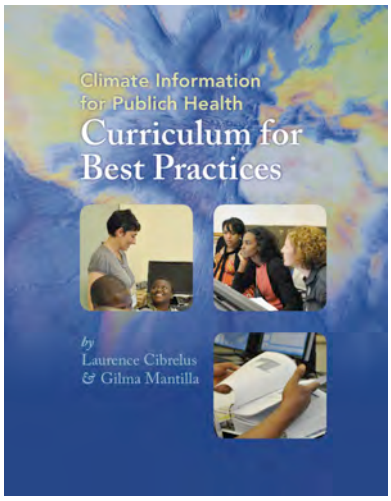
Climate Information for Public Health Action (CIPHA)

Summer Institute

News from the Ground

November 2010

Vol. 3 Issue 1



J. Rodriguez, IRI

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This newsletter provides updates on the latest developments within the CIPHA network, including the activities of alumni and facilitators, brief meeting reports, news from the health and climate community, and opportunities for collaboration.

From the Editors

The IRI is committed to converting new knowledge into training and education products which are then transferred in person and through electronic media to expand the basis for learning about climate risks and introducing the concepts of climate risk management into the decision making processes of the health sector. To meet this need, the Summer Institute on Climate Information for Public Health (SI) team started building curricula and learning networks that participants can use, refine and deliver in their own communities. After three years of running the SI, we are glad to present the **Climate Information for Public Health: A Curriculum for Best Practices – Putting Principles to Work** that we hope will enable the widest possible uptake from the public health community around the globe.

We believe this core curriculum aligns very closely with the Field Epidemiology Training Programs (FETP) implemented by several Ministries of Health across the globe as well with courses or programs developed by Public Health, Environmental or Sustainable Departments of numerous Universities worldwide, relying either on Web-based or off-line training tools.

A lot of knowledge remains to be built in the area of climate and public health and the field efficiency of the innovative approaches illustrated in this curriculum are yet to be fully assessed. For these reasons, including a CIPH module into Public Health curricula would not only enable our understanding and operational use of the relationship between climate and health outcomes, but it would also enable monitoring and evaluating of how climate information can improve public health activities and decision-making. For this effort to be sustained and scaled-up, it is also critical that "climate-proficient" public health professionals train and mentor their peers.

This tremendously important initiative must be undertaken jointly by the climate and public health/field epidemiology communities, with the common goal of improving public health outcomes across the globe in order to meet the people's most basic needs. For more information about this new IRI development please contact Gilma Mantilla at mantilla@iri.columbia.edu

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Updates

Alumni

SI10 alum Ramesh Dhiman is a Scientist/Deputy Director at the National Institute of Malaria Research in New Delhi, India. A recent paper on Epidemic Malaria and Monsoon Rains in Northwest India is now available online: Karina Laneri, Anindya Bhadra, Edward L. Ionides, Menno Bouma, Ramesh C. Dhiman, Rajpal S. Yadav Ë, Mercedes Pascual. Forcing Versus Feedback: Epidemic Malaria and Monsoon Rains in Northwest India, which is available from: http://tinyurl.com/27cct9a

SI10 alum Pascal Yaka, serves as Chief of the "Environment and Bioclimatology" Desk with the Direction de la Météorologie in Burkina Faso. He currently is a Visitor Scientist at the African Desk / NCEP National Center for Environment Prediction in Washington DC where he works on the part-evaluation of the model of prediction of meningitis incidence rate published in http://www.ij-healthgeographics.com/content/7/1/34. This evaluation is conducted the by the Burkina Faso Meteorological Office in association with the Burkina Faso Public Health General Direction of Ministry of Health, and the "LOCEAN" Research Center, based in Paris. Pascal hopes to finalize the evaluation using NCEP new products by January 2011.

SI10 alum Moussa Mouhaimouni, head of climatological analysis at the National Meteorological Office of the Republic of Niger. Since the completion of SI10, Moussa has facilitated six workshops from June to the end of October 2010 in partnership with the National Council of Environment for Sustainable Development (CNEDD). The goal of these courses, which are sponsored by National Adaptation Action Project (NAPA), is to promote the use of climatological and meteorological information in priority sectors like agriculture, livestock and public health. The specific objective is not only to show sectoral professionals useful tools for planning their activities but also to be make them aware of potentially major consequences of climate change among which are changes in risk of climate-sensitive diseases like malaria, cholera, meningitis etc. Participants in these workshops were very pleased and promised to ask for climatological information regularly. For further information contact: mouh_moussa@yahoo.fr



