 2005**

**Session: Natural Disasters and Climate Change – Case Studies (cont.)**

**8.30 – 12.30**

Field Trip on Natural Hazards in the Area of Kingston, Jamaica

*Rafi Ahmad, University of the West Indies, Mona, Jamaica*

*Simon R. Young, Training Institute Applications Program Coordinator*

**12.30 – 13.30** Lunch

**13.30 – 14.30**

Review what was learned in the field trip in the context of natural hazards and communication with decision-makers.

**14.30 – 15.30**

Participants work on proposals for Training Institute Seed Grants.

**15.30 – 15.45** Coffee Break

**15.45 – 17.30**

Participants work on proposals for Training Institute Seed Grants.

**Wednesday, November 16, 2005**

**Session: Water Security and Quality**

**8.30 – 10.30**

Climate Change and Freshwater Management

*Balfour Spence, University of the West Indies, Mona, Jamaica*

Climate in Relation to Food and Nutrition Security in Central America  
*Ana Victoria Roman, Institute of Nutrition of Central America and Panama, PAHO*

**10.30 – 10.45** Coffee Break

**10.45 – 12.30**

Water and Health in the Americas  
*Ana Treasure, PAHO, Jamaica*

Roundtable Discussion - Session Lecturers

**12.30 – 13.30** Lunch

**13.30 – 15.30**

Breakout groups discuss assigned topics on water security and quality and report in plenary session.

*Facilitators:*

*Joan L. Aron, Training Institute Science Program Coordinator*

*Simon R. Young, Training Institute Applications Program Coordinator*

**15.30 – 15.45** Coffee Break

**15.45 – 16.30**

Breakout groups continue with reports to plenary session.

**16.30 – 17.30**

Participants work on proposals for Training Institute Seed Grants.

**Thursday, November 17, 2005**

**8.30 – 10.30**

Participants complete and turn in pre-proposals for Training Institute Seed Grants.

**10.30 – 10.45** Coffee Break

**10.45 – 12.30**

Participants discuss plans for full proposals to Training Institute Seed Grants.



**12.30 – 13.30** Lunch

**13.30 – 13.50**

Presentation on Proposal Evaluation

*Paul Filmer, U.S. National Science Foundation*

**13.50 – 15.30**

Pre-proposal teams present their proposals in plenary and receive feedback.

Feedback on Pre-proposals for Training Institute Seed Grants

*Facilitators:*

*Paul Filmer, U.S. National Science Foundation*

*Marcella Ohira, Inter-American Institute for Global Change Research*

*Joan L. Aron, Training Institute Science Program Coordinator*

*Simon R. Young, Training Institute Applications Program Coordinator*

**15.30 – 15.45** Coffee Break

**15.45 – 17.30**

Feedback on Pre-proposals for Training Institute Seed Grants (cont.)

**Friday, November 18, 2005**

**8.30 – 10.30**

Advice for Full Proposals for Training Institute Seed Grants

*Facilitators:*

*Paul Filmer, U.S. National Science Foundation*

*Marcella Ohira, Inter-American Institute for Global Change Research*

*Joan L. Aron, Training Institute Science Program Coordinator*

*Simon R. Young, Training Institute Applications Program Coordinator*

**10.30 – 10.45** Coffee Break

**10.45 – 12.30**

Participants review ideas about adaptation, early warning, communication to decision-makers and the public at large, bridging across physical and biological hazards. What are the take-home messages?

*Facilitators:*

*Joan L. Aron, Training Institute Science Program Coordinator*

*Simon R. Young, Training Institute Applications Program Coordinator*

**12.30 – 13.30** Lunch

**13.30 – 15.30**

Participants review expectations from the first day. What was successful? What not?  
Evaluation discussion (Training Institute evaluation forms to be handed out on Nov. 16<sup>th</sup>  
and returned on Nov. 17<sup>th</sup>)

*Marcella Ohira, Inter-American Institute for Global Change Research (closed session)*

**15.30 – 15.45** Coffee Break

**15.45 – 16.45**

### **Closing Ceremony**

*Prof. Trevor Jackson, Director of the Graduate School  
University of the West Indies, Mona, Jamaica*

*Prof. Wayne Hunte, Pro-Vice Chancellor for Graduate Studies and Research  
University of the West Indies, Mona, Jamaica*

*Prof. Anthony Chen, Department of Physics  
University of the West Indies, Mona, Jamaica*

*Ms. Marcella Ohira, Inter-American Institute for Global Change Research*