

CLUB IWA 2017







Aufgaben und Aktivitäten der IWA Specialist Group „Health-Related Water Microbiology“ - HRWM



**MEDIZINISCHE
UNIVERSITÄT WIEN**




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MedUni Wien
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Wasserhygiene

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Technische Universität Wien
Karl Landsteiner Privatuniversität für
Gesundheitswissenschaften



Wien, 23. Oktober 2017



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HRWM -Entstehung



IWA entstand aus der International **Water Supply Association (IWSA)**, gegründet im Jahr 1947, und der **International Association on Water Quality (IAWQ)**, die auf die International Association for Water Pollution Research (Gründung 1965) zurückgeht. The beiden Gesellschaften haben sich 1999 zur IWA vereinigt, als eine international Organisation, die sich dem gesamten Wasserkreislauf widmet.

Die IWA hat 10,000 individuelle Mitglieder, 500 Mitglieder als Körperschaften und Governing Members in etwa 80 Ländern.

49 Specialist Groups



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Specialist Groups (Anzahl 49)

- ❖ IWA Specialist Groups sind für eine Vielzahl an Themen eingerichtet.
- ❖ Sie stellen eine Möglichkeit für Fachleute eines speziellen Fachgebietes dar, Wissen zu teilen und zu Netz-werken.
- ❖ Da die IWA Mitglieder aus 130 Ländern kommen, werden internationale Kontakte und Kooperationen ermöglicht.
- ❖ Specialist Groups sind zu einem gewissen Grad selbstständig tätig, haben ihr eigenes Programm und regelmäßige Symposien.

<http://www.iwa-network.org/iwa-specialist-groups/>




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Health-Related Water Microbiology (HRWM) ist eine der Specialist Groups der **International Water Association (IWA)**.

Unsere Gruppe war die erste der Specialist Groups, gegründet im Jahr 1977 als Water Virology Specialist Group (innerhalb der **IAWPRC**).

Thema: Gesundheitsbezogene Wassermikrobiologie

Das Fachgebiet umfasst viele Themen: umwelt- und medizinische Virologie, Bakteriologie, Parasitologie, Infektionserkrankungen, Epidemiologie, Risikobewertung, Wasseraufbereitung und Desinfektion, Wasserhygienische Praktiken.

Former: International Association on Water Pollution Research and Control (IAWPRC)










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1359 Mitglieder <http://hrwm-watermicro.com/WordPress/management/board-members/>

Vorstand 2017-2019 (15 Mitglieder)

Chair: Dr. Hiroyuki Katayama (Japan)
 Department of Urban Engineering, School of Engineering,
 The University of Tokyo
 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8654
 JAPAN
 Tel: +81-3-5841-6263
 E-mail: katayama@juken.tu-tokyo.ac.jp



Prof. Rosina Girones (Spain)
 Section of Microbiology, Virology and Biotechnology, Department of Genetics, Microbiology and Statistics, Faculty of Biology, University of Barcelona, Spain
 Tel: +34 934021483
 Email: rgirones@ub.edu



Past-Chair: Dr. Gary Toranzo (Puerto Rico)
 University of Puerto Rico at Rio Piedras,
 Department of Biology,
 Avenida P.R. 23901, San Juan, Puerto Rico,
 00926-3201
 Tel: (787) 764-0000 ext. 4885



Secretary: Dr. Daisuke Sano (Japan)
 Environmental Water Quality Engineering Laboratory
 Department of Civil and Environmental Engineering
 Tohoku University
 Tel: +81-22-795-7481
 E-mail: Daisuke.sano.et[at]tohoku.ac.jp



Prof. Andreas Farnleitner (Austria)
 Karl-Franzens-Universität Graz
 Institute of Microbiology
 In-2010: Environmental Engineering
 Environmental Engineering
 August 2009 Vienna, Austria
 Email: andreas.farnleitner@uni-graz.at