Moussa Mouhaimouni delivers training on the potential uses of climate and meteorological information in Niger

SI09 alumna Cristina Recalde participated as speaker and facilitator to the Training Workshop on Dynamic Models of Climate and Malaria held in Guayaquil, Ecuador last August which was sponsored by The Ministry of Environment (MAE) and National Weather Service of Ecuador (INAMHI) with the support of the Espiritu Santo University, Centro de Modelado Científico (CMC-Venezuela), the International Research Institute for Climate and Society (IRI, USA) and the Antioquia University (Colombia). The goal of the course was to provide participants with basic knowledge and necessary tools to perform dynamic modeling of malaria using climatic variables. The workshop had the participation of professionals from institutions such as the National Malaria Eradication, the Municipality of Guayaquil, universities, research centers and the National Financial Corporation, among others. As an outcome of the workshop the organizers highlighted the participation of the audience and the formation of a national working group. Cristina presented some results on her project "Predictability Study of Malaria in Areas of the Coastal Region of Ecuador" and facilitated the practical session using the IRI Data Library. For more information please contact crisrecc86@gmail.com

Facilitators

SI09-10 Facilitators Walter Baethgen, Simon Mason and Gilma Mantilla and SI09 alumna Cristina Recalde participated as facilitators to a training conducted by the Inter-

American Institute for Global Change Research (IAI) Training Institute: Use of Seasonal Climate Predictions for applications in Latin America on 2nd - 13th August, 2010 in Buenos Aires, Argentina. The overall objective of this training was to increase local and regional capacity on the use of seasonal prediction tailored to user needs in different socioeconomic sectors (agriculture, health, water resources, disaster risk reduction, etc). They shared the IRI experience with 38 professionals from different areas of 12 countries of Latin America. Among the activities Cristina presented an exercise executed with the Statistical Climate Predictability Tool (CPT) to study the relationship between cases of malaria and climate components in a specific sector of Ecuador.

Interview



Primarily trained as a physician, Pr. Ulisses Confalonieri, from Brazil, works at the Oswaldo Cruz Foundation, which is based at the Brazilian National Health Institute.

Since working at the Oswaldo Cruz Foundation, Ulisses Confalonieri has been mostly working on the effects of climate variability and change on diseases (including tropical diseases) in Latin America, as well as on the assessment of the varied forms of vulnerability (social, environmental etc.) and on the development of tools for climate change decision-making and adaptation in Brazil.

Ulisses Confalonieri (**UC**) visited the IRI during the summer 2010 and was interviewed by Francesco Fiondella (**FF**), communication officer at the IRI.

FF: **How did you become interested in public health and climate?**

UC: It's a long story. (Laughs) Well, in 1990, I met an old friend who had an NGO in Rio in Brazil, and he invited me to join the NGO to address environmental issues. Soon after he asked me to be a representative of the NGO during the 2 weeks of the Earth Summit in 1992, which took place in Rio de Janeiro because I could speak English, Spanish, etc., so he thought I would be kind of a liaison person between what happened during the Earth Summit and bring the information and the contacts to the NGO, and I accepted. And then I met, for the first time, many people and also became aware of the discussion on climate change, on wilderness issues, etc. During the Earth Summit, I also joined an international NGO called International Society of Doctors for the Environment, based in Switzerland. I was associated to them for several years and I started to attend discussions on global environmental changes, etc. And of course, I brought that interest to my own research on tropical medicine. Then I developed a line of investigation, which was how major changes in the global environment affect the dynamics of tropical diseases. This is what I'm still doing today, and this is how everything started. Then, I started to attend and get involved in international meetings and congresses where I met people, especially the IHP [International Health Partnership of WHO], and they eventually invited me to join the Intergovernmental Panel on Climate Change (IPCC) and the Millennium Ecosystem Assessment.

FF: Regarding the climate and the public health communities: Having worked on the public health side of the issues, but with a strong focus on the climate aspect of them, how would you say the interactions between the two groups have changed and evolved in the past decade and in the last few years?

UC: It's changing for the better. In my experience, the problem is that we have to talk at two different levels: basic science, on the one hand, about which interaction is easier, and its applications, on the other hand, which may be impeded by some deficiencies in disease surveillance systems and healthcare services and are is much more difficult to address, for several reasons.

