

M-ECO USER GROUPS AND EVALUATION

The M-Eco system will be tested and evaluated with respect to the quality, timeliness, usability and usefulness of the event detection. Evaluations will show whether or not Web 2.0 is a useful source of information for signalling potential disease outbreaks. Various user groups will therefore evaluate and test the M-Eco system, among them are:

State level

- Niedersächsisches Landesgesundheitsamt
(Lower Saxony)

National level

- Robert Koch-Institut (Germany)
- Health Protection Agency (UK)
- Institut de Veille Sanitaire (France)

International level

- World Health Organization
- European Centre for Disease Prevention and Control

If you would like to participate in the evaluation,
please contact us!

Please visit <http://www.meco-project.eu>

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M-ECO CONSORTIUM

The M-Eco project is carried on as a collaborative partnership of the following institutions:



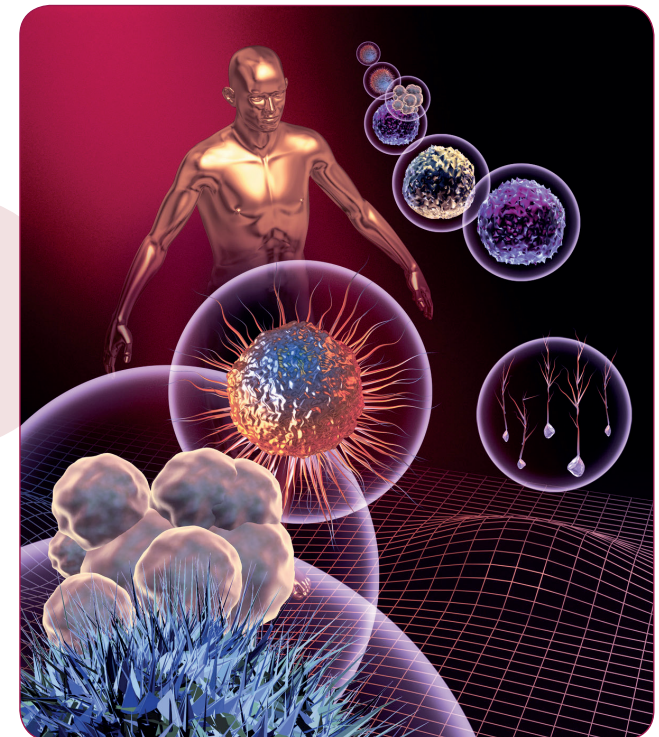
- Gottfried Wilhelm Leibniz Universität Hannover
- Aalborg University
- Brno University of Technology
- SAIL Labs Technology AG
- Robert Koch-Institut
- Niedersächsisches Landesgesundheitsamt
- Joint Research Centre

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PERSONALIZED EVENT-BASED SURVEILLANCE





M-ECO MISSION

Seven research institutes and health organizations are working together in the M-Eco project for two and a half year. The team investigates whether Web 2.0 and Multimedia data can support the early detection of disease outbreaks.

Public health officials are faced with new challenges for outbreak alert and response due to the continuous emergence of infectious diseases and their contributing factors such as demographic change, climate change, or globalization. The objective of M-Eco is to identify new sources of information and to develop new technologies for the early detection of disease outbreaks.

Forums, social networks and blogs mainly serve as entertainment and informal communication platform. Anyway, there is content which could be useful also for other purposes. The M-Eco team develops an early warning system for potential disease outbreaks that uses information from the Web. The spread of dangerous diseases could be detected earlier by such system and appropriate actions could be taken earlier.

Problems of existing systems are addressed by M-Eco by:

- Developing more sophisticated event detection technologies,
- Using additional information sources (Web2.0, Multimedia),
- Personalising and filtering and by
- Integrating existing systems.

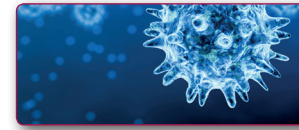


M-ECO APPROACH

The M-Eco system:

- Searches Web 2.0 and other media sources,
- Extracts and integrates relevant Information, and
- Presents it to the user in an organised and user-friendly format

The M-Eco approach is to monitor a large variety of sources for hints to public health events. These hints might be references to symptoms or diseases that exceed a certain expected threshold. Supervised and unsupervised event detection methods are applied to analyse the textual data to identify these hints. M-Eco's recommendation and adaptation component adapts the presented results according to the user's information need to draw attention to signals of potential interest.



M-ECO OUTPUT

The project work is highly user-driven, involving potential end users (e.g., epidemiologists working in health organizations) from the beginning in requirement gathering, scenario specification and system evaluation. M-Eco provides

- information on the detected outbreaks,
- access to the original information sources,
- services that support disease surveillance.

The results will be visualized in various, comprehensive ways, for example as tag clouds or in maps. Two scenarios will be realised: 1) The epidemiologist uses the system for a direct search for hints to potential health threats. 2) He or she can specify and store a signal definition and is notified when a signal matching the definition was identified.