Vice Chair: Prof. Regina Sommer (Austria)
 Regina Sommer is Associate Professor at the Medical University Vienna, Austria (Institute for Hygiene and Applied Immunology). She is head of the unit Water Hygiene where she is teaching, researching and running the accredited Laboratory and Inspection Body "Hygiene Vienna" (authorized by the Ministry of Health). Together with



Dr. Georg Reitscher (2013-2017)
 Georg Reitscher studied Technical Chemistry at the Vienna University of Technology and graduated with a masters degree in Biochemistry, Biotechnology and Microbiology. He did his PhD with Andreas Farnleitner at the same University specializing in microbial source tracking and







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Aktivitäten

- ❖ **Aspekte der Forschung betreffend Wassermikrobiologie und Gesundheit / öffentliches Gesundheitswesen**
- ❖ **Newsletter**
- ❖ **Wissenschaftliche Preise**
- ❖ **Reisestipendien für Studenten**
- ❖ **Reisestipendien für Teilnehmer aus Entwicklungsländern**
- ❖ **Alle zwei Jahre HRWM Symposium (North Carolina 2017, Lissabon 2015,)**





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Aktivitäten

<http://hrwm-watmicro.com/WordPress/publications/newsletters/>







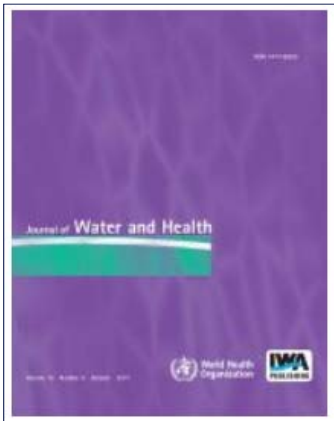
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Aktivitäten

<http://jwh.iwaponline.com/content/15/5>



Journal of Water and Health

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October 2017; 15 (5)

■ Prevalence and direct costs of emergency department visits and hospitalizations for selected diseases that can be transmitted by water, United States
E. A. Adam, S. A. Collier, K. E. Fullerton, J. W. Gargano, M. J. Beach
Journal of Water and Health 2017 Oct; 15 (5): 679-693. DOI: [10.2166/jwh.2017.283](https://doi.org/10.2166/jwh.2017.283)
Supplementary Data
Add to Cart (3.00)

■ Enterococci populations of a metropolitan river after an extreme flood event: prevalence, persistence and virulence determinants
Nicole M. Heesters, Aaron Wegand, Joann M. Thompson, Tara L. Vollenweider, Eva Hoge, Mohammad Khatibi
Journal of Water and Health 2017 Oct; 15 (5): 694-694. DOI: [10.2166/jwh.2017.284](https://doi.org/10.2166/jwh.2017.284)
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We are happy to announce that JWH papers published in 2015 are now free as part of the archive!

<http://mailchi.mp/iwap/journal-of-water-and-health-archive-now-open-access-649221?e=40ade72d27>




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Aktivitäten



GWPP
Global Water Pathogens Project

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

Determining Persistence of Pathogens in Wastewater is Essential in Determining the Public Health Impact

Global Water Pathogens Project Newsletter (Vol. 3, Issue 19).



Determining Persistence of Pathogens in Wastewater is Essential in Determining the Public Health Impact

Global Water Pathogens Project Newsletter (Vol. 3, Issue 19).

<http://mailchi.mp/4a3ec7ef16f3/gwpp-newsletter?e=e1e2204839>



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IN MEMORIAM: Huw Taylor, a Water Microbiology icon, passes away

Huw Taylor, one of the most amiable and good-humored persons in our field of health-related water microbiology, has passed away on October 14, 2017. He was professor at the University of Brighton



He worked to provide evidence-based water and sanitation solutions in Haiti, West Africa, Brazil, Malawi, Kenya, Nepal and India. He assisted the NGO Médecins Sans Frontières in Haiti during the cholera outbreak that followed the 2010 earthquake to design a safe treatment system for cholera hospital wastewaters. He coordinated an international WHO expert team to advise on the sanitation response in the Ebola outbreak in West Africa in 2014-2016. He developed novel-low cost approaches to disinfecting human waste in emergency settings and microbial source tracking methods.

