



Project No. 68-10-55 – JPI-EC-AMR ERA-Net

AWARE-WWTP

Antibiotic Resistance in Wastewater:
Transmission Risks for Employees and Residents
around Wastewater Treatment Plants

Deliverable no.: D 7.1
March 2018

Dissemination Plan

Start date of project: 01.06.2017
Duration: 36 months

Lead partner for this deliverable:

Institute and Clinic for Occupational, Social and Environmental Medicine
University Hospital
LMU Munich, Germany

Revision 01 (12-03-2018)

Dissemination level

<input checked="" type="checkbox"/>	PU	Public
<input type="checkbox"/>	PP	Restricted to other program participants (including the Commission Services)
<input type="checkbox"/>	RE	Restricted to a group specified by the consortium (including the Commission Services)
<input type="checkbox"/>	CO	Confidential, only for members of the consortium (including the Commission Services)

Document Information

Deliverable Title	Dissemination Plan
Filename	20180312_AWARE_DisseminationPlan.docx
Authors	Daloha Rodríguez-Molina
Date	12 March 2018

Prepared under contract from the European Commission
JPI-EC-AMR ERA-Net Cofund grant no 681055

Project Coordinator

Prof. Dr. Ana Maria de Roda Husman
National Institute for Public Health and the Environment
Ministry of Health, Welfare and Sport (the Netherlands)
Antonie van Leeuwenhowkiaan 9
3721 MA Bilthoven
The Netherlands
Phone: +31302742661
Email: ana.maria.de.roda.husman@rivm.nl

Coordinator of WP5

Prof. Dr. Katja Radon
Institute and Clinic for Occupational, Social and Environmental Medicine
University Hospital - LMU Munich
Ziemssentr. 1
80336 Munich
Germany
Phone: +4989440052400
Email: sekretariat-radon@med.uni-muenchen.de

Deliverable status version control

Version	Date	Author
0.1	12.03.2018	Daloha Rodríguez-Molina
0.2	27.06.2019	Daloha Rodríguez-Molina

Table of contents

1. About the AWARE-WWTP Project
2. Issues and Messages
3. Target groups
4. Dissemination strategy, tools and activities

Annex 1. List of target journals for publication of scientific articles

Annex 2. List of project-relevant scientific events

Annex 3. Dissemination schedule of newsletters

Annex 4. List of public deliverables

Annex 5. Project leaflet

Annex 6. Project logo

Annex 7. Project website: homepage

Annex 8. Powerpoint template

Annex 9. Newsletter template

1. About the AWARE-WWTP Project

The AWARE-WWTP Project is a European research project aiming at investigating the transmission of resistant bacteria and resistance genes resulting from human exposure within and around wastewater treatment plants. AWARE-WWTP is an observational, cross-sectional, and multicentric study carried out by teams in Germany, the Netherlands, Romania, and Sweden. We use microbiology, metagenomics, and epidemiology research to answer the research questions. Within this project, data on ESBL, CPE, and resistance gene prevalence gathered in air and water samples as well as in workers and residents of 80-100 different WWTPs in three countries enable us to assess the health impact of exposure in and around WWTPs. Through quantifying the contribution of different wastewater treatment processes to the ARB/ARG removal efficiency, we will provide evidence-based support for possible mitigations. This project addresses transmission of resistant bacteria and resistance genes resulting from human exposure within and around wastewater treatment plants (WWTP). The specific objectives of our study are:

- to study the occupational and environmental health impact of exposure to resistant bacteria and resistance genes stemming from WWTP through epidemiological studies of their carriage in exposed versus unexposed controls,
- to study human waterborne and airborne exposure through models for uptake through ingestion and inhalation,
- to assess the efficiency of different WWTP treatment technologies,
- to investigate selection and emergence of resistance in WWTP through studying relative changes in resistance genes and exploring putative novel resistance genes,
- to disseminate the results of this project

In order to better take advantage of the strengths of each project partner, we have divided the project into work packages (WP) as follows:

- **WP1:** Epidemiological studies
- **WP2:** Setup of Sampling Campaign
- **WP3:** Characterization of ESBL, CPE, and full resistomes
- **WP4:** Exposure Modelling
- **WP5:** Dissemination of Results
- **WP6:** Project Management and Coordination

2. Issues and Messages

As communication of results is an integral part of the research project, and as it is stated in our study objectives and work packages, we have prepared this document to state and describe our dissemination strategy. We consider dissemination as a necessary way of communicating research findings to the scientific community, stakeholders and the general population, as well as a way of establishing a two-way communication, by which researchers can also benefit from feedback provided by the target groups, in order to improve the scientific process.

We are planning on disseminating current developments, achieved results and milestones, published deliverables and other publications (e.g. scientific articles), events to attend and events organized by AWARE (e.g. final project workshop), and other important incidents.

3. Target groups

AWARE-WWTP has identified several target groups that include the scientific community, decision makers and practitioners, funding agencies, as well as study participants and the general population. The identified target groups are:

- **Political Press EU and EU officials:** The political press EU is a key target group because AWARE-WWTP is a European project, co-funded by the European Commission. We aim at reaching EU officials and interested public. Some of these European channels are “New Europe” or “EUObserver”.
- **National Press:** Each of the countries involved in the AWARE-WWTP project will consider its own national press to disseminate project results. Through this channel, we will be able to reach several other target groups such as potential study participants, interested public, and the general population.
- **International Organizations:** There are several international organizations concerned about antimicrobial resistance and exposure risks for workers and residents around wastewater treatment plants. Some of these organizations are the World Health Organization (WHO), the European Medicines Agency (EMA), the National Resources Defense Council (NRDC), and the U.S Food and Drug Administration (FDA).
- **Regional and local authorities and municipalities:** Local authorities might be interested in our project because they administer wastewater treatment plants, and thus are concerned with potential risks to workers and residents. Also, the results of our project might be crucial for improving city planning, by determining if distance to the plants represents an increased risk to local residents. We will benefit from a cooperation work with local authorities to carry out the project.
- **Water boards:** National and local water boards are formed by scientists, engineers, technicians, politicians, and other professional groups related to wastewater treatment plants. Cooperation with water boards will be crucial especially during the recruitment phase. Input from water board members and representatives will significantly improve our collection methods.

- **Experts in antibiotic resistance:** Exchanging information with experts in antibiotic resistance will allow us to refine our research methods, especially regarding the microbiological and metagenomics analyses. Further, some of these experts are scientists, to whom we will also communicate results in the form of scientific publications, and with whom we will interact at different events.
- **Industry:** Pharmaceutical companies developing or distributing antibiotics might be interested in our findings in order to better refine their processes.
- **Interested Public:** The interested public includes any individual or organization who is interested in the topic of antibiotic resistance, wastewater treatment plants, or research disciplines such as microbiology, metagenomics, or epidemiology. Therefore, we anticipate medical doctors, wastewater treatment plants operators, microbiologists, epidemiologists, public health experts, private persons and bloggers. The main difference of this target group with the general public is that the interested public knows in advance the information they need and actively seek it.
- **General Public:** The general population is a key target group because the ultimate goal of our project is to generate knowledge about the exposure risk to antibiotic-resistant bacteria and resistance genes in wastewater. The main challenge to communicate with this target group is to translate the scientific language and media into attractive and reliable information that the general consumer can understand, digest, and make use of.

4. Dissemination strategies, tools, and activities

For the AWARE-WWTP team, dissemination of results is a key component of the research process and will take place during the entire life of the project. Dissemination of results is framed within work package 5, of which the LMU team in Germany is responsible. Therefore, the German team at LMU will coordinate and promote dissemination activities, in which all project partners will actively contribute.

AWARE-WWTP has prepared several dissemination tools and activities to reach identified target groups in an efficient and effective way (Table 1). These tools and activities range from those of scientific nature (e.g. scientific publications in relevant journals), to newsletters and press releases that are easier to read for the broader audience. All relevant deliverables will be published in the project website.

- **Editorial team:** The LMU has established an editorial team composed of at least three members of the project, who will meet every two weeks to review the current dissemination strategy, and talk about the implementation and maintenance of new and existing tools and activities. These three members are Laura Wengenroth, Daloha Rodríguez-Molina, and N.N. The editorial team will encourage other project partners to disseminate information about their current activities, and to provide assistance if needed. The editorial team is also responsible of collecting relevant information for publication on the project website and dissemination through social media and other channels, and it is responsible of processing, editing and finally publishing the information.

