BfR-Academy Training STEM

Mo, February 06th, 2017

10:00 – 10:15 a.m.
Welcome

10:15 – 11:00 a.m.
Introduction to BfR and the BfR FoodRisk-Labs toolbox

11:00 – 12:00 p.m.
Epidemiological modelling and STEM – Introduction, basic concepts and live demo

12:00 – 1:00 p.m. Lunch Break

1:00 – 2:45 p.m.
Training I –
First Steps:
- Download and installation of STEM;
- Run downloadable scenarios

2:45–3:15 p.m. Coffee Break

3:15 – 5:00 p.m.
Training II –
Creating own STEM scenarios and disease models

Optional:
7:00 – 9:30 p.m. Dinner at local restaurant

Tue, February 7th, 2017

9:00 – 9:45 a.m.
Overview on STEM's Advanced Features
- STEM Model Generator
- Customizing Graphs (Pajek and Shapefile Import)
- Implementing Interventions
- Running simulations (Batch Mode, Automated Experiments)

9:45–10:30 a.m.
Advanced feature training I

10:30–11:00 a.m. Coffee Break

11:00–12:30 p.m.
Advanced feature training II

12:30–1:15 p.m. Lunch Break

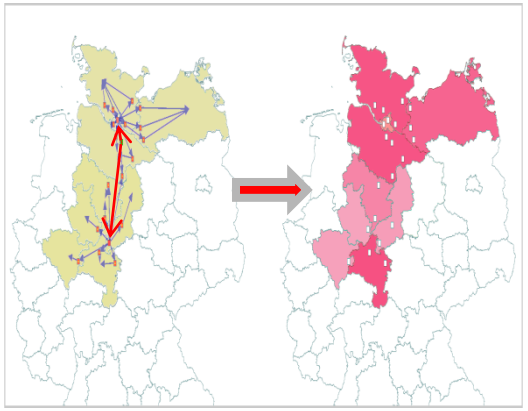
1:15–4:30 p.m.
Advanced feature training III AND STEM Hackathon
(bring your own data / models / problems)

4:30 p.m.
Summary and Farewell

Background

In public or animal health crisis situations timely and science based risk assessments are of utmost importance for all involved stakeholders (Regulation (EC) 178/2002). Mathematical models and free, open source software tools can support in providing science-based decision support, e.g. through simulation-based scenario analyses.

The Spatiotemporal Epidemiological Modeler (STEM) software has been specifically designed to support researchers and risk assessors in their efforts to run epidemiological disease outbreak simulations on the basis of scientific data on spatial and temporal disease transmission from farm-to-fork.
STEM provides a fully developed open-source software infrastructure for model generation, parameter estimation, simulation and documentation.



STEM: Generic Disease Simulation Framework

The Spatiotemporal Epidemiological Modeler (STEM) tool is designed to help scientists and public health officials to create and use spatial and temporal models of emerging infectious diseases. These models can aid in understanding and potentially preventing the spread of such diseases.

STEM is designed to make it easy for developers and researchers to plug in their choice of models. It comes with a large number of existing compartment models and a new model building framework that allows users to rapidly extend existing models or to create entirely new models. The model building framework provides a simple graphical users interface and automatically generates all of the model code and hot injects the code into STEM at runtime. In many cases, no knowledge of Eclipse or Java is required. The STEM code generator even allows users to build models considering trade events or environmental data.

In this workshop we will demonstrate specific applications of the software and provide hands-on training for interested users. Therefore it is necessary to bring own laptops. The laptop must be able to connect to Wi-Fi via WPA2.

The target audience of this workshop is researchers, employees of risk assessment or public health authorities from the European member states with a “certain modelling affinity”.

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BfR-Academy Training STEM

Venue:

Bundesinstitut für Risikobewertung
Room D 145, House 3
Diedersdorfer Weg 1
12277 Berlin (Marienfelde)

Destination stop on http://www.bvg.de/en:
“ Friedenfelser Str. (Berlin)” or
„ Nahmitzer Damm/Marienfelder Allee (Berlin)“

More information here:
https://www.bfr.bund.de/en/location_marienfelde-5533.html

Registration:

The workshop is free of charge. Lodging and meals are not included. The number of participants is restricted; therefore participation is granted on a first-come-first-serve principle.

Please note: You need to bring a laptop with Windows, Mac or Linux OS that is able to connect to Wi-Fi via WPA2.

Please register via e-mail to:
matthias.filter@bfr.bund.de
Registration deadline: January, 29st 2017

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FEDERAL INSTITUTE FOR RISK ASSESSMENT

BfR-Academy Training STEM

A
Spatiotemporal Epidemiological Modelling Software

06-07th February 2017, Berlin

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