

FEBS Special Meetings

Eurobiofilms 2013

Ghent, Belgium; September 9–12, 2013

www.eurobiofilms2013.ics.dk

This third European congress on microbial biofilms will provide a platform for all scientists studying basic and clinical aspects of bacterial and fungal biofilms to present novel data and exchange new information. The multidisciplinary and diverse program will be delivered through various plenary sessions and symposia, with leading scientists in the field as speakers and/or chairpersons. Several educational pre-conference workshops will take place on 9 September.

Abstract submission deadline: March 15, 2013

JAK/STAT signalling: model systems and beyond

Nottingham*, UK; September 12–15, 2013

<http://nott.ac.uk/jakstat2013>

This meeting brings together world leaders in the field of JAK/STAT pathway research to discuss the latest developments. The topics include JAK/STAT signalling in health and disease as well as recent insights gained from model systems including fish and insects. This promises to provide stimulating exchanges across the breadth of the field with many opportunities to forge interdisciplinary links.

Applications deadline: August 2, 2013

*New location.

FEBS Practical Course: Report

State-of the-art infection models for human pathogenic fungi; Jena, Germany

Life-threatening human fungal infections have increased worldwide, especially in the expanding immunocompromised population. Despite antimycotic treatment, these infections are associated with substantial mortality. Surprisingly, the impact of these diseases on human health is not widely appreciated ([Brown et al., 2012 Sci Transl Med](#)) [[link](#)].

The two main causative agents of fatal fungal infections in Europe are *Candida* spp. and *Aspergillus fumigatus*. Although many European laboratories work on these fungal pathogens, there have been very few practical courses on human fungal pathogens in Europe, in contrast to the USA.

An Advanced FEBS Practical Course on ‘State-of-the-art infection models for pathogens fungi’ – held at the Leibniz Institute for Natural Product Research and Infection Biology, Hans Knöll Institute (HKI) (www.hki-jena.de/mpm) in Jena, Germany, from 17 February 17 – 2 March 2013 – has now filled the gap. The course addressed host–pathogen interactions by teaching state-of-the art *in vitro*, *ex vivo* and *in vivo* infection models. The focus was on hands-on training, with participants divided into small groups to perform experiments under the guidance of supervisors and tutors. The experiments in the course addressed the interaction of fungi with epithelial cells and different immune cells, the isolation of primary immune cells for challenge experiments, alternative complex infection models such as the re-discovered embryonated egg model, murine infection models of candidiasis and aspergillosis, *in vivo* imaging of murine infections, and downstream analyses such as



(top) The 20 FEBS course participants and the local organizers; (bottom) hands-on training to study host–pathogen interactions using *in vivo* infection models.

pathology, histology and transcription analysis by microarrays, RNASeq and proteomics.

The practical part was complemented by lectures from international experts on fungal pathogenesis (Elaine Bignell, Imperial College London; Arturo Casadevall, Albert Einstein College New York;

Christophe d'Enfert, Institut Pasteur Paris; Carol A. Kumamoto, Tufts University Boston; Donna M. MacCallum University of Aberdeen; Julian Naglik King's College London; Robert T. Wheeler, University of Maine; and Axel Brakhage, Oliver Kurzai, Peter Staib, HKI Jena). These lectures provided insights into the different aspects of fungal pathogenicity, focusing on *Candida albicans*, *Aspergillus fumigatus*, *Cryptococcus neoformans*, and dermatophytes. Joint lunch breaks and evening activities provided ample opportunities for discussions with other course fellows, tutors, supervisors and lecturers.

The course received over 90 applications from which 20 participants, including PhD students, young postdocs and young principal investigators, from 15 different nations (Austria, Belgium, Brazil, France, Germany, Great Britain, Hungary, Italy, South Africa, Kanada, Portugal, Spain, Sweden, Switzerland and USA) were selected. In addition to providing a basic grant for the course, FEBS allocated Youth Travel Fund grants for the support of nine european attendees and partial sponsorship was provided by the European Confederation of Medical Mycology (ECMM) and the Jena School for Microbial Communication (JSMC) to three and two participants, respectively.

The feedback from the participants was enthusiastic concerning both the hands-on training in the modern laboratories of the HKI and the



(left) Using the re-discovered embryonated egg model as an alternative fungal infection model; (right) enjoying dinner at the 'German Evening'.

lectures, both of which they think will be useful for their scientific work. As importantly, the participants strongly valued the opportunity to network with each other and course faculty and thoroughly enjoyed the group spirit that developed over the two weeks. This was also valued by the invited lecturers, who likewise gave a very positive feedback on the course.

In conclusion, this course was successful not only in teaching state-of-the-art experimental skills but also provided a platform for sharing ideas and promoted international networking of young scientists. The very positive feedback from both participants and lecturers underscores the need for such a course to promote methodology and networking in mycology. We thank all participants, supervisors and tutors for contributing to the success of this memorable course.

Ilse Jacobsen, Patrick van Dijk and Bernhard Hube
[affiliations]