- **Press releases:** Press releases will include information about achieved results, reached milestones, and events. These press releases will be elaborated at each key milestone. The preparation of press releases will be the responsibility of the coordination team (RIVM), with assistance from the editorial team (LMU). The elaboration language of press releases will be English. If press releases are to be distributed at a national level, each project partner must translate it to the local or national language.

- **Scientific articles:** The main target group for scientific articles is the scientific community, who will be reached by publications in relevant national and international journals. The AWARE-WWTP team will prepare several scientific publications ranging from the study protocol and methods, to specific results in diverse research areas such as microbiology, metagenomics,

epidemiology and public health. The manuscript for the study protocol will be prepared after obtaining ethics approval, while the rest of the publications will be prepared as soon as results have been obtained. The coordination of publications is responsibility of the coordination team (RIVM), and the execution will be the responsibility of project partners. Annex 1 includes a list of relevant target journals for publication of scientific articles.

- **Public deliverables:** There are 22 public deliverables, of which six will have a restricted access. Public deliverables will be made public by the editorial team on the project website, or by project partners in specialized repositories, according to the nature of each deliverable. A list of public deliverables and due dates can be found in Annex 4.

- **Project Website:** The team at LMU has designed a project website using the Fiona platform, and with the technical assistance and support of the University Hospital at the LMU (Department of web requirements and services, WCMS, Klinikum der Universität München). The website will be updated and maintained by the editorial team. The website is the main source of information of the project activities and results for a wide range of target groups, and will remain available at least for five years after project completion. The webpage contains information about the project, its objectives, work packages, principal investigators, team members, external advisory, study participants, and publications (scientific articles, press releases, newsletters, public deliverables, etc.). It also contains links to social media (Twitter, Facebook), and provides several ways of communication with the editorial team (email, contact form). The project website informs about supporting institutions, both academic and financial, and about latest news and events related to the project or to the topic of antibiotic resistance. The project website also contains a link to the researchers area, powered by KUM-Teams, which is an internal working platform only accessible to project partners. In this virtual area, team members can interact, upload or access internal working documents, reports, presentations, and other relevant documents. It also has blog functionality, keeps a record of milestones, and shows a project calendar. Maintenance of this researchers virtual area will be responsibility of the editorial team.

- **Project Leaflet:** The editorial team has designed and elaborated a project leaflet containing relevant information at an understandable level for the general population (Annex 5). The main objective of this project leaflet is to provide concise and complete information about the project, and it is mainly aimed at wastewater treatment plant operators, water board members, potential study participants, visitors of events, or other personal contacts of partners. The leaflet will be made available in print and online form.

- **Newsletters:** Newsletters will be prepared annually to announce target groups about recent events, milestones, and results from the project. These newsletters have a two-fold objective: to raise awareness of antibiotic resistance, and to keep the public informed, engaged, and interested in project activities. The content of the newsletters will be provided by study partners to the editorial team, who will process, edit, and publish the information on the project website, and will spread the word about it through social media. The newsletters will be distributed only electronically, and made available on the project website. Each project partner will also ask colleagues and stakeholders to further distribute the newsletter to interested audience. The first newsletter will be published within the first year of the project, and subsequent numbers will be published every six months (Dissemination schedule, Annex 3).

- **Social Media:** The dissemination strategy includes continuous engagement with the interested public and international organizations via social media (e.g. Twitter and Facebook). Regularly posting information about antibiotic resistance and wastewater treatment plants, along with sharing information from trusted expert sources (see target group: International Organizations) will give the project visibility and will help connect with the interested public. Social media is also a way of promoting the project and its activities. The editorial team will be in charge of curating the information to post and to maintain the profile of these social media. Other project partners can contribute with content if needed. Content will be published or shared at least three times a week. Although initially only Twitter and Facebook have been considered, other platforms might be taken into account during the development of the project (e.g. LinkedIn).

- **Templates for Dissemination Tools:** The editorial team has prepared templates for the newsletters and a powerpoint presentation (see Annex 8 and 9). The powerpoint presentation template will be used to communicate activities by the AWARE-WWTP consortium. Using a uniform format will give the project a clear identity.

- **Events:** Participation in relevant events at a national and international level is a key activity for project partners to engage with experts and scientists, and to communicate project results. Annex 2 shows a working list of events to which project partners could attend.

- **Annual reports:** The coordination team will present annual reports to summarize project activities and reached milestones to project members.

- **Final project workshop:** At the end of the project, the LMU team will organize and host a final project workshop. In this workshop, project partners will have the chance to present

project outcomes to the scientific community and the media. We will expect mostly European participants, but will consider to get international participants also from other continents.

Table 1. AWARE-WWTP Dissemination Matrix

Tools and activities	Target groups	Who is responsible?	When?
Editorial team	—	At least three members of the LMU team (L.W., D.R.M., N.N.)	Meetings every two weeks
Press releases on national level	All target groups	Preparation: Coordination team (RIVM), with assistance of editorial team (LMU). Translation: Project Partners	At each key milestone
Press releases on EU level	EU officials, interested public	Coordination team (RIVM), with assistance of editorial team (LMU).	At each key milestone
Scientific Articles	International scientific press, scientific community	Coordination: RIVM Execution: Project Partners	Study protocol: after obtaining ethics approval Other: after obtaining results
Public deliverables	All target groups	Provided by: Project Partners Publishing in Website: Editorial team (LMU)	As per proposal, see annex 4
Project website	All target groups, focus on interested public	Editorial team (LMU)	Monthly updates after editorial team meetings
Project virtual drive	Project Partners	Creation and management: Editorial team (LMU) Collaboration: Project Partners	Continuously updated
Project leaflet	Visitors of events or personal contacts of partners	Provided by: Editorial team (LMU) Dissemination: Project Partners	Elaboration: early in the project. Distribution: Permanently at events, presentations, etc.
Newsletter	All target groups	Content: Project Partners Elaboration: Editorial Team (LMU)	Annually
Social Media	All target groups, focus on interested public and scientific community	Supervised by: Editorial Team (LMU) Supported by: Project Partners	Permanently
Dissemination tools templates	Project Partners	Editorial team (LMU)	First version early in the project, updated if needed, see annexes 8 and 9
Events	All professional target groups	Coordination of must-go events: Editorial team (LMU) Execution: Project Partners	Continuously. See annex 2
Annual reports	Project Partners	RIVM	Annually
Final Project Workshop	All professional target groups, press	Editorial team, LMU	At the end of the project

ANNEXES

Annex 1. List of target journals for publication of scientific articles

No.	Abbreviated Journal Title	ISSN	IF (2016/2017)	5-Year IF	Frequency
EPIDEMIOLOGY					
1	EUR J EPIDEMIOL	0393-2990	7.226	6.312	Monthly
2	INT J HYG ENVIRON HEALTH	1618-131X	4.643	4.439	Bimonthly
3	BMC MED RES METHODOL	1471-2288	3.295	3.896	—
4	ZOONOSES PUBLIC HEALTH	1863-2378	2.323	—	10 no. a year
5	BMC PUBLIC HEALTH	1471-2458	2.265	2.814	—
6	INT J ENVIRON RES PUBLIC HEALTH	1660-4601	2.101	2.540	Monthly
7	INT J OCCUP ENVIRON HEALTH	2049-3967	2.068	—	Quarterly
8	AM J IND MED	0271-3586	1.732	—	Monthly
MICROBIOLOGY					
1	NAT REV MICROBIOL	1740-1526	26.819	28.420	Monthly
2	CLIN INFECT DIS	1058-4838	8.216	8.885	24 no. a year
3	J ANTIMICROB CHEMOTH	0305-7453	5.071	5.173	Monthly
4	ANTIMICROB AGENTS CHEMOTHER	1098-6596	4.476	4.606	Monthly
5	FRONT MICROBIOL	1664-302X	4.076	—	—
6	APPL ENVIRON MICROB	1098-5336	3.807	4.406	Twice a month
7	FEMS MICROBIOL ECOL	0168-6496	3.720	—	Monthly
8	APPL MICROBIOL BIOTECHNOL	1432-0614	3.420	3.716	Twice a month
9	MICROBES ENVIRON	1342-6311	2.909	2.690	Quarterly
10	LETT APPL MICROBIOL	0266-8254	1.575	—	Monthly
11	J GLOB ANTIMICROB RESIST	2213-7173	1.276	1.357	Quarterly
ENVIRONMENTAL SCIENCES					
1	ENVIRON HEALTH PERSP	0091-6765	9.776	—	Monthly
2	ENVIRON SCI TECHNOL	0013-936X	6.198	—	Twice a month
3	ENVIRON POLLUT	0269-7491	5.099	5.552	15 issues/year
4	SCI TOTAL ENVIRON	0048-9697	4.900	5.102	54/year
5	CHEMOSPHERE	0045-6535	4.208	4.506	Thirty no. a year
6	ENVIRON RES	0013-9351	3.835	4.315	8 issues/year
7	ECOTOXICOL ENVIRON SAF	0147-6513	3.743	3.577	8 no. a year
8	ATMOS ENVIRON	1352-2310	3.629	3.948	18/year
9	J ENVIRON SCI CHINA	1001-0742	2.937	3.243	Monthly
10	ENVIRON SCI POLLUT RES INT	1614-7499	2.741	—	Bimonthly
11	ENVIRON MONIT ASSESS	0167-6369	1.687	—	48 no. a year

