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## WaterMicro 2017: May 15 – 17

The 19th International Symposium on Health-Related Water Microbiology is organized by the International Water Society (IWA) Specialist Group on Health-Related Water Microbiology (HRWM) biennially. In 2017, the Symposium will run concurrently with our annual *Water Microbiology Conference* to create a forum for researchers and practitioners focused on microbiology and public health to come together around the intersection of the two. The Conference will be held in Chapel Hill, North Carolina from May 15 – 19, 2017.

The Conference will blend interactive workshops with scientific symposia and poster socials, offering participants a variety of opportunities to exchange ideas, debate challenging topics and explore potential collaborations. The focus will be on water microbiology from watershed to human exposure including current concerns in recreational waters, shellfish harvesting waters, emerging technologies and quantitative tools.

IWA members will be able to participate in all Water Microbiology Conference sessions as well as several exclusive to members of the IWA Specialist Group on Health-related Water Microbiology.

More information, including the call for abstracts, accommodation details, and registration will be available soon!

<http://waterinstitute.unc.edu/conferences/watermicro/>



## Paleomicrobiology at TED-X

The Chair of our HRWM Specialist Group, Gary A. Toranzos just completed a TEDx Episode on paleomicrobiological research being carried out by his group. For those interested in watching what it is all about (unfortunately only in Spanish), here is the link: <https://www.youtube.com/watch?v=kdj1DSG9UgI>



For those interested in reading more about paleomicrobiology, below are links to two open source journal articles on this work published by his group:

- Santiago-Rodriguez TM, Narganes-Storde YM, Chanlatte L, Crespo-Torres E, Toranzos GA, et al. (2013) Microbial Communities in Pre-Columbian Coprolites. PLoS ONE 8(6): e65191. doi:10.1371/journal.pone.0065191; <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0065191>
- Cano RJ, Rivera-Perez J, Toranzos GA, Santiago-Rodriguez TM, Narganes-Storde YM, et al. (2014) Paleomicrobiology: Revealing Fecal Microbiomes of Ancient Indigenous Cultures. PLoS ONE 9(9): e106833. doi:10.1371/journal.pone.0106833; <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0106833>

## Conferences

IECID 2017: Impact of Environmental Change on Infectious Diseases

**17 – 19 May 2017**

<http://www.iecid.com/>

Water Microbiology and Novel technologies

**28 – 30 August 2017**

<http://water.conferenceseries.com/>

IWA Symposium on Tastes, Odours and Algal Toxins in Water: Occurrence and Control

**14 – 16 February 2017**

<http://www.iwatando2017.org/>

International Water and Health Congress

**6 – 10 March 2017**

<http://www.suvesaglik.org/invitaton.html>



## Mark Sobsey wins 2016 Clarke Prize

The National Water Research Institute (NWRI) has announced that Prof. Mark D. Sobsey, Ph.D., will be the twenty-third recipient of the NWRI Athalie Richardson Irvine Clarke Prize for excellence in water research.



The 2016 NWRI Clarke Prize, consisting of a medallion and \$50,000 award, will be handed over at a prestigious event held on 3 November 2016.



Every year this award recognizes research accomplishments that solve real-world water problems and highlights the importance and need to continue funding this type of research. Professor Sobsey's leadership and contributions to the fields of environmental health microbiology, virology, and water sanitation and hygiene were among the reasons cited for his selection as the 2016 recipient. Congratulations from the HRWM Specialist Group on this accomplishment!

## Hot off the Press!

The *Manual of Environmental Microbiology*, Fourth Edition, was recently published by the American Society for Microbiology (ASM). This is what ASM Press had to say about the latest edition:



“Environmental microbiology, the study of the roles that microbes play in all planetary environments, is one of the most important areas of scientific research. Thoroughly updated and revised, this manual is the definitive reference for information on microbes in air, water, and soil and their impact on human health and welfare. Written in accessible, clear prose, it covers four broad areas: general methodologies, environmental public health microbiology, microbial ecology, and biodegradation and biotransformation. This wealth of information is divided into 17 sections each containing chapters written by acknowledged topical experts from the international community.

Specifically, the new edition of this manual contains completely new sections covering microbial risk assessment, quality control, and microbial source tracking; incorporates a summary of the latest methodologies used to study microorganisms in various environments; and, synthesizes the latest information on the assessment of microbial presence and microbial activity in natural and artificial environments.