I have noticed that it is much easier for climate professionals to approach and try to understand what public health problems are, and to try to apply their products to epidemiological investigations for instance; while, for several reasons, it is much more difficult for public health professionals to get more familiar with climatology and their associated products. One of these reasons is that you shift from biology and medicine to physics and mathematics, which is much more difficult. In addition, public health people in general, at least in developing countries, are very much pressed by immediate problems: lack of access to care, higher demand for care in public healthcare centers and

hospitals, lack of resources, etc. So they often tend to focus on these issues and pay less attention to the issue of climate in general - except maybe for disasters, which are the most visible climate impacts on people's lives and well-being. In general, since I started in the IPCC 13 years ago, the public health community seems now much more clinging to interact with climate people.Climate change became a global issue and most governments are somehow concerned with the impacts of climate change and what can be done in terms of public policies to protect their population. Currently, it's highly favorable to introduce climate discussions in the public health agenda generally in developing countries. I know the situation in Latin America well, but not in Africa or in Asia. In general, that's my perception of the interaction, and of course the scientific and other interactions are fast increasing, and many new partnerships are being formed. I don't think there's any problem with that. The main problem is to translate the science into public health policies. It is going to take some time for climate products to be used in routine for public health.

FF: What are the challenges to getting climate science translated into public health policies?

UC: Public health professionals must be convinced of the importance of climate as a possible determinant of poor health and increased risks. And for that, we have to be able to produce credible or accurate use of such results to convince people that climate is an important determinant of ill health in many places. In Latin America, there is a cultural aspect to this, which is that public health people are very much linked to social sciences. So the major issue in terms of what can and should be changed in society, to have better health for the people, is to decrease social inequality. So once people get in the track of social inequality, they don't want to pay attention to physical aspects of the environment. Poverty is the main driver of public health discussions in Latin America. It may be perhaps the most important driver of poor health, poor living conditions and poor medication but we should not neglect the physical aspects of environment, like water quality and changing climate, changing temperatures, deforestation among others: all are important. Depending on the context, the importance of poverty as a health-determinant may vary, that's why it is important to consider other issues, such as disasters or weather extremes, which kill more poor than rich people.

Upcoming Training Courses

World Climate Research Program (WCRP) Workshop on Drought Predictability and Prediction in a Changing Climate: Assessing Current Knowledge and Capabilities, User Requirements and Research Priorities. Barcelona, Spain. 2-4 March 2011.

This workshop is designed to accelerate progress on improving prediction of drought on time scales of weeks to centuries, with a focus on developing capabilities and products that facilitate practical applications for stakeholders around the world. Scientists involved in all aspects of drought research and applications, including modeling and observations, as well as key users of drought information are invited to participate. More information available from: http://drought.wcrp-climate.org/workshop/

Summer Institute on Climate Information for Public Health. New York, USA. May 16 -27, 2011

The IRI, in partnership with the Center for International Earth Science Information Network (CIESIN) and the Mailman School of Public Health, is pleased to announce the 2011 Summer Institute course on Climate Information for Public Health.
This two-week training course offers professionals who play a research role in operational public health decision-making the opportunity to learn practical methods for integrating climate knowledge and information into health decision-making processes through expert lectures, special seminars, focused discussions and practical exercises. The online applications are already open. More information available from: http://iri.columbia.edu/education/ciph11

Upcoming Events

Second Symposium on Environment and Health. Seattle, Washington. 23–27 January 2011.

This symposium is sponsored by the American Meteorological Society (AMS), and organized by the AMS Policy Program along with its public/private sector partners is part of the 91st AMS Annual Meeting. The main organizer of the event is

Wendy Marie Thomas, an SI08 alumna. More information available from: http://www.ametsoc.org/meet/annual/

Environmental Health 2011: Resetting Our Priorities. Salvador. Brazil. February 6 – 9, 2011.

This conference is organized and sponsored by Elsevier and the journals *Environmental Research* and *Science of the Total Environment*. It will be chaired by Prof. Ellen Silbergeld of Johns Hopkins University, Baltimore, USA, and Prof. Jerome Nriagu from the University of Michigan, USA. The event will provide an interdisciplinary platform to exchange knowledge and learn about the latest issues in environmental health. The main themes of this conference will include: environmental health research, climate change, globalization and policy changes to environmental health and impact of technological innovations, including analytic methods.
More information available from:
http://www.environmentalhealthconference.com

American Society of Limnology and Oceanography (ASLO) 2011 Aquatic Sciences Meeting: Tropical Atlantic Variability. San Juan, Puerto Rico. 13-18 February 2011.

This conference will bring together an international group of scientists to meet the challenge on the potential impacts of global warming and secular (decadal to multidecadal) climate variability on the Caribbean region and bordering regions in the tropical North and South Americas.

