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Climate Information for Public Health Action Summer Institute

News From the Ground

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

Editorial

The IRI has been leading the global health community in the creation and dissemination of climate information for public health decision-making for more than a decade. The last few months have brought series of exciting partnership development that, we believe, will have a long term impact on the way climate and public health communities work together across the globe.

IRI has been re-designated as a PAHO/WHO collaborating center. IRI has had this status for 8 years under the leadership of Stephen Connor, specifically collaborating on malaria early warning system and other climate sensitive diseases. Under the re-designation (with Madeleine Thomson) we will maintain our core focus on malaria but frame our effort based on five principles ***IDEAS*** (Innovate, Demonstrate, Educate, Advocate and Serve**).**

Innovate by undertaking new research and analysis to establish the relationship of historical, current and predicted climate to health outcomes and how that relationship might be exploited for improved public health decisions using new technologies and social science.

Demonstrate the utility of the newly available information to decision makers.

Educate the next generation of researchers and practitioners in the use of climate and environmental information for public health decisions using the

In This Issue

2 **Editorial**

3 **Updates**

5 **Upcoming Courses**

7 **Upcoming Events**

9 **Publications**

11 **Related Links**

11 **Contact Information**

11 **Internet Citation**

power of the IRI Data library and the approach developed through the Summer Institute "Climate Information for Public Health".

Advocate for Global Climate Services that meet the needs of public health decision-makers via our already extensive collaborative network.

Serve and facilitate a growing global community of practice, including PAHO/WHO and its global development partners, with new data, tools and methodologies that respond to their needs.

The benefits of being a PAHO-WHO Collaborating Center includes the opportunity for extensive partnerships across the United Nations and global health community as well as the chance to influence policy and practice through targeted research and training.

For example IRI is working with the WHO Special Programme for Research and Training in Tropical Diseases as part of an on-going four-year, multi-country research initiative between WHO/TDR and the International Development Research Centre (IDRC) of Canada entitled "Population health vulnerabilities to vector-borne diseases: increasing resilience under climate change conditions in Africa". In this partnership IRI is supporting the design and implementation of capacity building activities for interdisciplinary policy-oriented research.

In our last issue we reported that Dr. Lucien Manga -WHO/AFRO Regional Advisor in Environmental Health visited IRI in New York and partners in Washington as part of his mission to help support the establishment of a Climate Change Adaptation program for Public Health in Africa. Although much was achieved during his October visit many activities were derailed by Superstorm Sandy – giving him first hand experience of an extreme climate event!. It was a pleasure therefore to welcome him back for a second time in January to further his mission.

The initiative he is supporting stems from the 2008 Libreville declaration (http://www.afro.who.int/en/regional-declarations.html) which established formal links between ministries of health and ministries of environment in African countries to tackle major environmental problems including climate change.

Through this process a new set of partnerships is being established between African institutions and between African networks and northern counterparts. The ultimate aim is to strengthen climate-associated disease prediction, detection, prevention, response and control to further understand, promote and protect improved public-health outcomes.

Updates

Alumni

2012 Andean Course on Climate and Health (ACCH) Training .Maria Ortega is a medical doctor from the Imbabadura county in Ecuador, carried out a workshop on Climate and Health with the surveillance team that she leads last January. This is an example of how the CIPHA Summer Institute trainees are transferring the information and knowledge they got from the IRI trainings. She also is a co-principal investigator (PI) of a seed project that will try to understand the relationship between Diarrheic Diseases and Climate Variability in Catón Eloy Alfaro and Tumaco on the Border Zone of Ecuador and Colombia. This project, which is an outcome of the Andean training, involves professionals from the academia, the Ministry of Health and the meteorological office from Colombia and Ecuador.

