

**Aquavalens –
Improving public
health through
safer water**



AQUAVALENS



The €8.9 million Aquavalens research project aims to improve the safety of European drinking water through developing more rapid methods of detecting viruses, bacteria and parasites in water.

The project, led by the University of East Anglia, will develop and use new molecular techniques to allow the routine detection of waterborne pathogens and improve the provision of safe, hygienic water for drinking and food production throughout Europe.

Funded by European Union Framework Programme 7, the Aquavalens, or 'healthy water' consortium brings together 39 partners from small businesses, universities and research institutes.

The research project connects a multi-disciplinary team of scientists, engineers, public health practitioners and policy makers from 13 countries across Europe.

Throughout the project, close cooperation will be maintained with biotechnology companies, water providers and food producers so that new technologies will meet real needs and find strong markets.

Benefits

Although most European countries are fortunate to have some of the safest drinking water in the world, outbreaks of disease do still occur each year. The Aquavalens project aims to establish more reliable and accurate assessment of the risks from waterborne pathogens, enabling water providers and food producers to develop robust control measures that are proportionate to the risks they face.

Such work should benefit the EU institutions involved in drinking water, the World Health Organisation, International Water Association and other organisations who can directly gain from the outputs of the project, such as organisations adapting water testing methods for developing countries.

Project Coordinator Professor Paul Hunter of UEA's Norwich Medical School comments that "with the technologies we currently have it can take two or more days to identify infectious risks in drinking water and by then the affected water is likely to have been consumed. This project will develop more rapid methods so that problems can be identified earlier. It will prevent people becoming sick by stopping them drinking contaminated water."

Project lifecycle

The Aquavalens project will progress through four main phases:

1. Platform targets

Generating new knowledge on the molecular genetics of viral, bacterial and parasitic waterborne pathogens such as Cryptosporidium, Campylobacter and Norovirus.

2. Platform development

Developing new technologies that integrate sample preparation and detection into a single platform.

3. Field studies

Carrying out research in drinking water and food production systems to increase our understanding of the risk to public health and the value of such technologies in the field.

4. Improving Public Health through safer water

Testing how these technologies can be used to protect human health and determining their sustainability and potential economic impact.



How to get involved

If you are interested in the progress and results of the work, please get in touch. We would particularly like to engage with people from:

- The water testing industry
- Large potable water suppliers
- Small potable water suppliers
- Food manufacturers using water
- Those interested in waterborne disease

You can learn more about the 39 partners from 13 countries and their roles by visiting the website: www.aquavalens.org

Aquavalens – Improving public health through safer water

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www.aquavalens.org

The 5 year Aquavalens research project started in February 2013 and is coordinated by the University of East Anglia.



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Consortium partners:

Austria:

Vienna University of Technology
Medical University of Vienna

Denmark:

Technical University of Denmark
Højmarklaboratoriet a.s
Instituttet For Produktudvikling (IPU)
Nordvand AS

Finland:

University of Helsinki

France:

Ceeram

Germany:

Water Technology Centre (TZW)
Helmholtz Centre for
Infection Research
Ribocon GmbH
Vermicon Aktiengesellschaft

Iceland:

University of Iceland

Ireland:

City Analysts Ltd
TEAGASC – Agriculture and Food
Development Authority

Italy:

University of Genoa

Netherlands:

microLAN BV

Portugal:

Enkrott S.A.
Instituto Superior Técnico

Serbia:

Desing Food Products
University of Belgrade,
Faculty of Agriculture
Rajkovic Fruit and Veggies

Spain:

Centro Tecnológico del Agua (CETAqua)
Genetic PCR Solutions SL
University of Barcelona
Rovira i Virgili University

Sweden:

National Food Agency
Swedish University of
Agricultural Sciences

Switzerland:

University of Bern

UK:

University Of East Anglia
Epigem Ltd
Heriot-Watt University
Moredun Research Institute
Moredun Scientific Ltd
Parker Hannifin Manufacturing Ltd
Public Health Wales National Health
Service Trust
The James Hutton Institute
University of Surrey
Water Research Centre