No.	Abbreviated Journal Title	ISSN	IF (2016/2017)	5-Year IF	Frequency
WATER					
1	WAT RES	0043-1354	6.942	7.715	—
2	DESALINATION	0011-9164	5.527	5.905	Quarterly
3	CLEAN SOIL AIR WATER	1863-0650	1.473	—	Monthly
4	J WATER HEALTH	1996-7829	1.041	—	Four no. a year
BROAD SCIENCE					
1	PLOS ONE	1932-6203	2.806	—	Upon acceptance

EPIDEMIOLOGY AND PUBLIC HEALTH

European Journal of Epidemiology

Published by Springer

Impact factor: 7.226 (2016/2017)

Frequency: Monthly

Founded in 1985, the European Journal of Epidemiology is a forum on the epidemiology of communicable and non-communicable diseases and their control. The results of epidemiologic studies are essential arguments for action in the field of public health policies and efforts are made to bring the journal to the attention of public health decision makers. The journal is a source of material for those engaged in teaching epidemiology.

The journal covers the different fields of epidemiology, a science which has always been multidisciplinary by nature: contributions are encouraged from the fields of public health planning and control, economy, preventive medicine, clinical trials, vaccinology, psychology, molecular biology, mathematical modelization and computer sciences.

The journal presents original articles, reviews, short communications, commentaries and letters to the editor. Proceedings of relevant symposia and monothematic issues on topics of particular interest are occasionally published as supplements.

International Journal of Hygiene and Environmental Health

Published by Elsevier

Impact factor: 4.643 (2016/2017)

Frequency: Bimonthly

The International Journal of Hygiene and Environmental Health serves as a multidisciplinary forum for original reports on exposure assessment and the reactions to and consequences of human exposure to the biological, chemical, and physical environment. Research reports, short communications, reviews, scientific comments, technical notes, and editorials will be peer-reviewed before acceptance for publication. Priority will be given to articles on epidemiological aspects of environmental toxicology, health risk assessments, susceptible (sub) populations, sanitation and

clean water, human biomonitoring, environmental medicine, and public health aspects of exposure-related outcomes.

BMC	Medical	Research	Methodology
Published by BioMedCentral			
Impact factor: 3.295 (2016/2017)			

BMC Medical Research Methodology is an open access journal publishing original peer-reviewed research articles in methodological approaches to healthcare research. Articles on the methodology of epidemiological research, clinical trials and meta-analysis/systematic review are particularly encouraged, as are empirical studies of the associations between choice of methodology and study outcomes. BMC Medical Research Methodology does not aim to publish articles describing scientific methods or techniques: these should be directed to the BMC journal covering the relevant biomedical subject area.

Zoonoses and Public Health

Published by Wiley, Blackwell Verlag GmbH

Impact factor: 2.323 (2016/2017)

Frequency: 10 no. a year

Zoonoses and Public Health brings together veterinary and human health researchers and policy-makers by providing a venue for publishing integrated and global approaches to zoonoses and public health. The Editors will consider papers that focus on timely collaborative and multi-disciplinary research in zoonoses and public health. This journal provides rapid publication of original papers, reviews, and potential discussion papers embracing this collaborative spirit. Papers should advance the scientific knowledge of the sources, transmission, prevention and control of zoonoses and be authored by scientists with expertise in areas such as microbiology, virology, parasitology and epidemiology.

BMC Public Health

Published by BioMedCentral

Impact factor: 2.265 (2016/2017)

BMC Public Health is an open access, peer-reviewed journal that considers articles on the epidemiology of disease and the understanding of all aspects of public health. The journal has a special focus on the social determinants of health, the environmental, behavioral, and occupational correlates of health and disease, and the impact of health policies, practices and interventions on the community.

International Journal of Environmental Research and Public Health

Published by MDPI AG (Basel, Switzerland)

Impact factor: 2.101 (2016/2017)

Frequency: Monthly

International Journal of Environmental Research and Public Health (ISSN 1660-4601; CODEN: IJERGQ; ISSN 1661-7827 for printed edition) is an interdisciplinary, open access journal published monthly online by MDPI. The International Society Doctors for the Environment (ISDE) and Italian

Society of Environmental Medicine (SIMA) are affiliated with IJERPH and their members receive a discount for the article processing charges.

International Journal of Occupational and Environmental Health

Published by Taylor & Francis

Impact factor: 2.068 (2016/2017)

Frequency: Quarterly

International Journal of Occupational and Environmental Health (IJOEH) is an authoritative, interdisciplinary resource covering occupational health, environmental health, and consumer health (the aspects of human disease and injury that are determined or influenced by exposure to consumer goods and their components, including pharmaceuticals, food additives, and other purchased products). It publishes original scientific and social scientific research, as well as commentary and analysis in the broad fields of occupational and environmental health.

IJOEH is read by researchers, practitioners, policy makers, and activists in the fields of occupational, environmental, and consumer health. Its international readership extends across disciplines, including epidemiology, occupational and environmental medicine, sociology, toxicology, and related fields.

American Journal of Industrial Medicine

Published by Wiley, Wiley Periodicals, Inc.

Impact factor: 1.732 (2016/2017)

Frequency: Monthly

American Journal of Industrial Medicine considers for publication reports of original research, review articles, instructive case reports, and analyses of policy in the fields of occupational and environmental health and safety. The Journal also accepts commentaries, book reviews and letters of comment and criticism. The goals of the journal are to advance and disseminate knowledge, promote research and foster the prevention of disease and injury. Specific topics of interest include: occupational disease; environmental disease; pesticides; cancer; occupational epidemiology; environmental epidemiology; disease surveillance systems; ergonomics; dust diseases; lead poisoning; neurotoxicology; endocrine disruptors.

MICROBIOLOGY

Nature Reviews Microbiology

Published by Nature Publishing Group

Impact factor: 26.819 (2016/2017)

Frequency: Monthly

Nature Reviews Microbiology is a peer-reviewed review journal published by the Nature Publishing Group. It publishes reviews and perspectives on microbiology, bridging fundamental research and its clinical, industrial, and environmental applications.

Clinical Infectious Diseases

Published by Oxford University Press

Impact factor: 8.216 (2016/2017)

Frequency: 24 no. a year

Clinical Infectious Diseases (CID) is a leading journal in the field of infectious disease with a broad international readership. The Journal publishes articles on a variety of subjects of interest to practitioners and researchers. Topics range from clinical descriptions of infections, public health, microbiology, and immunology to the prevention of infection, the evaluation of current and novel treatments, and the promotion of optimal practices for diagnosis and treatment. The Journal publishes original research (as Major Articles or Brief Reports), Review Articles, Viewpoints, Editorials, Invited Commentaries, Photo Quizzes, Practice Guidelines, Correspondence, and Supplements and is among the most highly cited journals in the field of infectious diseases. Clinical Infectious Diseases is an official publication of the Infectious Diseases Society of America.

Journal of Antimicrobial Chemotherapy

Published by Oxford University Press

Impact factor: 5.071 (2016/2017)

Frequency: Monthly

The Journal of Antimicrobial Chemotherapy is a journal of the British Society for Antimicrobial Chemotherapy (BSAC) and is among the foremost international journals in antimicrobial research. Our readership includes representatives of academia, industry and health services, and includes those who are influential in formulary decisions.

Published monthly, the Journal features original articles on the laboratory aspects and clinical use of antimicrobials including antibacterial, antiviral, antifungal, and antiprotzoal agents.

The Journal publishes between two and eight supplements each year. These include Working Party reports of the British Society for Antimicrobial Chemotherapy, and original publications on pre-clinical and clinical aspects of drugs in development or the role of established drugs in specific therapeutic areas.