Huw Taylor Medal



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Water and Health

Assessment and Control of Hazardous Substances in Water (ACHSW)

Disinfection

Health Related Water Microbiology

Sanitation and Water Management in Developing Countries

[Health Related Water Microbiology website](#)

Forschungsthemen

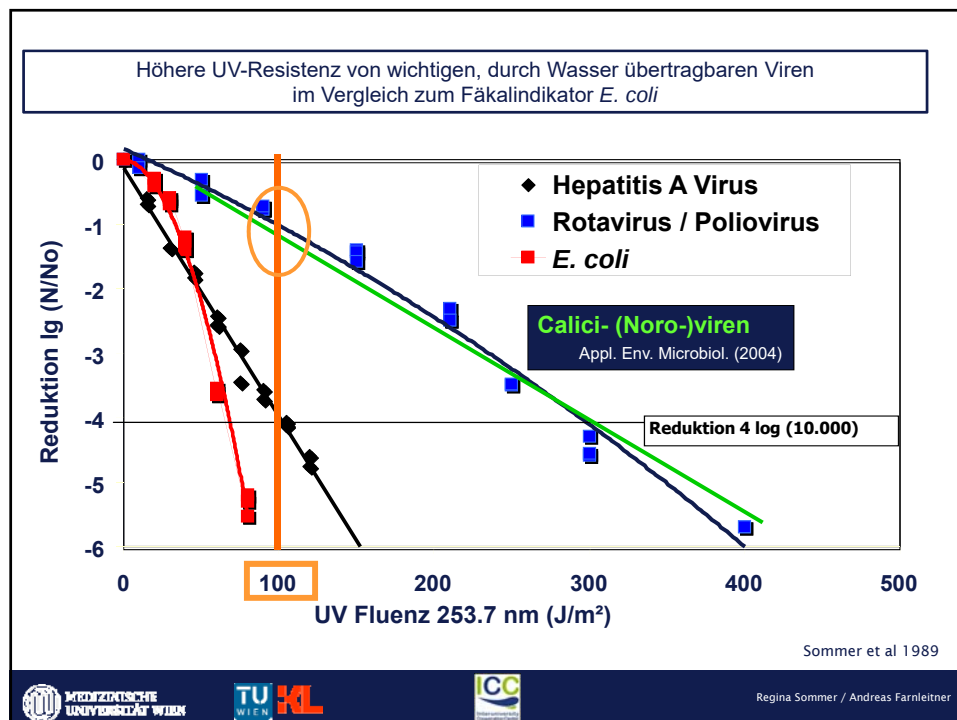
- Krankheitserreger
 - Bakterien, Viren, Parasiten
- Mikrobiologische Indikatoren
- Risiko Abschätzung und Modellierung
- Fäkale Herkunftsbestimmung
- Desinfektion
- Biofilme
- Auswirkung von Katastrophen auf die mikrobiologische Qualität von Trinkwasser und Oberflächenwasser
- Wiederverwendung von Wasser
- Nachhaltige Wasserverwendung
- Wassermanagement und Sicherheitspläne
- Neue Technologien in der Molekularbiologie (Next Generation Sequencing und Metagenomics)



