



## **European Federation of Biotechnology Microbial Physiology Section**

**The 2007 Annual meeting of the EFB Microbial Physiology Section was held at 18.30 on Monday 17th September during ECB13, Fira de Barcelona in Barcelona, Spain. All Section Members as well as everyone registered for the 13th European Congress on Biotechnology were invited to attend this open meeting. Fifteen members of the Section attended, in addition to D. Mattanovich (Secretary) and J Cole (Chairman).**

### **Minutes**

#### ***1. Minutes of the Open Meeting of the Section held at UAB-Casa Convalescencia in Barcelona on Friday 22 September 2006***

**The Minutes were accepted, and signed by the chairman. They can be found on:**

**[http://www.tu-berlin.de/biotec/mibi/AG\\_Lang/efb/](http://www.tu-berlin.de/biotec/mibi/AG_Lang/efb/)**

#### ***2. Matters arising from the Minutes***

**Forthcoming meetings being organised by the Section were reviewed individually later in the meeting – see below.**

#### ***3. Report from the Section Chairman***

##### **(a) Report on EFB activities**

**Major activities of the EFB Central Office since the previous Section Meeting in September 2006 have been the reorganisation of the EFB Website, and the organisation of the current European Congress of Biotechnology. The Federation remains deeply indebted to the Barcelona Bioregion for their financial help with the expenses incurred by the Central Office.**

**The Federation is now well into two EU-funded programmes under the EAGLES initiative: visit the EFB website for information. Funding was approved earlier this year for a third project, EULAF. The Central**

**Office will soon accept increased responsibility for the administration of these programmes. EFB will benefit from the increased number of administrative staff in the Central Office, allowing continuity of service to our members during staff holidays and absences.**

**Critical to the future success of the Federation will be the recruitment of more Institutional Members, from universities and research institutes to small, medium sized and large industrial or financial companies. The considerable financial benefits available to institutional members include decreased registration fees and preferential deals with trade exhibitions, and lower registration fees for biotechnology meetings organised not only by the Federation, but also by other organisations as well. The Section will benefit from any new institutional members joining the Federation following an introduction by a section member. If you can identify a potential member, please contact either the Secretary General, Christian Suojanen: [christian@efb-central.org](mailto:christian@efb-central.org); or the Section Chairman, Jeff Cole: [j.a.cole@bham.ac.uk](mailto:j.a.cole@bham.ac.uk).**

**The Report from the EFB Sections to the General Assembly; 16 September 2007, was prepared by Vice-President Jeff Cole and is attached as**

#### **APPENDIX 2007A**

**One direct conclusion of this report is that there are not many cross-Section activities, which are however strongly encouraged by EFB.**

**(b) Report on recent Section meetings.**

#### **Recombinant protein production IV**

**An excellent meeting in this highly acclaimed series was held in Barcelona in September, 2006. Attendance was limited to 250 people, but was over-subscribed with about 50 potential participants being unable to register. Recombinant protein production in bacteria, yeast, filamentous fungi and mammalian cells were compared, with emphasis on physiological aspects. The Section is most grateful to Pau Ferrer and Antonio Villaverde for organising this excellent meeting.**

#### **Course on Pichia technology**

**A course on the theoretical background on Pichia pastoris as a protein production system, including practical elements to run a fed batch fermentation, was organised by the School of Biotechnology, KTH Stockholm, Sweden, 20-22 February 2007. The Section supported this**

course as an EFB event under auspices of the Microbial Physiology Section. The course was fully booked by 40 participants, mainly from industry, but included academic participants as well. The programme was highly acclaimed by the participants.

#### **Physiology of yeasts and filamentous fungi III (PYFF III).**

This meeting was organised by Merja Penttilä and Markku Saloheimo, VTT Finland, in Helsinki from June 13-16, 2007. Over 180 scientists attended this conference, which was regarded as highly successful both from the scientific and the organisational viewpoint. Based on the success and the obvious progress in the field, an offer to organise a follow-up meeting was made by Jack Pronk and his colleagues from TU Delft (NL).

The Section Meeting approved this proposal, and thanked Jack and his colleagues for taking this initiative.

#### **Bioprocess Workshop**

A workshop hosting 90 participants, including 50% from industry was organised by Peter Neubauer in Oulu, Finland. Next year a similar workshop is planned on scale down technology.

#### ***4. Treasurer's report***

**The balance of the Section funds consists of:** Account balance September 2006: 17,360.26 € Incomes (Dec 2006): 3,000.00 € (=50% of the total surplus of the RPP4) Expenses (July 2007): 5,000.00 € (Deposit Hotel RPP5), to be returned.