Journal of Antimicrobial Chemotherapy

Published by Frontiers Research Foundation

Impact factor: 4.476 (2016/2017)

Frequency: Monthly

Antimicrobial Agents and Chemotherapy® (AAC) features interdisciplinary studies that build our understanding of the underlying mechanisms and therapeutic applications of antimicrobial and antiparasitic agents and chemotherapy. The journal also publishes studies involving animal models, pharmacological characterization, and clinical trials. Complementing the journal's full-length research articles, minireviews quickly bring readers up to date with the state of the science in fast-moving areas of research, making it a key resource for microbiologists, pharmaceutical researchers, biochemists, pharmacologists, clinicians, and other infectious disease practitioners.

Frontiers in Microbiology

Published by American Society for Microbiology

Impact factor: 4.076 (2016/2017)

Frontiers in Microbiology is a leading journal in its field, publishing rigorously peer-reviewed research across the entire spectrum of microbiology. Field Chief Editor Martin G. Klotz at Washington State University is supported by an outstanding Editorial Board of international researchers. This multidisciplinary open-access journal is at the forefront of disseminating and communicating scientific knowledge and impactful discoveries to researchers, academics, clinicians and the public worldwide.

As we are taking much better account of the unseen majority of life, unravel the biogeochemical processes that microbes facilitate, thereby making planet Earth habitable for all forms of life; as we increasingly identify the rules by which microorganisms interact with co-evolving viruses and macroorganisms in health and disease; and as we find more and better strategies to mitigate the detrimental effects of anthropogenic activities on the abundance, diversity, distribution and activity of microbial communities, Frontiers in Microbiology will be the 21st century approach to communicate all this progress to both the specialist and a wider audience of readers in the field.

Applied and Environmental Microbiology

Published by American Society for Microbiology

Impact factor: 3.807 (2016/2017)

Frequency: Twice a month

Applied and Environmental Microbiology® (AEM) publishes study results that make significant contributions to applied microbial research, basic microbial ecology research, and genetic and molecular investigations of microbial topics of practical value. The journal sheds new light on key microbiological principles, fundamental microbial processes, and basic questions in applied and environmental microbiology. Its original research articles not only build on our understanding of microbiology but also enable scientists to advance their own investigations, design new products, and develop new processes.

Applied and Environmental Microbiology

Published by Oxford University Press

Impact factor: 3.720 (2016/2017)

Frequency: Monthly

FEMS Microbiology Ecology publishes high quality papers that make a significant contribution to the field. It covers microorganisms in soil, aquatic and atmospheric habitats – including extreme environments – and includes natural, artificial and managed systems.

Applied Microbiology and Biotechnology

Published by Springer International Publishing AG

Impact factor: 3.420 (2016/2017)

Frequency: Twice a month

Applied Microbiology and Biotechnology focusses on prokaryotic or eukaryotic cells, relevant enzymes and proteins; applied genetics and molecular biotechnology; genomics and proteomics;

applied microbial and cell physiology; environmental biotechnology; process and products and more. The journal welcomes full-length papers and mini-reviews of new and emerging products, processes and technologies.

Microbes and Environments

Published by Japanese Society of Microbial Ecology

Impact factor: 2.909 (2016/2017)

Frequency: Quaterly

Microbes and Environments (M&E) is an international, peer-reviewed, open access journal devoted to the publication of original and review articles regarding all aspects of research on microbial ecology and environmental microbiology. It is published quarterly in a printed and an electronic version by Japanese Society of Microbial Ecology (JSME), Japanese Society of Soil Microbiology (JSSM), Taiwan Society of Microbial Ecology (TSME), and Japanese Society of Plant Microbe Interactions (JSPMI).

Letters in Applied Microbiology

Published by Wiley

Impact factor: 1.575 (2016/2017)

Frequency: Monthly

Letters in Applied Microbiology (LAM) provides for the rapid publication of short, high quality papers in the broad field of applied microbiology, including environmental, food, agricultural, medical, pharmaceutical, veterinary, taxonomy, soil, systematics, water and biodeterioration. Advances in rapid methodology are a particular feature. The Journal reflects developments in biotechnology in such fields as applied microbial genetics, immunodiagnosis and fermentation science.

Journal of Global Antimicrobial Resistance

Published by Elsevier

Impact factor: 1.276 (2016/2017)

Frequency: Quarterly

JGAR is an official journal of and owned by the International Society of Antimicrobial Chemotherapy (ISAC), the Global Chinese Association of Clinical Microbiology and Infectious Diseases (GCACMID), and the Asia-Pacific Society of Clinical Microbiology and Infection (APSCMI)

The Journal of Global Antimicrobial Resistance (JGAR) is a quarterly online journal run by an international Editorial Board that focuses on the global spread of antibiotic-resistant microbes.

JGAR is a dedicated journal for all professionals working in research, health care, the environment and animal infection control, aiming to track the resistance threat worldwide and provides a single voice devoted to antimicrobial resistance (AMR).

Featuring peer-reviewed and up to date research articles, reviews, short notes and hot topics JGAR covers the key topics related to antibacterial, antiviral, antifungal and antiparasitic resistance.

ENVIRONMENTAL SCIENCES

Environmental Health Perspectives

Published by U.S. National Institute of Environmental Health Sciences (NIEHS)

Impact factor: 9.776 (2016/2017)

Frequency: Monthly

Environmental Health Perspectives (ISSN-L 0091-6765) is a monthly peer-reviewed journal of research and news published with support from the National Institute of Environmental Health Sciences (NIEHS), National Institutes of Health, U.S. Department of Health and Human Services.

The mission of EHP is to serve as a forum for the discussion of the interrelationships between the environment and human health by publishing high-quality research and news of the field. With an impact factor of 9.78, EHP is one of the most highly ranked journals in Toxicology, Public, Environmental and Occupational Health, and Environmental Sciences.

The environmental health sciences include many fields of study and increasingly comprise a multidisciplinary research area. EHP publishes articles from a wide range of scientific disciplines encompassing basic research; epidemiologic studies; risk assessment; relevant ethical, legal, social, environmental justice, and policy topics; longitudinal human studies; and in vitro and in vivo animal research with a clear relationship to human health. Because children are uniquely sensitive to their environments, EHP devotes a research section specifically to issues surrounding children's environmental health.

Environmental science & technology

Published by American Chemical Society

Impact factor: 6.198 (2016/2017)

Frequency: Twice a month

Environmental Science & Technology (ES&T) is an authoritative source of information for professionals in a wide range of environmental disciplines. The journal combines magazine and research sections and is published both in print and online.

Environmental Pollution

Published by Elsevier

Impact factor: 5.099 (2016/2017)

Frequency: 15 issues/year

Environmental Pollution is an international journal that seeks to publish papers that report results from original, novel research that addresses significant environmental pollution issues and problems and contribute new knowledge to science.

The editors welcome high quality papers where the pollutants are clearly defined and measured and can be directly related to biological, ecological, and human health effects. This includes air, water, and soil pollution and climate change. New techniques for the study and measurement of pollutants and their effects are also encouraged as well as papers on new types of environmental challenges such as pollution/antibiotic resistances of organisms. Emerging pollutions are of eminent interest, such as microplastics, electronic wastes, light or noise pollution as long as they can clearly be related to the biological effects mentioned above. Papers must be process-orientated and/or hypotheses-based to be considered for publication. Papers based on field studies are given priority for publication over micro/meso cosmos studies.

Papers, such as meta analyses, that report findings from re-examination and interpretation of existing data are welcome. Modeling papers are welcome only to a certain extent, i.e., they must be related to a specific pollution issue or process that is potentially of ecological and/or human health implications. Critical review papers and commentaries are also of high interest as are letters to the editor.

Science of the Total Environment

Published by Elsevier

Impact factor: 4.9 (2016/2017)

Frequency: 54/year

Science of the Total Environment is an international journal for publication of original research on the total environment, which includes the atmosphere, hydrosphere, biosphere, lithosphere, and anthroposphere.

The total environment is characterized where these five spheres overlap. Studies that focus on at least two or three of these will be given primary consideration. Papers reporting results from only one sphere will not be considered. Field studies are given priority over laboratory studies. The total environment is studied when data are collected and described from these five spheres. By definition total environment studies must be multidisciplinary.

Chemosphere

Published by Elsevier

Impact factor: 4.208 (2016/2017)

Frequency: 30 issues/year

Chemosphere is an international journal designed for the publication of original communications and review articles. As a multidisciplinary journal, Chemosphere offers broad and impactful dissemination of investigations related to all aspects of environmental science and engineering. All papers should demonstrate a high level of novelty, originality and uniqueness. The following sections and subject fields are included: (a) Environmental Chemistry (including Persistent Organic Pollutants and Dioxins); (b) Toxicology and Risk Assessment; (c) Treatment and Remediation.

