

## 5<sup>th</sup> ESCMID-FEMS Conference on New Frontiers in Microbiology and Infection

### From microbial pathogenesis to the discovery of antivirulence drugs

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This year the Conference on New Frontiers in Microbiology and Infection was devoted to “From microbial pathogenesis to the discovery of antivirulence drugs”. This was the 5<sup>th</sup> edition of this joint activity between ESCMID and FEMS held this year in Les Diablerets (Switzerland), a wonderful place with a nice atmosphere to stimulate interaction between the invited speakers and about 50 young participants interested in the topic, since the main objective of this conference is to attract young scientists who want to hold in-depth discussions with senior scientists. The conference normally lasts for four days, this year starting Sunday night, 4 October, with an opening lecture and continuing through Wednesday, 7 October.

The opening lecture was given by Ariel Blocker from the University of Bristol, UK, who gave a very interesting overview on “Bacterial virulence factors as targets for new antibacterials”. During the first full day, different topics on commensal flora and intestinal homeostasis were covered. In the first lecture, Nadine Cerf-Bensussan from INSERM in Paris talked about “The role of the flora in the maturation of the immune system”. The following lectures by Lars Enstrand and Joël Doré were on commensal microbiota and, finally, Peter Bron discussed what we can expect from the probiotics.

During the second day, four specific models of invasion, such as entero-aggregative *Escherichia coli*, invasive enteropathogenic *Escherichia coli*, *Campylobacter jejuni* and *Listeria monocytogenes* were covered by James Nataro, Gad Frankel, Michael Konkel and Marc Lecuit, respectively.

On the third day, four specific lectures on current search for antivirulence drugs were presented. In the first one, Axel Dalhoff discussed the antibacterials as signalling agents, in the two following lectures, Vanessa Sperandio and Pia Keyser presented interesting data on the inhibitors of quorum sensing and type III secretion systems, respectively. Finally, Françoise Van Bambeke gave an update on the inhibitors of the efflux pumps and its potential clinical application.

During the afternoon young scientists had eight minutes to present their own data on topics related to the subject of the conference and after that some time was given for discussion. In addition, the participants presented their work in a poster format that stimulated further discussions.

The conference was stimulating in a relaxed atmosphere. We are looking forward to the next edition in 2010.