2011 Mercosur Course on Climate and Health (MCCH).Jose E. Villarroel , geographer who works at the Ministry of Health is the co-author of the paper entitled: The influence of climatic conditions on the transmission dynamics of the 2009 A/H1N1influenza pandemic in Chile. This is a good example of how trainees from CIPHA courses may use what they learned during them and apply to the needs of their own countries. The paper is available online at: http://www.biomedcentral.com/1471-2334/12/298

2011 Mercosur Course on Climate and Health (MCCH). Silvia Fontan facilitated the regional course on climate and health in Ecuador last November. She shared her experience on the implementation of the pilot project entitled: Climate variability and its likely impact on the health of cities in Latin America: Buenos Aires, Santiago, Montevideo, Salto and Manaus. This project is an outcome of the climate and health training that the IRI ran in collaboration with the Inter-American Institute for Global Research (IAI) and the Environmental Health Commission in the Mercosur region in Uruguay in 2011. Silvia is a co-PI on this project.

2011 SI Jennifer Vanos is no longer working at Health Canada, but has become a Research Associate at the University of Guelph for the School of Environmental Sciences and also a Research Consultant for Larry Kalkstein's Company "Applied Climatologists, Inc." based out of Marco Island, Florida.
She is also a Guest Editor on a Special Issue for the Journal of Environmental and Public Health on "Climate, Human Health, and Society." If you are interested to send a paper please contact Jennifer at vanosj@alumni.uoguelph.ca

2010 SI Tiantian Li from the Chinese Center for Disease Control (CDC) presented a seminar on Climate Change and Health in China at the Mailman School of Public Health of Columbia University. In her talk, she gave an overview on the climate change and health work in China. She also briefly summarized the haze pollution situation in Beijing and the work initiated as a response by the CDC of China.

Facilitators

2008-2011 SI Gilma Mantilla and Madeleine Thomson were co-organizers and facilitators of the Climate and Agro-ecological information services for nutrition programming Workshop held on January 18th 2013 in the Lamont Campus at Columbia University. This workshop was conducted in partnership with Roseline Remans, a researcher from Tropical Agriculture Center.

2008 - 2011 SI Judy Omumbo recently published a paper, "How Well Are Malaria Maps Used to Design

and Finance Malaria Control in Africa?" Some of the conclusions of this paper are that the way information on the epidemiology of malaria is presented and used needs to be addressed to ensure evidence-based added value in planning control. The science on modeled impact of interventions must be integrated into new mapping products to allow a translation of risk into rational decision making for malaria control. As overseas and domestic funding diminishes, strategic planning will be necessary to guide appropriate financing for malaria control.

The paper is available online at: http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0053198

2008-2011 SI Rémi Cousin, Walter Baethgen, Gilma Mantilla, Hugo Oliveros and Allyza Listing facilitated the First Andean Course on Climate and Health last November in Ecuador. Twenty-three participants from Colombia, Venezuela, Perú, Ecuador, Bolivia and Chile were trained. Four new climate and health working groups were established subsequently, and two new pilot projects were funded. The IRI Technical report is available online at: http://iri.columbia.edu/publications/id=1181

Meetings

Climate and Agro-ecological information services for nutrition programming, Palisades, New York, USA. 18th January 2013.

A group of 27 participants representing various disciplines (climate, nutrition, agriculture, and ecology), centers from Columbia University (the IRI, TropAg, the School of Medicine, the Mailman School of Public Health, the Center on Globalization and Sustainable Development (CGSD)) and other institutions (the Consultative Group on International Agricultural Research (CGIAR), WHO/PAHO, the Global Agricultural Information Network (GAIN), the Food and Agriculture Organization(FAO)/World bank, Sackler Institute of Human Nutrition) was brought together for a one-day workshop in the Comer building of the Lamont Campus.

The main objectives of the workshop were to reflect on the existing work in this area, brainstorm ideas, and develop an action framework to explore and mobilize the potential of climate and agro-ecological information services for nutrition programming. Participants from various sectors (climate change, nutrition, agriculture, and biodiversity) and various organizations (universities, non-governmental organizations, and international organizations) contributed to the discussion

Common themes throughout the workshop placed an emphasis on the vast potential of climate and agro-ecological information to improve nutrition programming and the simultaneous need to actively establish a bridge among the nutrition, climate, public health and environment communities to benefit from these information services. Moreover, differences in spatial indicators and time-scales were often cited, resulting in a major challenge of the ability to match the scales of climate and agro-ecological data within the framework of decision-making in nutrition programs.