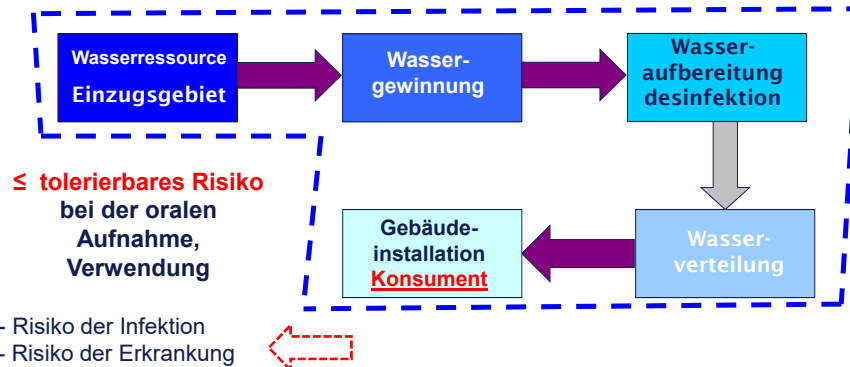




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WHO Ansatz für sicheres Trinkwasser im 21. Jahrhundert



Qualitätsmanagement entlang der gesamten Kette von Gewinnung, Aufbereitung/Desinfektion, Speicherung, Verteilung (Wassersicherheitsplan)

Gesundheitsbasierte Qualitätsziele (maximal tolerierbares Infektionsrisiko 1:10.000 oder DALY = disability adjusted life years)



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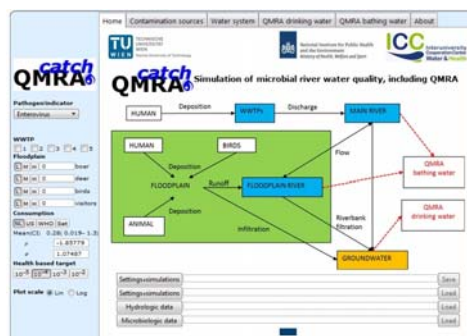
catch QMRA

Officially launched at the World Water Conference Brisbane, 2016

Free download links:

www.waterandhealth.at

- + Quick User Guide
- + Example spreadsheets of settings, simulations, microbiological and hydrological data
- + Weblinks to Free CDF Player Download



National Institute for Public Health and the Environment
Ministry of Health, Welfare and Sport

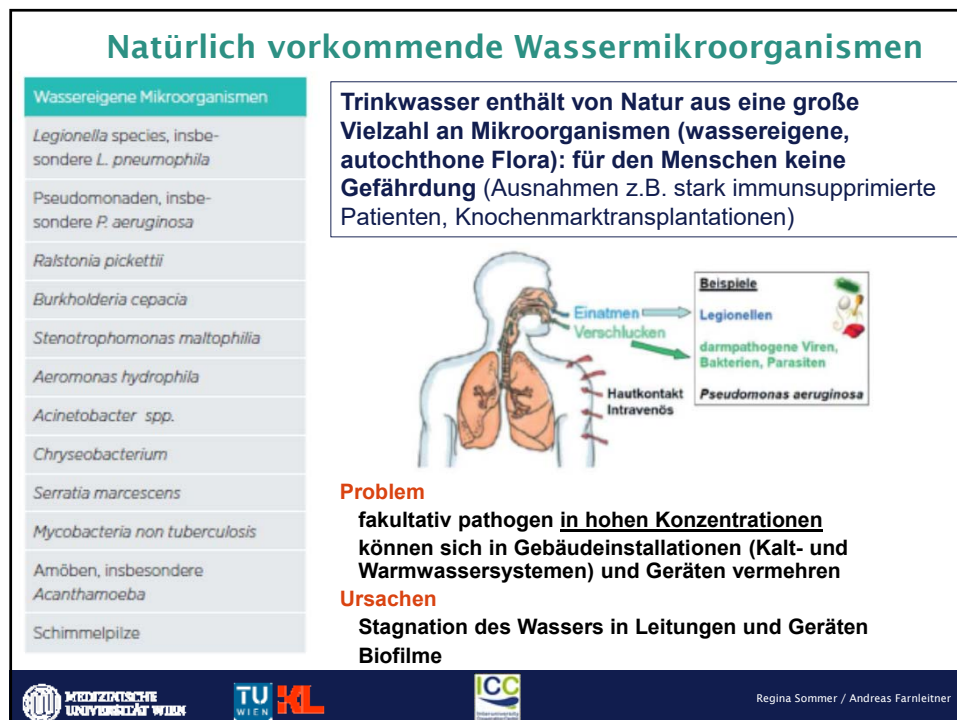
www.rivm.nl/en/Topics/W/WHO_Collaborating_Centre_Risk_Assessment_of_Pathogens_in_Food_and_Water/Tools



