Workshop Image-based Systems Biology

3rd International Workshop on Image-based Systems Biology

The general experience that “a picture is worth a thousand words” also holds in the field of systems biology: **Image-based Systems Biology** is a modern approach that aims to extract spatio-temporal information contained in images in a form that it can be used to model morphological, functional and dynamical aspects of biological processes. Image-based Systems Biology seeks to take full advantage of the information in images and establishes an essential connection between experimental and theoretical examination of biological processes at a quantitative level. This approach includes:

(i) acquisition and automated analysis of image data for high-content and high-throughput screening;

(ii) quantitative description of biological processes by appropriate characteristic measures;

(iii) construction of image-derived spatio-temporal models and predictive computer simulations.

Researchers from all fields are invited to communicate their results focused on **Image-based Systems Biology** in order to exchange novel scientific methods and to share recent achievements from image-driven research in biology. Joint studies of experiment and theory will be highly welcomed. Furthermore, demonstrations of methods for accurate segmentation and classification of regions of interest or object-tracking that can be applied for high-content and high-throughput screening are of interest, as well as computational methods for translating images into mathematical models ranging from differential equations to agent-based methods.

ILRS doctoral researchers can attend the meeting free of charge as JSMC associates. Nevertheless, they are kindly requested to follow the normal registration procedure and to declare their association in the registration email. Thank you.

Registration

More information

Date and Time

September 29, 2016 - September 30, 2016

Location

Location: Leibniz Institute for Natural Product Research and Infection Biology - Hans Knöll Institute

Leader

Marc Thilo Figge