Environmental Research

Published by Elsevier

Impact factor: 3.835 (2016/2017)

Frequency: 8 issues/year

Environmental Research publishes original reports describing studies of the adverse effects of environmental agents on humans and animals. The principal aim of the journal is to assess the impact of chemicals and microbiological pollutants on human health. Both in vivo and in vitro studies, focused on defining the etiology of environmentally induced illness and to increase understanding of the mechanisms by which environmental agents cause disease, are especially welcome. Investigations on the effects of global warming/climate change on the environment and public health, as well as those focused on the effects of anthropogenic activities on climate change are also of particular interest.

Ecotoxicology and Environmental Safety

Published by Elsevier

Impact factor: 3.743 (2016/2017)

Frequency: 8 issues/year

Scope of the EES journal Ecotoxicology and Environmental Safety is a multi-disciplinary journal that focuses on understanding the exposure and effects of environmental contamination on organisms including human health. The scope of the journal covers three main themes. The topics within these themes are (but are not limited to) ecotoxicology, environmental chemistry and environmental safety.

Atmospheric Environment

Published by Elsevier

Impact factor: 3.629 (2016/2017)

Frequency: 18 issues/year

Atmospheric Environment is the international journal for scientists in different disciplines related to atmospheric composition and its impacts. The journal publishes scientific articles with atmospheric relevance of emissions and depositions of gaseous and particulate compounds, chemical processes and physical effects in the atmosphere, as well as impacts of the changing atmospheric composition on human health, air quality, climate change, and ecosystems.

Atmospheric Environment publishes original research and review articles, special issues, supplements, and New Directions columns. The articles should be of general relevance and novelty in terms of atmospheric observations, process studies, modeling, and data analysis.

Journal of Environmental Sciences

Published by IOS Press, Elsevier and Science Press

Impact factor: 2.937 (2016/2017)

Frequency: Monthly

Journal of Environmental Sciences is an international peer-reviewed journal established in 1989. It is sponsored by the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, and it is jointly published by Elsevier and Science Press. It aims to foster interdisciplinary communication and promote understanding of significant environmental issues. The journal seeks to publish significant and novel research on the fate and behaviour of emerging contaminants, human impact on the environment, human exposure to environmental contaminants and their health effects, and environmental remediation and management. Original research articles, critical reviews, highlights, and perspectives of high quality are published both in print and online.

Environmental Science and Pollution Research

Published by Springer

Impact factor: 2.741 (2016/2017)

Frequency: Twice a month

Environmental Science and Pollution Research (ESPR) serves the international community in all areas of Environmental Science and related subjects with emphasis on chemical compounds. It reports from a broad interdisciplinary outlook. Apart from the strictly scientific contributions as

research articles (short and full papers) and reviews, ESPR publishes: news & views from research and technology, legislation and regulation, hardware and software, education, literature, institutions, organizations, conferences.

ESPR represents the international perspective, with emphasis on the natural sciences but also includes the impacts of legislation, regulation, and the economy on pollution control; and ESPR articles are generally chemically oriented but cover all the broad areas within environmental science.

ESPR was conceived as a truly international scientific journal.

Information from ESPR should also be useful for planning lectures and university environmental curricula. A global network of editorial board members represents a variety of disciplines and groups of interest: university, industry, administrative bodies, government, consulting companies, public interest groups. The Editorial Board safeguards the international and interdisciplinary character of the journal and ensures appropriate refereeing procedures (peer review).

Environmental Monitoring and Assessment

Published by Springer

Impact factor: 1.687 (2016/2017)

Frequency: 48 no. a year

Environmental Monitoring and Assessment discusses technical developments and data arising from environmental monitoring and assessment, principles in the design of monitoring systems, and the use of monitoring data in assessing the consequences of natural resource management and pollution risks.

The journal examines monitoring systems designed to estimate exposure both at the individual and population levels, and also focuses on the development of monitoring systems related to the management of various renewable natural resources in, for instance, agriculture, fisheries and forests.

Coverage extends to the use of monitoring in pollution assessment, and particular emphasis is given to the synthesis of monitoring data with toxicological, epidemiological and health data, as well as with pre-market screening results.

High quality research papers or reviews dealing with any aspect of environmental monitoring are encouraged. However, papers should not be submitted that do not advance scientific knowledge on environmental monitoring issues. Articles that simply replicate known knowledge or techniques and do not add anything new or unique to the science will normally be rejected.

WATER

Water Research

Published by Elsevier

Impact factor: 6.942 (2016/2017)

Water Research publishes refereed, original research papers on all aspects of the science and technology of water quality and its management worldwide. A broad outline of the journal's scope includes (a) Treatment processes for water and wastewaters, municipal, agricultural and industrial, including residuals management; (b) Water quality monitoring and assessment, based on chemical, physical and biological methods; (c) Studies on inland, tidal or coastal waters and urban waters, including surface and ground waters, and point and non-point sources of pollution; (d) The limnology of lakes, impoundments and rivers; (e) Solid and hazardous waste management, including

source characterization and the effects and control of leachates and gaseous emissions; (f) Environmental restoration, including soil and groundwater remediation; (g) Analysis of the interfaces between sediments and water, and water/atmosphere interactions; (h) The application of mathematical modelling and system analysis techniques; (i) Public health and risk assessment; (j) Socio-economic studies.

Desalination

Published by Springer

Impact factor: 5.527 (2016/2017)

Frequency: Quarterly

Desalination is dedicated to promoting leading edge progress on the globally important topic of water desalting since 1966. It focuses broadly on science and engineering, being both fundamental and applied in motivation, respecting that desalination today is a widely accepted practice by industry and communities, but in need of ongoing innovation at all levels to ensure economic and environmental sustainability.

Desalination therefore welcomes submissions detailing work that is clearly connected to water desalting including applications of desalination to seawater, groundwater and waste waters, such as thermal, membrane, sorption and hybrid processes. The journal considers articles showing advances in science made on desalination materials, processes and related technologies. Articles can feature transport and process modelling, energy consumption, renewable energy and energy recovery. Topics can also be on related systems such as pre-treatment, post-treatment, integrated plants and brine disposal. Performance aspects are also of interest, for example causes, consequences, and countermeasures of fouling and scaling. Articles presenting interesting technical, economic, and regulatory analyses of full-scale plants will also be considered. Overall, topics of submitted articles are prioritised to those well suited to a journal dedicated to the field of desalination.

CLEAN – Soil, Air, Water

Published by Wiley-VCH Verlag

Impact factor: 1.473 (2016/2017)

Frequency: Monthly

CLEAN covers all aspects of Sustainability and Environmental Safety. The journal focuses on organ/human--environment interactions giving interdisciplinary insights on a broad range of topics including air pollution, waste management, the water cycle, and environmental conservation. The journal publishes an attractive mixture of peer-reviewed scientific reviews, research papers, and short communications.

Papers dealing with environmental sustainability issues from such fields as agriculture, biological sciences, energy, food sciences, geography, geology, meteorology, nutrition, soil and water sciences, etc., are welcome.

Journal of Water and Health

Published by IWA publishing

Impact factor: 1.041 (2016/2017)

Frequency: Four no. a year

Journal of Water and Health is a peer-reviewed journal devoted to the dissemination of information on the health implications and control of waterborne microorganisms and chemical substances in the broadest sense for developing and developed countries worldwide. This includes microbial toxins, chemical quality and the aesthetic qualities of water.

BROAD SCIENCE

PLOS ONE

Published by U.S. Public Library of Science

Impact factor: 2.806 (2016/2017)

Frequency: Upon acceptance

The world's first multidisciplinary Open Access journal, PLOS ONE accepts scientifically rigorous research, regardless of novelty. PLOS ONE's broad scope provides a platform to publish primary research, including interdisciplinary and replication studies as well as negative results. The journal's publication criteria are based on high ethical standards and the rigor of the methodology and conclusions reported.

PLOS ONE features reports of original research from the natural sciences, medical research, engineering, as well as the related social sciences and humanities that will contribute to the base of scientific knowledge. By not excluding research on the basis of subject area, PLOS ONE facilitates the discovery of connections between research whether within or between disciplines.