Editor in Chief Marylynn V. Yates is a professor of Environmental Microbiology and Distinguished Teaching Professor at the University of California, Riverside. Dr. Yates' research interests include characterizing and predicting the fate and transport of human enteric pathogenic microorganisms in soils, water, and wastewater; development of methods for rapid, sensitive detection of infective enteric viruses in water samples; human pathogen considerations associated with wastewater reuse and biosolids application to land; and the use of indicators for predicting pathogen occurrence and behavior in the environment.

Dr. Yates, along with Volume Editors Robert V. Miller (Oklahoma State University), Cindy H. Nakatsu (Purdue University), and Suresh D. Pillai (Texas A&M University) developed this essential reference for environmental microbiologists, microbial ecologists, and environmental engineers, as well as those interested in human diseases, water and wastewater treatment, and biotechnology.

The *Manual of Environmental Microbiology, Fourth Edition* is available in hardcover or as an ebook. It has a list price of \$200 and can be purchased online at <http://www.asmscience.org>.



## Earthquakes in Japan cause havoc

The 2016 Kumamoto Earthquake is a series of earthquakes including two times magnitude 7.0 main shocks (on April 14 and 16, 2016), which hit Kumamoto City and surroundings in Kyushu island, Japan. More than 40,000 people were evacuated from their homes.



Hygiene problems occurred in evacuation facilities, and more than 50 cases of norovirus infection have been reported so far. Infection sources have not been identified, but inappropriate usage of temporary toilets is suspected as the cause for spreading infection. Influenza virus infection and food poisoning cases caused by *Staphylococcus aureus* have also been reported from multiple evacuation facilities. The hygiene condition in evacuation facilities remains a concern in the disaster area.



Article by: Daisuke Sano

## HRWM SG Young Water Professionals (YWP)

Are you interested in playing a more active role as a young water professional, specifically in the IWA Health Related Water Microbiology Specialist Group? Well now is your chance. Please familiarise yourself with the rules of the game at: <http://www.iwa-network.org/young-water-professionals.php>

Please email your interest and specific ideas to [msteyn@csir.co.za](mailto:msteyn@csir.co.za) You will then be included in a mailing list specifically for HRWM SG YWP and you will then be contacted to form part of the forum to generate ideas towards WaterMicro 2017.

### General information: Connect and Contribute

As an IWA member we encourage you to connect and contribute to:

**Thematic Programmes** – IWA is pleased to offer our YWPs the ability to get some work experience by contributing to the projects in the programmes. Please contact the programme coordinator in case you are willing to offer support.

**YWP Country Chapters** – Find out if IWA is active in your country and whether they have specific YWP activities you can become involved in.

**YWP Events** – Attend, participate and organise YWP dedicated events.

**Specialist Groups (SG)** – Find the SG in your field and get in contact with its members, bring in new ideas and offer to organise other YWPs under the group. Read about our YWPs previous experiences in the Newsletter.



The 5th International Conference for Food and Environmental Virology was successfully held at Hotel Sakurai, Kusatsu, Japan from Sep. 13th to 16th, 2016 (Conference Chair: Dr. Hiroyuki Katayama, The University of Tokyo, Japan). In total 108 participants from 21 countries joined this event. Plenary lecture was given by Prof. Joan Jofre, University of Barcelona, and eight key note speeches were given by leading researchers. There were 48 oral presentations and 44 poster presentations. These presentations were evaluated from the viewpoints including novelty and presentation skill, and the following presenters were awarded (these awards are sponsored by IDEXX Laboratories K.K.)

**Excellent Presentation Award:**

- Qingxia Zhong, École polytechnique fédérale de Lausanne, Switzerland Resistance of echovirus 11 to disinfection: The costs and benefits.
- Jade Derrick, Public Health England, UK The development of virus capture, concentration and molecular detection methods from foods, fomites and food handlers hands in order to improve outbreak investigations in catering premises.

**Excellent Poster Award**

1. Shinobu Kazama, Tohoku University, Japan Development of a selective-metagenomic method for human enteric viruses in wastewater.
2. Jason Torrey, The University of Tokyo, Japan Development of a method for evaluating RNA virus capsid integrity using the platinum-based compound Cis-DDP.
3. Yinyin Ye, University of Michigan Model enveloped virus inactivation by free chlorine.

Voting for the next conference venue was conducted, and it is determined that Arizona State University will host the next conference (ISFEV2018).