If you want to contribute on this discussion please contact Gilma Mantilla at mantilla@iri.columbia.edu or Roseline Remans at rremans@ei.columbia.edu

MERIT – 6th Technical Meeting – Accra Ghana 2012

The meeting was hosted by the Ghana Health Service in partnership with the MERIT Steering Committee, the meeting brought together researchers, climate scientists, disease experts and public health

practitioners from countries across the Meningitis Belt region, Europe and the United States. Madeleine Thomson (IRI) Laurence Cibrelus (independent consultant) Carlos Perez (Columbia NASA GISS) and Pascal Yaka (Burkina Faso Met Services) were among the participants.

The success of the meeting reflects a new phase in the MERIT Project whereby the gap between research and operations is narrowing through the implementation and design of several key areas of activity. As far as possible, discussions focused on the application of MERIT-related research outputs that have been achieved over the past five years, in order to add value to the considerable investments that have been made in epidemic meningitis control in Africa. With active engagement of health and climate professionals from African countries, MERIT partners are determining how existing knowledge and new research opportunities can be directed to support the public health strategy across three key areas: (i) the use of predictive tools to inform the reactive strategy, ii) the design of impact evaluation studies for the new conjugate vaccine and preventive strategy, and iii) the anticipation of longer term changes in the nature and geographic extent of the Meningitis Belt.

The technical report is available on the MERIT website at http://merit.hc-foundation.org/ under 'MERIT highlights'.

Calls

Global Health Research Fellowship in Infectious Diseases

The Mount Sinai Global Health Fellowship in Infectious Diseases is a one-year, post-residency/post-fellowship research program designed to provide physicians with the knowledge and experience they need to successfully launch research careers that focus on infectious diseases in a global context. For more information contact: Elena.Rahona@mssm.edu

Global Health Teaching Fellowship

The Mount Sinai Global Health Teaching Fellowship is a one or two-year program (for fellows without an MPH when starting) designed to provide post-graduate physicians with the knowledge and skills to become professionals in the fields of public health and healthcare for underserved populations. This fellowship has a unique focus on developing teaching strategies and techniques, so that the fellow can effectively build healthcare capacity and effect positive behavior change in settings with human resource shortages.

More information and application link: http://www.gh-training.org/training/fellows-2/fellows/

Upcoming Courses

NOAA's 11th Annual Climate Prediction Applications Science Workshop (CPASW). Logan, Utah, USA. April 23-25, 2013.

The workshop will focus on "Climate Information for Natural Resource Management." This theme will integrate broad aspects of climate information applications in water, land, forest, wildlife, habitat, energy, and other natural resources management.

The meeting format will include presentations and interactive sessions addressing the meeting goals. The workshop focus will include examples of applications of hydro-climate predictions ranging from short-term

(e.g., two-week to seasonal/annual) to long term (e.g., decadal and multi-decadal projections). Targeted users include natural resource managers from multiple sectors; for example, land, water, agriculture, forests, fish & wildlife. The workshop will highlight climate information use in special-purpose programs such as fire risk reduction, species recovery, ecosystem restoration, and flood and drought responses.

More information available online at: http://climate.usurf.usu.edu/CPASW/index.php

Training-Workshop on Iterative Risk Management for Climate Change Adaptation. Bangkok, Thailand. April 22-26, 2013.

This is a five-day training that shall mentor participants in designing and implementing iterative and flexible risk management plans. It specifically helps them to understand the iterative risk management process in view of the complexities and uncertainties inherent in climate-related risks; and to establish ways to ensure continuous re-evaluation of their risk management plans, so that information is considered and incorporated at regular intervals.

This training is designed for different organizations and entities, and it is limited to 25 participants. For more information, you can visit the webpage for this training course: http://www.rimes.int/em/?p=1159

Summer School on Uncertainty, Innovation and Climate Change. Venice, Italy. June 30th - July 6th, 2013.