Annex 2. List of project-relevant scientific events

- **The 15th IWA Leading Edge Conference on Water and Wastewater Technologies**
Nanjing, China, May 27-31, 2018
Deadline for presenters (oral and poster): March 31, 2018
<http://iwa-let.org/>
- **ICAWS 2018 : 20th International Conference on Advances in Water and Soil Microbiology**
Toronto, Canada, July 19-20, 2018
Abstract submission deadline: March 9, 2018
<https://waset.org/conference/2018/07/toronto/ICAWS>
- **13th Conference on Microbial Interactions & Microbial Ecology**
Rome, Italy, July 19-20, 2018
<https://microbialinteraction.conferenceseries.com/>
- **ICEH 2018 : 20th International Conference on Environment and Health**
Zurich, Switzerland, July 30-31, 2018
Abstract submission deadline: March 9, 2018
<https://waset.org/conference/2018/07/zurich/ICEH>
- **ISES-ISEE 2018 Joint Annual Meeting: Addressing Complex Local and Global Issues in Environmental Exposure and Health**
Ottawa, Canada, Aug 26-30, 2018
<http://isesisee2018.org/>
- **47th World Congress on Microbiology**
London, UK, Sept 10-11, 2018
<https://europe.microbiologyconferences.com/>
- **ICATWEM 2018 : 20th International Conference on Advanced Technology in Water and Environmental Microbiology**
Paris, France, Sept 21-21, 2018
Abstract submission deadline: March 9, 2018
<https://waset.org/conference/2018/09/paris/ICATWEM>
- **2nd Annual Summit on Antimicrobials and Drugs Resistance**
Montreal, Canada, Sept 24-25, 2018
<http://antimicrobes.alliedacademies.com/>

- **ICAWEM 2018 : 20th International Conference on Advances in Water and Environmental Microbiology**
Chicago, USA, Oct 15-16, 2018
<https://waset.org/conference/2018/10/chicago/ICAWEM>
- **Environmental Health and Preventive Medicine**
Warsaw, Poland, Oct 15-16, 2018
<https://environmentalhealth.conferenceseries.com/call-for-abstracts.php>
- **ICBHES 2018 : 20th International Conference on Biological, Health and Environmental Sciences**
Amsterdam, Netherlands, Nov 5-6, 2018
<https://waset.org/conference/2018/11/amsterdam/ICBHES>
- **Water and Health Conference**
Chapel Hill, North Carolina, Oct 29-Nov 2, 2018
<http://waterinstitute.unc.edu/conferences/#>
- **3rd International Conference on Water Microbiology and Novel Technologies**
Birmingham, Alabama USA, Nov 07-08, 2018
<https://water.conferenceseries.com/>
- **14th International Conference on Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases**
Sitges, Spain, Nov 6-9, 2018
Abstract submission deadline - June 1, 2018
<https://www.elsevier.com/events/conferences/meegid>
- **ICAE 2018 : 20th International Conference on Aerobiology and Epidemiology**
London, UK, Nov 19-20, 2018
Abstracts/Full-Text Paper Submission Deadline: March 9, 2018
<https://waset.org/conference/2018/11/london/ICAE>
- **ESCAIDE 2018: European Scientific Conference on Applied Infectious Disease Epidemiology**
St. Julien, Malta, Nov 21-23, 2018
<https://www.escaide.eu/en>
- **11th European Public Health Conference**
Ljubljana, Slovenia, 28 Nov - Dec 1, 2018
Abstract submission deadline – May 1, 2018
<https://ephconference.eu/>

2019

- **Wasser Berlin International**
Berlin, Germany (Mar 26-28, 2019)
<https://www.wasser-berlin.de/DieMesse/>
- **ICOHAR International Conference on One Health Antimicrobial Resistance**
Utrecht, Netherlands (Apr 16-18, 2019)
Abstract submission deadline: Jan 16, 2019
<http://www.icohar2019.org/icohar2019.html>
- **ICBVA 2019: International Conference on Bacterial Vaccines and Antibiotics**
Venice, Italy (Jun 20-21, 2019)
Abstract submission deadline: Apr 30, 2019
<https://waset.org/conference/2019/06/venice/ICBVA>
- **48th World Congress on Microbiology** (Theme: Current Research and Future Developments in Microbiology)
Moscow, Russia (Jun 24-25, 2019)
<https://europe.microbiologyconferences.com/>
- **ARAE 2019: 8th Symposium on Antimicrobial Resistance in Animals and the Environment**
France (Jul 1-3, 2019)
Registration deadline: Jun 03, 2019
<https://symposium.inra.fr/arae2019/>
- **ICWSMT 2019: International Conference on Advances in Water and Soil Microbiology and Treatments,**
Berlin, Germany (Jul 22-23, 2019)
Abstract submission deadline: May 30, 2019
<https://waset.org/conference/2019/07/berlin/ICWSMT>
- **14th International Conference on Microbial Interactions & Microbial Ecology** (Theme: Addressing New Challenges and emerging issues in Microbiology)
Vienna, Austria (Aug 19-20, 2019)
<https://microbialinteractions.expertconferences.org/>
- **2nd European Conference on Epidemiology & Public Health** (Theme: Exploring the emerging transitions in Epidemiology and Public Health)
Paris, France (Sep 16-17, 2019)
<https://epidemiology-publichealth.healthconferences.org/>
- **ICAIDE 2019: International Conference on Applied Infectious Disease Epidemiology,**
Montreal (Aug 05-06, 2019)
Abstract submission deadline: Jun 13, 2019
<https://waset.org/conference/2019/08/montreal/ICAIDE>
- **ICBID 2019: International Conference on Bacteriology and Infectious Diseases,**
Istanbul (Aug 15-16, 2019)
Abstract submission deadline: Jun 13, 2019
<https://waset.org/conference/2019/08/istanbul/ICBID>
- **2nd International Conference on Epidemiology** (Theme: New Innovations & Current Trends in the field of Epidemiology)

Toronto, Canada (Aug 19-20, 2019)

<https://www.americanmeetings.net/conferences/epidemiology>

- **ICBVAR 2019: International Conference on Bacterial Vaccines and Antibiotic Resistance**, Singapore, SG (Sep 10-11, 2019)
Abstract submission deadline: Jul 1, 2019
<https://waset.org/conference/2020/09/singapore/ICBVAR>
- **20th International Symposium on Health Related Water Microbiology**
Vienna, Austria (Sep 15-20, 2019)
Abstract Submission deadline: Apr 15, 2019
<http://www.iwa-network.org/events/20th-international-symposium-on-health-related-water-microbiology/>
- **ICATWEM: International Conference on Advanced Technology in Water and Environmental Microbiology**
Paris, France (Sep 19 - 20, 2019)
Abstract submission deadline: July 01, 2019
<https://waset.org/conference/2019/09/paris/ICATWEM>
- **ICBVAR 2019: International Conference on Bacterial Vaccines and Antibiotic Resistance**
Singapore, SG (Sep 10 – 11, 2019)
Abstract submission deadline: July 01, 2019
<https://waset.org/conference/2019/09/singapore/ICBVAR>
- **20th International Symposium on Health Related Water Microbiology**
Austria (Sep 15-20, 2019)
Abstract submission deadline: Apr 22, 2019
<http://www.hrwm.eu/>
- **2nd European Conference on Epidemiology & Public Health** (Theme: Exploring the emerging transitions in Epidemiology and Public Health)
Paris, France (Sep 16-17, 2019)
<https://epidemiology-publichealth.healthconferences.org/>
- **11th IWA EE YWP Conference: Water for All, Water for Nature, Reliable Water Supply, Wastewater, Treatment and Reuse**
Czech Republic (Oct 01-05, 2019)
Abstract submission deadline: May 15, 2019
<https://iwa-ywp.eu/>
- **UNC Water and Health: Where Science Meets Policy**
Chapel Hill, North Carolina (Oct 7-11, 2019)
<https://waterinstitute.unc.edu/conferences/waterandhealth2019/>
- **ICABCM 2019: International Conference on Antibiotics, Bioactive Compounds and Medicine**,
New York, USA (Oct 08-09, 2019)
Abstract submission deadline: Jul 01, 2019
<https://waset.org/conference/2019/10/new-york/ICABCM>

