

Rapporteur Report

Partnership:	ESF/EMBO
Conference Title:	Synthetic biology of antibiotic production II
Dates:	30 August – 04 September 2014
Chair:	Chair Eriko Takano; co-chair Rainer Breitling
Rapporteur:	Tanel Tenson

General Comments

Any general comments you might have concerning the conference, your role, the scientific area covered by this conference, etc.

Synthetic biology is a rapidly developing field, attracting both scientific and commercial interest. Considering the current increase in antibiotic resistance it is essential to employ synthetic biology tools for antibiotic discovery and development. Therefore I find the topic very important and the conference timely.

I am working in the field of antibiotics and antibiotic resistance. Although I have not been involved in synthetic biology, I still could actively participate in scientific discussions.

Quality of the Scientific Programme, Presentations and Discussion

Comments on the balance and scope of the scientific programme, the scientific quality of the presentations and discussions.

In general, the scientific programme was very good. It was well balanced, covering different aspects of synthetic biology and antibiotic discovery, development and production. There was a reasonable mix of scientists from academia and industry.

The organizers introduced a format with rather short presentations. Most of the oral presentations had a 10 minute slot (7 min for presentation + 3 min for questions). Before the poster sessions there were also sessions where every poster presenter introduced his or her poster with 1 minute oral presentation (without slides).

The short presentations allowed to maximise the number of oral presentations. As the format is a little unusual, presenters would have benefitted from some kind of instruction: some of the poster talks failed emphasizing the main points and some of the 7 minute presenters spent valuable time for introduction that was not needed for this specific audience (all knew why antibiotics are important, why natural products are important etc.).

Informal Networking and Exchange; Atmosphere

Was the schedule and the atmosphere conducive to an easy exchange of information?

Was there time and space for an informal discussion? Were younger researchers integrated?

Over the years a more or less standard format for the EMBO/ESF meetings has developed. The current event followed this tradition. The ratio between formal sessions and breaks for discussion was optimal.

At some meetings the younger researchers do not mix well with senior scientists who tend to group between themselves. This was not the case at the current conference where people from different generations grouped at meal times and coffee breaks. I found that the integration of younger researchers was achieved well.

Balance of Participants

Was there an appropriate balance between young and senior participants?

Was a balance of national groups and researchers from different (sub)fields achieved?

The balance between younger and senior participants was appropriate and the different subfields were well represented. The only comments made by the participants about possible items missing in the programme concerned systems biology (and flux analysis) and enzymology (enzyme kinetics). These directions were currently missing.

The geographic representation was reasonably wide with a focus on Europe, as expected for an ESF/EMBO conference. The high numbers of participants from UK and Germany seem to reflect the current intensive activities in the field in these countries.

Numbers of participants by country:

EUROPE

UK 30

Germany 26

France 7

Switzerland 6

Netherlands 5

Spain 4

Finland 3

Austria 2

Belgium 2

Denmark 2

Hungary 2

Poland 1

Russia 1

Slovenia 1

Turkey 1

Ukraine 1

NORTH AMERICA

USA 14

Canada 6

Mexico 1

OTHER REGIONS

Brazil 1

China 1

Singapore 1

South Africa 1

Outlook and Future Developments

Will new collaborations emerge from this conference?

(How) could the conference outcomes be utilised further?

I find that the EMBO/ESF conference format has very good balance between official sessions and breaks for discussion. I am sure that many new ideas were discussed between the scientists and interesting research collaborations will follow.

It was the feeling of the participants that the field needs regular meetings. Unfortunately the future of the ESF/EMBO conferences is not clear. In US there is the highly successful Gordon conference series and Europe would greatly benefit from this kind on meeting programme.

In the outlook session the chair was collecting feedback, ideas for development of the programme in case there would be an opportunity for a third European “Synthetic biology for antibiotic production” meeting. I hope that the summary will be also presented to ESF and EMBO.

Follow-up

What immediate and long term follow-up would benefit collaborations and dialogues that may have begun at the conference?

Some collaborations in the field are currently supported by an ERA-Net programme. It was mentioned that more funding for collaborative research and also infrastructure centres would be highly beneficial. It has to be noted that recent synthetic biology calls in Horizon 2020 were extremely oversubscribed. Concerning infrastructure, the community should seek for links with the ESFRI initiative EU-Openscreen that is building useful resources also for synthetic biology.

Organisation and Infrastructure

*Were venue, catering and accommodation appropriate for this conference?
Were participants satisfied with the on-site administration and support?*

In general, venue, catering accommodation and administrative support were great. Participants were highly satisfied. The excursion to Dali museum was also nicely incorporated into the programme. There was some confusion about finding the organized transportation at the Barcelona airport. This was probably related to the fact that the ESF conference manager was first time organizing an event at this venue. I am sure that next ESF/EMBO meetings in Sant Feliu will run even more smoothly.

Summary & Overall Assessment

Was the conference successful; were its aims achieved?

I am convinced that the conference was successful and aims were achieved. The organizers put together a very interesting programme and the ESF conference manager did a great job.

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