

## USER GROUPS AND EVALUATION

To find out whether Web 2.0 data is able to provide a valuable source of information for Epidemic Intelligence, the M-Eco Portal will be evaluated by different user groups. This includes health organizations on

- State level
  - Niedersächsisches Landesgesundheitsamt
- National level
  - Robert Koch-Institut
  - Health Protection Agency
  - Institut de Veille Sanitaire
- International level
  - World Health Organization
  - European Centre for Disease Prevention and Control

## CONSORTIUM



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

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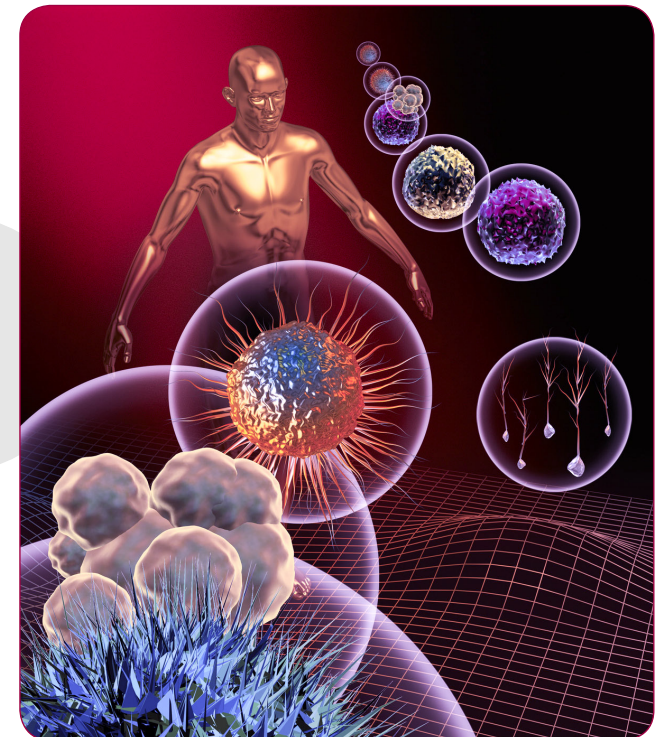
Please visit <http://www.meco-project.eu>  
Cofunded by the European Union, January 2010 – July 2012

# M-Eco

Medical EcoSystem



Personalized Event-based Surveillance





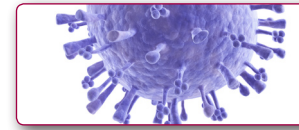
## OBJECTIVES

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, or globalization. Only the early detection of disease activity, followed by a rapid response, can reduce the impact of epidemics. It is the goal of the M-Eco project to complement traditional systems with additional approaches for the early detection of emerging threats.

M-Eco addresses limitations of current systems for Epidemic Intelligence by

- More sophisticated event-detection technologies (unsupervised and supervised methods)
- Additional resources (Web 2.0 data, Multimedia)
- Personalization and filtering
- Integration with existing systems

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



## SERVICES

The Medical Ecosystem will provide several services:

- Data Service: Event Export Capabilities
- Signal Notification Service: Personalized Notification Capabilities
- Validation and Explanation Service: Reasoning Support
- Adaptation Service: Adaptive interaction with the portal

## SYSTEM ARCHITECTURE

The M-Eco system will comprise five major components:

- Content Collection and Preprocessing Component
- Indicator Detection Component
- Indicator Analysis Component
- Signal Generation Component and a
- Recommendation and User Modelling Component

### Indicator Based Component



### User Generated Component