- **ICAWAMTB 2019: International Conference on Applications of Water and Agriculture Microbiology, Toxicology, Biofilms,**
New York, USA (Oct 08-09, 2019)
Abstract submission deadline: Jul 01, 2019
<https://waset.org/conference/2019/10/new-york/ICAWAMTB>
- **ICAWAMEB 2019: International Conference on Applications of Water and Agriculture Microbiology, Ecotoxicology, Biofilms,**
Osaka, Japan (Oct 09-10, 2019)
Abstract submission deadline: Jul 01, 2019
<https://waset.org/conference/2019/10/osaka/ICAWAMEB>
- **ICAWEM 2019: International Conference on Advances in Water and Environmental Microbiology,**
Chicago, USA (Oct 10-11, 2019)
Abstract submission deadline: Jul 01, 2019
<https://waset.org/conference/2019/10/chicago/ICAWEM>
- **ICWEMTB 2019: International Conference on Applications of Water and Environmental Microbiology, Toxicology, Biofilms,**
Rome, Italy (Oct 17-18, 2019)
Abstract submission deadline: Jul 01, 2019
<https://waset.org/conference/2019/10/rome/ICWEMTB>
- **8th International Conference on Epidemiology & Public Health** (Theme: A new journey inquest of Innovations & Current Trends in the field of Epidemiology & Public Health)
Tokyo, Japan (Oct 21-22, 2019)
<https://publichealth-epidemiology.conferenceseries.com/>
- **6th World Congress and Expo on Applied Microbiology** (Theme: Current Research and Future Innovations in Microbiology)
Rome, Italy (Oct 21-22, 2019)
<https://microbiology.conferenceseries.com/>
- **5th Global Public Health Congress** (Theme: Advancing New Innovate Technologies in Public Health)
Florence, Italy (Oct 24-25, 2019)
Abstract submission deadline:
<https://globalpublichealth.conferenceseries.com/>
- **Fifth edition Amsterdam International Water Week Conference**
Amsterdam (Nov 04-08, 2019)
<https://www.amsterdamiww.com/>
- **12th European Public Health Conference** (Building bridges for solidarity and public health)
France (Nov 20-23, 2019)
<https://ephconference.eu/>
- **2019 Innovation Conference on Sustainable Wastewater Treatment and Resource Recovery**
Shanghai, China (Nov 25-28, 2019)

Abstract submission deadline: Jun 30, 2019

<http://www.nrr2019.com/>

- **ESCAIDE European Scientific Conference on Applied Infectious Disease Epidemiology**
Stockholm (Nov 27-29, 2019)
Late breaker abstract call: Sep 2-18, 2019
<https://www.escaide.eu/en>
- **ICBDA 2019: International Conference on Bacterial Diseases and Antibiotics**,
Vienna (Dec 26-27, 2019)
Abstract submission deadline: Jul 01, 2019
<https://waset.org/conference/2019/12/vienna/ICBDA>
- **16th International Specialised Conferences on Small Water and Wastewater Systems**
Australia (Dec 01-05, 2019)
Abstract submission deadline: Jul 15, 2019
<https://www.swws2019.com/>

2020

- **Global Health and Emerging diseases**
Amsterdam, Netherlands (Mar 2 - 4, 2020)
<http://globalhealthcareconferences.com/europe/>
- **8th World Congress on Healthcare and Healthcare Management** (Theme: Navigating the Complexities of Healthcare in a Modern Society)
Tokyo, Japan (Apr 20-21, 2020)
<https://healthcare.healthconferences.org/>
- **ICBIA 2020: International Conference on Bacterial Infections and Antibiotics**,
London, UK (Apr 23-24, 2020)
<https://waset.org/conference/2020/04/london/ICBIA>
- **ICPH 2020: International Conference on Public Health**
London, UK (May 21-22, 2020)
<https://waset.org/conference/2020/05/London/ICPH>
- **ICAWEMEB 2020: International Conference on Applications of Water and Environmental Microbiology, Ecotoxicology, Biofilms**,
Vienna, Austria (Jun 18-19, 2020)
<https://waset.org/conference/2020/06/vienna/ICAWEMEB>
- **ICBVA 2020: International Conference on Bacterial Vaccines and Antibiotics**,
Venice, Italy (Jun 22-23, 2020)
<https://waset.org/conference/2020/06/venice/ICBVA>
- **Drug Resistance Conference**
Smithfield, RI, US (Jun 28 – Jul 03, 2020)
Application submission deadline: May 31, 2020
<https://www.grc.org/drug-resistance-conference/2020/>
- **ICAWS 2020: International Conference on Advances in Water and Soil Microbiology**,
Toronto, Canada (Jul 16-17, 2020)

- <https://waset.org/conference/2020/07/toronto/ICAWS>
- **ICWSMT 2020: International Conference on Advances in Water and Soil Microbiology and Treatments,**
Berlin, Germany (Jul 23-24, 2020)
<https://waset.org/conference/2020/07/berlin/ICWSMT>
 - **ICAIDE 2020 : 22nd International Conference on Applied Infectious Disease Epidemiology Copenhagen, Denmark, Aug 17-18, 2020**
Abstracts/Full-Text Paper Submission Deadline: Oct 17, 2019
<https://waset.org/conference/2020/08/Copenhagen/ICAIDE>
 - **ICBVAR 2020: International Conference on Bacterial Vaccines and Antibiotic Resistance,**
Singapore, SG (Sep 10-11, 2020)
<https://waset.org/conference/2020/09/singapore/ICBVAR>
 - **WCE 2020: World Congress of Epidemiology**
Melbourne, Australia (Sep 13-16, 2020)
<http://wce2020.org/>
 - **ICATWEM 2020: International Conference on Advanced Technology in Water and Environmental Microbiology,**
Paris, France (Sep 17-18, 2020)
<https://waset.org/conference/2020/09/paris/ICATWEM>
 - **ICABCM 2020: International Conference on Antibiotics, Bioactive Compounds and Medicine,**
New York, USA (Oct 08-09, 2020)
<https://waset.org/conference/2020/10/new-york/ICABCM>
 - **ICAWEM 2020: International Conference on Advances in Water and Environmental Microbiology,**
Chicago, USA (Oct 08-09, 2020)
<https://waset.org/conference/2020/10/chicago/ICAWEM>
 - **ICAWAMEB 2020: International Conference on Applications of Water and Agriculture Microbiology, Ecotoxicology, Biofilms,**
Osaka, Japan (Oct 08-09, 2020)
<https://waset.org/conference/2020/10/osaka/ICAWAMEB>
 - **ICAWAMTB 2020: International Conference on Applications of Water and Agriculture Microbiology, Toxicology, Biofilms,**
New York, USA (Oct 08-09, 2020)
<https://waset.org/conference/2020/10/new-york/ICAWAMTB>
 - **16th World Congress on Public Health** (Theme of the Congress: Public Health for the Future of Humanity: Analysis, Advocacy, and Action)
Rome, Italy (Oct 12 – 17, 2020)
<https://ephconference.eu/16th-world-congress-on-%20public-health-Rome-2020-106>
 - **ICWEMTB 2020: International Conference on Applications of Water and Environmental Microbiology, Toxicology, Biofilms,**

Rome, Italy (Oct 15-16, 2020)

<https://waset.org/conference/2020/10/rome/ICWEMTB>

- **ICBDA 2020: International Conference on Bacterial Diseases and Antibiotics**,
Vienna, Austria (Dec 24-25, 2020)
<https://waset.org/conference/2020/12/vienna/ICBDA>

2021

- **EDAR 6: 6th International Symposium on the Environmental Dimension of Antibiotic Resistance**
Gothenburg, Sweden (May 30 – Jun 4, 2021)
<https://care.gu.se/edar-6>
- **13th IWA Conference on Instrumentation, Control and Automation**
China (Sep 12-16, 2021)
<https://iwa-network.org/events/13th-iwa-conference-on-instrumentation-control-and-automation/>

List of conferences:

<https://waset.org/conference/medical-and-health-sciences>

Annex 3. Dissemination schedule of newsletters

No.	Topics	Due Date
D 5.3	Newsletter 1	June 2018
D 5.4	Newsletter 2	July 2019
D 5.5	Newsletter 3	June 2020

Annex 4. List of public deliverables

No.	Topic	Due Date	Comments
D 1.1	Questionnaires	April 2018	To be published with scientific publications
D 1.2	Study Protocol and ethical approval	January 2018	To be published with scientific publications
D 1.4	SOPs pilot study	February 2018	To be published with scientific publications
D 2.1	SOPs for fecal, air and water sample analysis	December 2017	To be published after scientific publications
D 2.3	Inventory of antibiotic pollutants of selected samples	End of results phase	
D 3.2	In-depth characterization	End of results phase	restricted access after embargo period
D 3.3	Inventory of types and relative abundances of resistance genes	End of results phase	restricted access after embargo period
D 3.4	Inventory of resistance genes prevalence of selected genes	End of results phase	restricted access after embargo period
D 3.5	Analyses of absolute and relative resistance gene prevalence	End of results phase	restricted access after embargo period
D 4.1	A model to compute exposure	End of results phase	restricted access after embargo period
D 4.2	Dose-response models for carriage	End of results phase	restricted access after embargo period
D 5.1	Dissemination plan	April 2018	
D 5.2	Webpage	April 2018	
D 5.3	Newsletter 1 - June 2018	June 2018	
D 5.4	Newsletter 2 - December 2018	July 2019	
D 5.5	Newsletter 3 - June 2019	June 2020	
D 5.9	Final project workshop	End of project	
D 5.10	Presentations and participation at relevant scientific conferences and workshops	Continuously	
D 5.11	Publication in peer-reviewed journals	Protocol: before data collection Other publications: as results become available	

Annex 5. Project leaflet (Version for Germany)

Study Team

The international team of the AWARE study is composed of scientists from the Netherlands, Sweden, Romania and Germany.



