



PhD Course
June 13-18
2010



The University of
Birmingham, UK

We are once again delighted to offer a hands-on course in modelling of microbial systems. In one stimulating week, this workshop will get you into individual-based modelling of microbial interactions with our newly developed software tool *iDynoMiCS* (*individual-based Dynamics of Microbial Communities Simulator*). In particular, you will get an in depth understanding of mathematical modelling of biofilms and other spatially structured microbial systems.

The course is intended for all students and researchers who have started to, or are considering to use, individual-based modelling for microbial systems. By the end of the course, participants will be able to independently use iDynoMiCS and apply it to their own work. The course will consist of a mix of core and guest lectures, tutorials, and a mini-project.

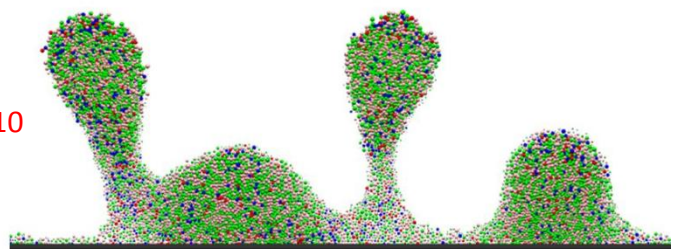
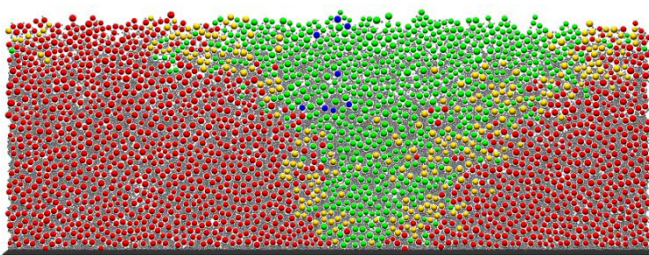
After running this course twice at the Danish Technical University in Lyngby, Copenhagen, with great success, the course will be held at the University of Birmingham in the UK in 2010.

Candidates from the fields of environmental science, microbiology, ecology, computer science, applied mathematics, engineering, and physics are encouraged to apply. Send (i) a brief statement of research interest and level of experience in modelling/programming, (ii) a brief CV, and (iii) a letter of support from your main advisor. The limited number of places will be allocated on a first come, first served basis.

Course Credits: 5 ECTS

→ **Extended Application Deadline:** April 20, 2010

Course Fee: £200 for PhD students,
£400 for postdocs



Course Instructors:

Jan-Ulrich Kreft, University of Birmingham, UK
Brian Merkey, DTU, DK & Northwestern, US
Cristian Picioreanu, TU Delft, NL
Susanne Schmidt, University of Birmingham, UK
Barth F. Smets, DTU, DK

For informal expression of interest, registration, and further information, first check out

<http://www.biosciences-labs.bham.ac.uk/kreftlab/course/index.html>

and then email Susanne Schmidt: s.schmidt@bham.ac.uk