Article by : Daisuke Sano





## Call for Nominations:

Nominations are open to fill the following positions on the HRWM Management Committee:

- ① Secretary to serve for four years (2017 – 2021)
- ② Vice Chair - to serve for 6 consecutive years ; two years as Vice-chair, another two as Chair and finally two years as Immediate Past-Chair ( 2017 – 2023)

Nominations should be clearly marked and sent to Rosina: [rgirones@ub.edu](mailto:rgirones@ub.edu) and Gary: [gary.toranzos@upr.edu](mailto:gary.toranzos@upr.edu)  
Nominations close on 20 November 2016.

Nominees will be alerted and names of nominees will be published in the March 2017 Newsletter, together with a call for votes , two months prior to WaterMicro in May 2017.



## Global Water Pathogen Project

The Global Water Pathogen Project (GWPP) is an international network of over 140 scientists focused on translating the science on global water pathogens, sanitation, and health in order to protect global health. Led by Dr. Joan B. Rose of Michigan State University and Dr. Blanca Jimenez, Director of the Division of Water Sciences, UNESCO, the GWPP provides an online knowledge resource and hub on water pathogens, which will guide the goals for sanitation and achieving safe water around the world. The GWPP grew out of an interest to update the book “Sanitation and Disease: Health Aspects of Excreta and Wastewater Management” (Feachem et al.1983), which was published with a financial contribution from the World Bank. The GWPP will update and revise the original book, as well as target the risk based evaluation of sanitation technologies within the WHO water safety framework and contribute to the improvement of access to sanitation.

Text: Schott Meshcke

## NEW Editor-In-Chief



Congratulations to Prof. Nicholas J. Ashbolt on his appointment as the new Editor-In-Chief for the Journal of Water and Health. Many thanks also to Prof. Paul R. Hunter for the years of hard work and the success he and his team achieved during his time as Editor for the Journal.

## IWA News:

Global Trends & Challenges in Water Science, Research and Management, Second Edition, Published by International Water Association (IWA), London , UK, ISBN 9781780408378.

Download it at : <http://www.iwa-network.org/publications/global-trends-challenges-in-water-science-research-and-management/>

## Become an IWA member

Not yet a member and interested in joining IWA and specifically HRWM ? Then click on the link below and see how you can become a member of this family. <http://www.iwa-network.org/membership.php>



## HRWM at IWA Brisbane 2016

At the recently held IWA Congress in Brisbane (2 – 14 October 2016), a combined workshop was held by the Health Related Water Microbiology (HRWM) and the Design, Operation and Maintenance of Drinking Water Treatment Plants (DOM) Specialty Groups.

The title of the workshop was ***Climate Change/Extreme Events: Water Safety Plans are your Lifeline***. It was jointly chaired by Marion Savill (HRWM) and Zdrayka Doquang (DOM). The workshop investigated ***“What have WSP’s achieved after 12 years implementation and what do they need to address to assist with Extreme Events?”***

The workshop discussed what has been achieved from both a microbial (Health Related Water Microbiology) and a practical treatment plant implementation (Disinfection Operation and Maintenance) perspective, what we can expect from Extreme Events and the kinds of issues WSP’s will need to address in the future from both Specialty Groups’ perspectives. The workshop included four presentations starting with Jennifer De France, WHO, Geneva, on Achievements of WSP's in Large and Small Water Supplies, Jean-François Loret, Suez, France, on What are the benefits in operational performance and how we have achieved these benefits: a comparison before and after ISO 22000 certification of drinking water systems in France and Spain, Paul Byleveld, New South Wales Department of Health, Australia, on What can we expect in the Future: How will WSP’s assist us with Extreme Events brought on by Climate Change, Kenneth Persson, Sydvaatern AB, Sweden on Long term impact of climate change on raw water resources quality and on drinking water plant operation. A panel discussion was led by Christobel Ferguson and Zdrayka Doquang to stimulate discussion on how successful WSP’s have been and where modifications to WSP’s need to occur to cope with Extreme Events.

### Editors note

**We would like to make this newsletter relevant, with a balance of news and technical input from all SG members. If you have news or contributions that may be relevant or feedback to improve the newsletter, please mail your information to [msteyn@csir.co.za](mailto:msteyn@csir.co.za) The next newsletter is earmarked for March 2017.**

### HRWM Board

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Maronel Steyn

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