Contact Information

If you would like to participate in the AWARE study with your company or have any questions, you are welcome to contact us at any time:

Daloha Rodriguez, Lennart Neumann, Prof. Dr. Katja Radon
Institute for Occupational, Social and Environmental Medicine
LMU, Munich
E-Mail: arb.aware@med.uni-muenchen.de
Telephone: +49 4400 52358

The AWARE study is financially supported by



DLR Projektträger



Bundesministerium
für Bildung
und Forschung

Invitation to participate in the AWARE Study



Antibiotic Resistance in Waste Water: Transmission Risks for Employees and Residents around Waste Water Treatment Plants

Dear Sir or Madam,

In the following, I would like to introduce you to the AWARE study on antibiotic resistance in wastewater. I cordially invite you to participate in this study with your wastewater treatment plant.

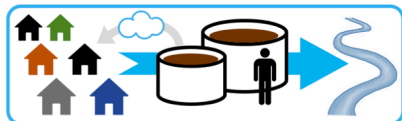
Katja Radon

Prof. Dr. Katja Radon
Institute for Occupational, Social and Environmental Medicine,
LMU Munich

BACK

Background

- The increase in infections caused by antibiotic-resistant bacteria poses a threat to public health.
- From private households, hospitals, agriculture and slaughterhouses, antibiotic-resistant bacteria can be channeled into municipal sewage treatment plants.
- It is unclear whether and to what extent antibiotic-resistant bacteria from sewage treatment plants are transferred to wastewater treatment plant workers and residents.



The AWARE Study

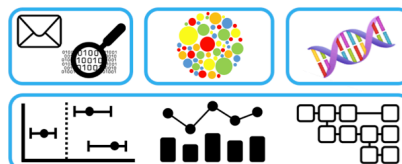
- A total of 300 employees and 2400 residents of municipal sewage treatment plants in Germany, the Netherlands and Romania are invited to participate in the study.
- The participants will be asked to complete a short questionnaire and to provide a stool sample. The sample will be examined for antibiotic-resistant bacteria. In addition, water and air samples will be taken at the treatment plant site.

We will then be able to assess the presence of antibiotic-resistant bacteria in municipal wastewater treatment plants and possible transmission to humans. The aim is to derive preventive strategies if necessary.

What is the benefit of participating in the study for you and your company?

By participating in the study, you will learn whether and:

- to what extent antibiotic-resistant bacteria are present in your water treatment plant.
- which areas of your business are affected by antibiotic-resistant bacteria.
- what types of antibiotic-resistant bacteria are present in your plant.
- to what extent antibiotic-resistant bacteria are transmitted to your employees.



You will receive all results in written and in graphic form. **If antibiotic-resistant bacteria are found in your plant, we happily agree to discuss with you ways to reduce their presence, if you desire.**

Data protection

Only you as the operator get access to your collected data. Only the employees receive a personal result. In all further analyses, only anonymised data is evaluated.

Annex 6. Project logo

Without project title
Color



hex: #27A366
rgb: 36, 162, 101
cmyk: 76, 0, 37, 36

Black&White



With project title
Color




Antibiotic Resistance in Wastewater
Transmission Risks for Employees and Residents
around Wastewater Treatment Plants

Black&White




Antibiotic Resistance in Wastewater
Transmission Risks for Employees and Residents
around Wastewater Treatment Plants


Annex 7. Project website: homepage



Antibiotic Resistance in Wastewater


Transmission Risks for Employees and Residents around Wastewater Treatment Plants


Co-funded by the European Union 


Suche 


[sitemap](#) | [Klinikum-Startpage](#) [DE](#) [EN](#)

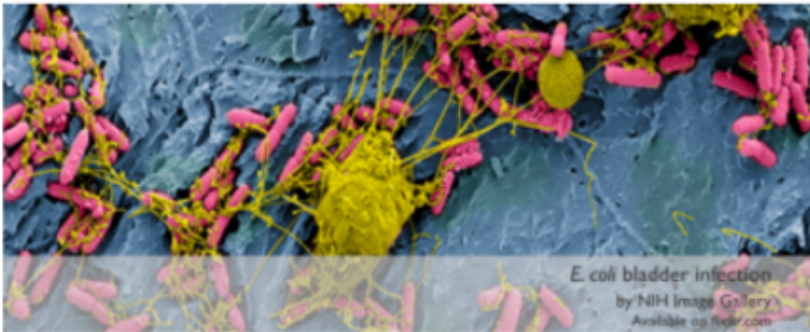
- The AWARE Project
- People
- Publications
- Contact us!

 E-mail

 Like us on Facebook

 Follow us on Twitter

 Area for researchers




E. coli bladder infection
by NIH Image Gallery
Available on flickr.com

< > ||

Welcome to the official webpage of the AWARE Project!


AWARE is a European research project aiming at investigating the transmission of resistant bacteria and resistance genes resulting from human exposure within and around wastewater treatment plants. The participating countries in the AWARE project are the Netherlands, Germany, Romania, and Sweden.

[About the Project](#)




The AWARE Project
[\[more...\]](#)

[About Us](#)




About Us
[\[more...\]](#)

[News and Events](#)




Keine aktuellen Meldungen


Supporting Institutions




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




ICUB
INSTITUT FÜR KLINISCHE UND
UMWELTBIOLOGIE




UNIVERSITY OF
GOTHENBURG




LMU
LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN




KLINIKUM
DER UNIVERSITÄT MÜNCHEN




DLR
Deutsches Zentrum
für Luft- und Raumfahrt
German Aerospace Center



jpiaamr



European
Commission



Bundesministerium
für Bildung
und Forschung

[Imprint](#) | [Privacy Policy](#) | [Contact](#)

Annex 8. Presentation template

Title Slide

 **Antibiotic Resistance in Wastewater**
Transmission Risks for Employees and Residents
around Wastewater Treatment Plants

Co-funded by the
European Union 

PRESENTATION TITLE

Name/title of presenter/author + affiliation

Event name, date, location

Last Slide

 **Antibiotic Resistance in Wastewater**
Transmission Risks for Employees and Residents
around Wastewater Treatment Plants

Co-funded by the
European Union 

Thank you for your attention!


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

 UNIVERSITY OF
GOTHENBURG
 LMU
 KLINIKUM
DER UNIVERSITÄT MÜNCHEN
 Bundesministerium
für Bildung
und Forschung
 DLR
Deutsches Zentrum
für Luft- und Raumfahrt
German Aerospace Center

Annex 9. Newsletter template

First page



Antibiotic Resistance in Wastewater

Transmission Risks for Employees and Residents
around Wastewater Treatment Plants

NEWSLETTER

Volume 1 | February 2018

IN THIS EDITION...

- Message from the coordination
- News 1
- News 2
- News 3
- Upcoming events

MESSAGE FROM THE COORDINATION

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ullamcorper a lacus vestibulum sed arcu. Risus viverra adipiscing at in tellus integer feugiat scelerisque varius. Aliquet risus feugiat in ante metus dictum at. Scelerisque purus semper eget duis at tellus at urna. Risus in hendrerit gravida rutrum quisque. Ipsum a arcu cursus vitae congue. Lectus vestibulum mattis ullamcorper velit sed ullamcorper morbi. Nunc pulvinar sapien et ligula ullamcorper malesuada proin libero nunc.



Prof. Dr. Ana Maria de Roda Husman
Study Coordination
AWARE

CONTACT US!

 @awarewwtp

 aware-study-eu

 arb.aware@med.lmu.de

AWARE (Antibiotic Resistance in Wastewater: Transmission Risks for Employees and Residents around Wastewater Treatment Plants) is supported by the European Commission (JPI-EC-AMR ERA-Net Cofund grant no 681055).



www.aware-study.eu