

# ESF RESEARCH CONFERENCES

## Rapporteur Report

Partnership:	ESF-EMBO
Conference Title:	Functional Neurobiology in Minibrains From Flies to Robots and Back Again
Dates:	17-22 Oct 2010
Chair:	Matthieu Louis
Rapporteur:	Barbara Webb

### General Comments

This was an excellent conference on hot topics in insect neurobiology.

### Quality of Scientific Programme, Presentations and Discussion

The scientific quality of the talks was absolutely first rate. Researchers presented cutting-edge results, mostly unpublished, and there was very good synergy with talks building on the material presented by previous speakers. There was a strong sense of momentum and important breakthroughs being made. The balance was generally good, especially to cover many different systems in the fly this allowing a sense of how the whole might fit together. Given the conference topic there perhaps could have been a few more talks from the robotics perspective. Every talk was very clearly presented and there was good discussion, although again there could have been a bit more of this – perhaps telling the speakers that they only have so minutes to ensure that questions do not get squeezed out. The specific discussion sessions worked quite well but might have been better if following directly after the relevant talks so the subjects were fresh in mind.

### Informal Networking and Exchange; Atmosphere

It seemed quite a full schedule but that was partly because every talk seemed interesting to me and I did not want to skip anything. However it was balanced with long coffee and lunch breaks which gave good chance to talk in more detail with the speakers and each other. It was helpful that the buffet format of meals gave flexibility in timing. It seemed to be a very positive atmosphere. Although there were not many young researcher talks (maybe more senior scientists could more often let their research students present their own data?) I felt that younger researchers were well integrated in dinner & coffee conversations, and also of course through the poster session, which was very well attended by all the participants, despite being relatively late in the evening.

### Balance of Participants

The balance seemed very good with enough senior scientists to show the younger ones how they often disagree, and to create the feeling that most of the best groups in this field in the world were represented. The research field itself is dominated by a few national groups so in that respect it was representative. I also liked that there seemed to be a few participants from relatively remote fields (e.g. quantum physics, developmental psychology) who nevertheless joined in conversation and gave perspective. As already mentioned there could possibly have been a few more from robotics or engineering fields, but in some sense that perspective was also brought by some biologists who are in the cybernetic tradition.

### Outlook and Future Developments

I am quite sure new collaborations will emerge, as I heard several conversations in which exactly this was being discussed, especially exchanges in methods between labs. I myself have derived at least two potential new contacts for collaboration. There was also some discussion of a special issue of a suitable journal.

### Follow-up

In the long term I believe there is an intention to organise a future conference on similar theme in around two years. Dialogues will be followed up by the individuals and it does not seem to me that a more centralised mechanism such as setting up a mailing list is really likely to succeed; rather people need to take away, the ideas generated and work on them. It was mentioned that there would be value in a scheme to allow biological labs to employ engineer/

technicians on more full-time or permanent basis, both to support experimental innovation, but also for the complementary insights they bring.

### **Organisation and Infrastructure**

In general the venue was excellent and I heard no complaints about accommodation or catering –except sometimes it was a bit unclear where to buy a coffee or beer. I felt the final dinner was actually the most disappointing meal. The excellent choice at the buffets was better, and also the room used for that dinner was acoustically bad making it unpleasantly loud and hard to talk, which I had not noticed at any other meal. I don't think any of the participants would have minded not to have had this 'special' dinner. All onsite administration seemed excellent, with very clear information and very helpful people.

### **Summary & Overall Assessment**

I thought it was extremely successful, managing to bridge a range of topics in a way that made things interesting to everybody. A very good choice of speakers and dear emergent links between them. There was serious critical discussion yet at the same time a very friendly atmosphere was maintained. It is one of the best meetings I have ever attended.

## 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)