More information available from:
http://www.aslo.org/meetings/sanjuan2011/

Recent Publications

Summary of the Climate Information for Public Health Training Course, Palisades, New York, May 17-28, 2010.G. Mantilla, M. Stanton L. Cibrelus. September 2010.

The third Summer Institute on Climate Information for Public Health was held at Columbia University's Lamont-Doherty Campus, Palisades, New York, in May 2010. It was designed to engage professionals who play a key role in the



operational decision making for climate-sensitive diseases in identifying and evaluating appropriate use of climate information. This report describes the content and the evaluation of the course with summaries of each training module.

The full report is available from the IRI's website:
http://iri.columbia.edu/publications/id=1011

Training Courses on the Use of Climate Information for Public Health in Madagascar. Cibrelus, L., N. Raholijao, Y. Raoelina, M. C. Rakoarivony, L. Tuseo, R. Cousin, and H. Kootval. 2010.

This report documents the two training courses designed and implemented by the IRI and the Malagasy Climate and Health Working Group in 2009 and 2010 for professionals in the climate and public health communities. The curriculum for both courses was based on the Summer Institute on Climate Information for Public Health organized each year by the IRI and partners from Columbia University, but the courses were delivered in the local language and the materials were tailored to local needs, using national disease surveillance data and examples relevant to the areas of work of the participants.

Available from: http://iri.columbia.edu/publications/id=1034

Environmental and Social Determinants of Health. Galvão LA, Finkelman J and Henao S. Pan American Health Organization, September 2010.



The Pan American Health Organization (PAHO) introduced a new book, *Environmental and Social Determinants of Health,* integrating environmental issues and health agendas. In the 25 chapters of this book, more than 100 authors and coauthors from several countries in the region expressed their views,

discuss the situation and develop proposals to strengthen and advance public policies, programs and lines of intervention applied research. They also address the governance and decision-making mechanisms with different themes and substantive issues that affect environmental health.

Available *in Spanish* from: http://tinyurl.com/29bto8z



The Health Practitioner's Guide to Climate Change: Diagnosis and Cure. Jenny Griffiths, Mala Rao, Fiona Adshead and Allison Thorpe. September 2009.

This is the first book to set out what health practitioners can do to prevent the worst impacts of climate change, to make health services sustainable, and to design healthy, sustainable communities. It is written by an authoritative group of authors from key organizations in the field, including the Meteorological Office, the Faculty of Public Health, Natural England, the London School of Hygiene and Tropical Medicine, the Climate and Health Council, the National Health Service (NHS) Sustainable Development Unit, the Health Protection Agency, the University of the West of England, Sustrans and the National Social Marketing Centre.

More information from:
http://www.earthscan.co.uk/?tabid=74742

Biometeorology for Adaptation to Climate Variability and Change. Kristie L. Ebi, Ian Burton, Glenn R. McGregor. Springer Science ,2009

This book is part of a collection of papers on biometeorology and adaptation which purpose is to communicate some of the basis ideas and concepts of the different subfield of biometeorology as they relate with impacts of climate and weather on human activities.

More information available from: http://tinyurl.com/2f32yb3

Mechanisms of Climate Change in the Semiarid African Sahel: Local View. Giannini, A. *Journal of Climate*, 23, 743-756.

This paper sketches alternative interpretations in model behavior in a subset of global climate models used in the 4th Assessment Report of the Intergovernmental Panel on Climate Change to make physical sense of divergent projections of future rainfall change in the Sahel. The analysis focuses on two models—those that exhibit the most extreme behavior, one projecting continued significant drying of the Sahel, the other a wetter future—to show that such models balance local and remote influences differently.

More information available from:
http://journals.ametsoc.org/doi/full/10.1175/2009JCLI3123.1

Related Links

http://tinyurl.com/28pjcbo
http://www.meteo-burkina.net/
http://www.mrcindia.org/about.htm
http://www.fiocruz.br/cgi/cgilua.exe/sys/start.htm?tpl=home
http://portal.iri.columbia.edu/portal/server.pt

Contact Information

Please contact cipha@iri.columbia.edu to send your comments or materials to be included in the next CIPHA newsletter. **The deadline for documents to be included in the next issue is January 20th, 2011.**

If you have questions about IRI activities, please visit our Home Page: http://portal.iri.columbia.edu/portal/server.pt

Internet Citation

CIPHA Newsletter, November 2010, Vol.3 Issue 1. International Research Institute for Climate and Society, The Earth Institute at Columbia University, Palisades, NY.

Available from: http://iri.columbia.edu/education/ciphnews

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