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Water Microbiology Conference 2017
May 15-17
International Symposium on Health-Related Water Microbiology
May 15-19
Chapel Hill, NC USA

Mai 2017, USA




3 Vorträge
7 Poster
2 Vorsitze

Austrian Delegation





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Ausschreibung HRWM Symposium 2019: Endrunde

Health Related Water Microbiology Specialist Group

WaterMicro 2019
Proposed Location:
Pisa, Italy
Venue:
 University of Pisa
Dates:
 12-17 June 2019

Issue 16 – March 2017




Health Related Water Microbiology Specialist Group

WaterMicro 2019
Proposed Location:
Vienna, Austria
Venue:
 University of Vienna
Dates:
 15 – 20 September 2019

Workshops:
 We propose workshops to the following topics: - Water quality in Health Care Facilities: water supply, water for technical purposes, water for medical purposes - Faecal source tracking: microbial and hydrological aspects .



International Symposium
on Health-Related
Water Microbiology

2019





IWA 20th International Symposium on Health-Related Water Microbiology

2019 September 15 -20








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Commissions from the Lancet journals [View all Commissions](#)

The Lancet Commission on pollution and health

Published: October 19, 2017

Executive Summary

For decades, pollution and its harmful effects on people's health, the environment, and the planet have been neglected both by Governments and the international development agenda. Yet, pollution is the largest environmental cause of disease and death in the world today, responsible for an estimated 9 million premature deaths.

The Lancet Commission on pollution and health addresses the full health and economic costs of air, water, and soil pollution. Through analyses of existing and emerging data, the Commission reveals pollution's severe and underreported contribution to the Global Burden of Disease. It uncovers the economic costs of pollution to low-income and middle-income countries. The Commission will inform key decision makers around the world about the burden that pollution places on health and economic development, and about available cost-effective pollution control solutions and strategies.

Commission

The Lancet Commission on pollution and health

Philip J Landrigan, Richard Fuller, Nereus J R Acosta, Olusoji Adeyi, Robert Arnold, Niladri (Nil) Basu, Abdoulaye Bibi Baldé, Roberto Bertollini, Stephan Bose-O'Reilly, Jo Ivey Boufford, Patrick N Breyse, Thomas Chiles, Chulabhorn Mahidol, Awa M Coll-Seck, Maureen L Cropper, Julius Fobil, Valentin Fuster, Michael Greenstone, Andy Haines, David Hanrahan, David Hunter, Mukesh Khare, Alan Krupnick, Bruce Langbehn, Bindu Lohani, Keith Martin, Karen V Mathiesen, Maureen A McTeer, Christopher J L Murray, Johanita D Nidhiyamanjara, Frederica Perera, Janez Potocnik, Alexander S Preker, Jai Ram Ramesh, Johan Rockström, Carlos Salinas, Leona D Samson, Karli Sandilya, Peter D Sly, Kirk R Smith, Achim Steiner, Richard B Stewart, William A Suk, Onno C P van Schayck, Gautam N Yadama, Kandeh Yumkella, Ma Zhong

The Lancet



Infographic

View the infographic on the Commission. Used with permission from the Mount Sinai Health System.



[Full size PDF \(319KB\)](#)

Audio



[Download](#)

The Lancet Commission on Pollution and Health: October 19, 2017
Gina McCarthy former EPA Administrator and





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