The Summer School is targeted to PhD and postgraduate students who have a thorough understanding of climate change economics and would like to contribute with original work focusing on the stochastic dimension of the problem.

There is no participation fee. All applicants can apply for a scholarship. For further information on application and funding please access the Summer School Website at http://www.feem.it/ess/

Summer school on climate variability and change in the subtropics. Navarino Environmental Observatory, Messinia, Greece. June 23 -July 3, 2013.

The school is aimed at graduate students, postdocs or other researchers interested inexploring the frontier of knowledge regarding subtropical climate change. Further details of the course contents may be found online at: http://www.bbcc.su.se/index.php/courses

12th International National Centre of Competence in Research (NCCR) Climate Summer School. Grindelwald, Switzerland. September 1–6, 2013.

The Summer School is focusing on the theme "from climate reconstructions to climate predictions". This theme has been chosen due to its paramount importance in terms of both scientific challenges and pressing societal concerns.

The Summer School is open to young researchers (PhD students and Post-Docs) worldwide. Participation is highly competitive and will be limited to a maximum of 70. The registration fee (1400 CHF) includes half board accommodation, excursion and teaching material. A small number of grants will be available for students from developing countries (i.e. non-OECD countries).

Detailed information and the application form are available at http://www.nccr-climate.unibe.ch/summer_school/2013/

MSc in 'Climate Change and Development'. University of Sussex, Brighton, United Kingdom. September, 2013.

This is a unique course that aims to provide state-of-the-art training for the rapidly expanding market for development professionals with specialisation in climate change. The course offers the opportunity to undertake a dissertation with placement with a relevant organisation. Further information on the programme and the on-line application process http://www.sussex.ac.uk/study/pg/2012/taught/3931/25103

PhD and in Masters Certificate in Climate and Health. Mailman School of Public Health. New York, USA. September, 2013

The academic program builds upon diverse theoretical and methodological frameworks to provide students with the competencies necessary to understand and respond to the complex linkages between climate and human health. Doctoral training is customized to the needs and interests of individual students in consultation with program faculty. For more information on the program, click here

Upcoming Events

The 3rd Asia-Pacific Climate Change Adaptation Forum. Incheon, Republic of Korea. March 18-20, 2013.

The forum will provide excellent opportunities for a range of actors working in different sectors and systems to share their knowledge about successes, and failures, to effectively adapt to climate. The mixture of plenary and panel discussions as well as diverse side-events will provide participants with an outstanding opportunity to interact and learn about the latest ideas and practices in mainstreaming adaptation.

For further information please contact info@asiapacificadapt.net or visit: www.asiapacificadapt.net/adaptationforum2013

European Climate Change Adaptation Conference 2013. Hamburg, Germany. March 18-20,2013

This will be the first European conference, which covers the broad range of issues related to climate change adaptation and follows international conferences in Australia (Gold Coast, Queensland) in 2010 and in the United States (Tucson, Arizona) in 2012. This conference will place a greater emphasis on understanding and assessing adaptation in action under the theme integrating climate into action.

For more information see http://eccaconf.eu/index.php/page/Start-2012-04-04

Environment and health in Africa (Climate and vector-borne diseases) Symposium. Kigali, Rwanda. March 29,2013.

This Symposium, one of four at the forthcoming 4th Annual East African Community Health & Scientific Conference in Kigali, Rwanda, brings together researchers at the cutting edge of efforts to understand the relationships between health and environment, and in particular links between climate and vector-borne diseases, in Africa. More information available online at: http://www.liv.ac.uk/qwec

26th PhD Workshop on International Climate Policy Studies in economics, politics & social sciences. Paris, France. April 25–26, 2013

This workshops aims to offer doctoral candidates the opportunity to present their research ideas and results, receive feedback, and exchange information and assistance in an informal and interdisciplinary setting. PhD students from all disciplines working on topics relevant to climate policy and environmental economics are invited to submit applications. To apply for the workshop, please submit the application form available on the workshop's website.

