



# ESF RESEARCH CONFERENCES

## Rapporteur Report

<b>Partnership:</b>	ESF-EMBO
<b>Conference Title:</b>	Integrated Insect Immunology: From Basic Biology To Environmental Applications
<b>Dates:</b>	23-28 September 2013
<b>Chair:</b>	Prof. Dominique Ferrandon
<b>Rapporteur:</b>	Prof. Wolfgang W. Weisser

### General Comments

The area of insect immunity has recently become a very active field of research, due to the availability of modern molecular methods. As a consequence, a number of breakthroughs have recently been made, in the identification of mechanisms underlying immune responses. This is important not only for a general understanding of host-parasite interactions, but also for applied perspectives, as many human diseases are transmitted by insect vectors. Understanding the interactions between pathogens and insects may therefore help in the development of vaccines and treatments, as pointed out in several talks in the conference. Thus, this conference was timely which was probably why it attracted much interest.

The conference was very efficiently organized and I think the ESF conference unit did a very good job doing this. Ms. Giulia Miotto, the Conference Administrator, was always available to participants and thanks to her work the conference proceeded without a problem. Some technical problems (project not working, battery empty etc.) were quickly solved, within minutes.

### Quality of Scientific Programme, Presentations and Discussion

The conference arose from a series of conferences on *Drosophila* immunity. As a consequence, about half of the talks used *Drosophila* as a model system, to answer a number of fundamental questions. However, the scope of this conference was considerably wider, and a large number of different model systems including aphids, ticks, mosquitos, bees, ants, bugs and even waterfleas and squid were presented. In addition to a number of presentations covering molecular and physiological aspects of immunology, talks also covered evolutionary and ecological questions. This wider scope was very important for the success of this conference, as the fruitful interdisciplinary exchange among the participants significantly broadened their perspectives, in particular in the case of Ph.D.-students and postdocs.

The oral presentations generally had a high quality, with some exceptions where the presentation style was not very exciting. The audience was, however, always very attentive, and a lively discussion after the talks always ensued.

### Informal Networking and Exchange; Atmosphere

The schedule was quite packed, with presentations starting at 9.00 a.m. and continuing until about 18.30. Every day there was also an evening session, starting at 20.30 and going until 22.00, i.e. twice a poster session, once a key note talk, once informal discussions. In fact, the discussion continued until midnight and longer, every day. For example, while the poster session officially ended at 22.00, presenters stay with their posters until well after 23.00, and a large crowd intensively discussed the posters. The "open bar" certainly helped creating an informal atmosphere.



Within this intensive program, there were sufficiently long breaks for coffee (35min) and lunch (1.5 hours). Again, my observation was that they were used intensively for discussions. Ph.D.-students and Postdocs made up a substantial fraction of the >80 participants and I have the impression that they benefitted from talking not only among themselves but also with more established scientists.

I talked to a number of Ph.D.-students and postdocs in 1:1 interviews and all confirmed that they thoroughly enjoyed the conference and had been able to talk to many people irrespective of rank.

Thus, there was sufficient time and space for an informal discussion and younger researchers were actively integrated in the conference.

### **Balance of Participants**

The conference organisers succeeded in attracting a number of leading figures in the field including a nobel prize winner. While I do not know the exact numbers of Ph.D.-students and young postdocs, these numbers will become available as I asked the conference administrator to include a question about the participants status in the questionnaire. My impression was that there was an appropriate balance between young and senior participants. People came from most countries in Europe. In my view, a sign of the success of the conference was also that a number of middle-career scientists registered with the conference at own costs. As pointed out above, researchers and talks covered a number of fields and this was certainly beneficial for the atmosphere and information exchange.

### **Outlook and Future Developments**

In the final session, various avenues for future research were assessed. In particular, young researchers were encouraged to give their view on how the field should move. A number of people told me that they have already talked about new cooperations inspired by the talks they heard and the contacts they made on the conference.

### **Follow-up**

In my view, a COST action or a cross-European research training network would be appropriate step to foster the cooperations that have started and intensified in this conference. This I suggested to the conference organisers. Because of the topic of the conference is relevant to human health, i.e. insect vectors of pathogens attacking humans such as lyme disease or malaria, and also to food security, a joint research action within the horizon 2020 program may also be possible. However, the decision on this has to wait until it becomes clearer what horizon 2020 will entail, with the publication of it in about three months.

### **Organisation and Infrastructure**

The Polonia Castle in Pultusk is a good venue for the conference. Rooms and the poster room were very good. The food was also very good (but too plentiful...). The lecture hall is not ideal but works. There are only large round tables so that some people have to sit quite a distance away from the in the back. However, the screen is large enough to the sound was good. Nevertheless, smaller tables would probably be better. As pointed out above, the conference administrator did a good job in running the conference locally. What could be improved is the provision of WiFi-services that were a little shaky in the lecture hall, did not exist in most the hotel rooms and were absent in many public spaces.

### **Summary & Overall Assessment**

In my view, this conference was very successful, as a hub to share important and state-of-art research results, for both junior and established researchers. Many people told me that is this meeting is the best in the field and I did have the feeling that this was the general feeling among attendants.



## About ESF Research Conferences

### The Scheme

This conference is part of the European Science Foundation's (ESF) Research Conferences Scheme. The Scheme aims to promote scientific excellence and frontier level research throughout Europe and the rest of the world. Conferences aim to provide leading scientists and other participants, including young researchers, with a platform to present their work, to discuss the most recent developments in their fields of research and to network.

### Conference Format

The core activities should be based on lectures by invited speakers, who are leaders in their respective fields, followed by extensive discussion periods. An informal exchange of ideas, both inside and outside the lecture room, should be encouraged, and the number of sessions in the daily timetable should be limited in order to allow sufficient time for interaction between the participants. Time should be reserved for a 'Forward Look Plenary Discussion' about future developments in the field.

Participants can take all their meals together to encourage further contact and networking, which can be particularly beneficial to younger researchers who may be less outspoken in the formal lecture room setting. In order to gain optimum benefit from the conference, both the speakers and the participants are asked to stay for the whole duration.

### Division of Tasks

The Conference Chair is responsible for ensuring the quality of the scientific programme through the selection and invitation of speakers, and through the selection of participants.

The ESF Conferences Unit is responsible for managing all the logistical aspects of the conference organisation, including the provision of an on-site secretariat.

Further information: [www.esf.org/conferences](http://www.esf.org/conferences)