3rd Annual Conference on Developing methods in agriculture and health research. London, United Kingdom. June 13-14, 2013.

The focus of this two-day conference will be on methodological and integrative aspects of research on agriculture and health and will feature the work and findings of researchers in agricultural development, nutrition, public health, economics, anthropology, veterinary science and other related fields.

More information available online at:
http://www.unscn.org/en/announcements/conferences/?id=880

Publications

Munang R, Thiaw I, et al. **Climate change and Ecosystem-based Adaptation: a new pragmatic approach to buffering climate change impacts**. Current Opinion in Environmental Sustainability 2013, 5:1–5

The paper highlights that Ecosystem-based (Approaches for Adaptation) (EbA) is a flexible strategy that can cope with the magnitude, speed and uncertainty of climate change.

With the impacts of climate change increasingly being felt across the world, it is important to scale up the approach to increase society resilience to climate change as well as to achieve more sustainable economic development. Though EbA still remains under-utilized by policymakers and associated stakeholders, it provides a viable strategy for pursuing development goals simultaneously with climate change adaptation and mitigation targets.

Read more from the link: http://www.africa.ganadapt.org/index.php/knowledge-base/publications/item/178-climate_change_and_ecosystem-based_adaptation-_a_new_pragmatic_approach_to_buffering_climate_change_impacts

Global Burden of Disease Study 2010. Published Dec 13, 2012

The Global Burden of Disease Study 2010 (GBD 2010) is the largest ever systematic effort to describe the global distribution and causes of a wide array of major diseases, injuries, and health risk factors. The results show that infectious diseases, maternal and child illness, and malnutrition now cause fewer deaths and less illness than they did twenty years ago. The study is described by Lancet Editor-in-Chief Dr Richard Horton as "a critical contribution to our understanding of present and future health priorities for countries and the global community."

Available online at: http://www.thelancet.com/themed/global-burden-of-disease

Jones, A. E and Morse A.P**. Skill of ENSEMBLES seasonal re-forecasts for malaria prediction in West Africa.** Geophysical Research Letters, Vol. 39, L23707, 2012

This study examines the performance of malaria-relevant climate variables from the ENSEMBLES seasonal ensemble re-forecasts for sub-Saharan West Africa, using a dynamic malaria model to transform temperature and rainfall forecasts into simulated malaria incidence and verifying these forecasts against simulations obtained by driving the malaria model with General Circulation Model-derived reanalysis. Two subregions of forecast skill are identified: the highlands of Cameroon, where low temperatures limit simulated malaria during the forecast period and interannual variability in simulated malaria is closely linked to variability in temperature, and northern Nigeria/southern Niger, where simulated malaria variability is strongly associated with rainfall variability during the peak rain months. Available online at: http://onlinelibrary.wiley.com/doi/10.1029/2012GL054040/abstract

Skansi María de los Milagros, et al. **Warming and wetting signals emerging from analysis of changes in climate extreme indices over South America**. Global and Planetary Change 100 (2013) 295–307

This paper show and discuss the results of an assessment of changes in both area-averaged and station-based climate extreme indices over South America (SA) for the 1950–2010 and 1969–2009 periods using high-quality daily maximum and minimum temperature and precipitation series

The results provide evidence of warming and wetting across the whole SA since the mid-20th century onwards. Nighttime (minimum) temperature indices show the largest rates of warming (e.g. for tropical nights, cold and warm nights), while daytime (maximum) temperature indices also point to warming (e.g. for cold days, summer days, the annual lowest daytime temperature), but at lower rates than for minimums. Both tails of nighttime temperatures have warmed by a similar magnitude, with cold days (the annual lowest nighttime and daytime temperatures) seeing reductions (increases). Trends are strong and moderate (moderate to weak) for regional-averaged (local) indices, most of them pointing to a less cold SA during the day and warmer nighttime temperatures.

Available online at: http://www.sciencedirect.com/science/article/pii/S0921818112002172

Contact Information

Please contact ciph@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 April 20th, 2013.



If you have questions about IRI activities, please visit our home page: http://iri.columbia.edu

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Related Links

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