Overall current balance (Sept. 2007): 15,345.76 €

#### ***5. Review of progress in the organisation of the forthcoming Section symposia:***

##### **(a) Analysis of microbial cells at the single cell level III:**

This meeting will be held at Elbresidenz, Bad Schandau, (near Dresden) in Germany from 22 to 25 May 2008. The meeting is being organised by Susann Mueller, with help from Hazel Davey. Details of the programme, invited speakers, registration and call for abstracts are available on <http://qbab.dbs.aber.ac.uk/sc2008/>

Submission of abstracts is open until 31 January 2008.

##### **(b) Recombinant Protein Production V (RPP V).**

The follow-up conference of this series will be held on Sardinia, Italy, at the Porto Conte Bay near Alghero, from 24-28 September 2008. The meeting is being organised by Enrico Berardi, with help from Jeff Cole, Diethard Mattanovich and Guido Grandi. The programme has been detailed, speakers are currently being invited, and registration will be opened soon. Potential participants are advised to check the website frequently as the meeting has to be strictly limited to 220 participants and is expected to be overbooked. Web address: [www.ing.univpm.it/rpp2008/](http://www.ing.univpm.it/rpp2008/)

**(c) Microbial response to environmental stress.**

A conference on microbial stress response from different areas, including both prokaryotic and eukaryotic microbes, will be held in Semmering, Austria, 7-10 May 2009. The local organisation will be chaired by Michael Sauer and Paola Branduardi, and the scientific programme committee will be chaired by Peter Lund.

Colleagues in industry are especially invited to offer help with the organisation of this meeting and, in particular, to sponsor plenary lectures or student prizes for poster and oral presentations.

**(d)**

**Bacterial electron transfer and its regulation.**

**(e)**

**Physiology of Yeasts and Filamentous Fungi 4 (PYFF 4).**

The next meeting in this series will be organised for 2009 or 2010: details to follow. The location will probably be in Scandinavia.

A follow-up meeting in this series is planned for 2010 in the Netherlands, organised by Jack Pronk and his colleagues. Other groups from Netherlands supported this plan. Volunteers from academia and industry who are interested to support meeting organisation are invited to contact the Section Chairman or Secretary, or Jack Pronk.

***6. Sources of information on Section activities.***

Details of all of the Section activities can be obtained from the Section website ([http://www.tu-berlin.de/biotec/mibi/AG\\_Lang/efb/](http://www.tu-berlin.de/biotec/mibi/AG_Lang/efb/)) or the EFB Website: (<http://efbweb.org>).

***7. Nomination and, if necessary, election of members to the Section Committee***

The present Section Committee members were confirmed in their position. The current membership of the Section Committee is found at:

[http://www2.tu-berlin.de/biotec/mibi/AG\\_Lang/efb/#sect](http://www2.tu-berlin.de/biotec/mibi/AG_Lang/efb/#sect)

The Section Board is always keen to identify volunteers to join the Section Board to organise specialist meetings, or help with the general running of the Section. Please contact the Chairman or Secretary, if you are interested in helping us.

#### **8. *Any other business.***

The Section members congratulated Jeff Cole to his 65<sup>th</sup> birthday earlier this year, and expressed their sincere thanks for his continuing and highly successful efforts to keep the Section, as well as EFB, flourishing.

#### **9. *Next meeting of the Section***

The next meeting will be held during the Recombinant Protein Production conference in Sardinia, September 2008.

Diethard Mattanovich, November 2007

### **APPENDIX 2007A**

#### ***Summary report from EFB Sections to the General Assembly, Barcelona, September 2007***

Eleven EFB Sections provide the main driving forces of the scientific activity of the EFB. The EFB Management Committee is pleased to report some of the highlights of their activities since our last General Assembly two years ago, and more importantly to tell you about some of their plans for the next two years.

The Section for Applied Biocatalysis (ESAB) continues to be one of the most active in the Federation. Since the last General Assembly, six Newsletters have been published on the Section website: this is a rapid way for EFB members to catch up with the many activities of this Section. Perhaps the most significant event since the Copenhagen GA has been the completion of the term of office of its Chairman, Maurice Franssen, who has been excellently replaced by Roland Wolgermuth, Buchs, Switzerland. Roland has already made his mark in the Federation by co-coordinating many of the Section contributions to the Congress Scientific Programme. Some of the other recent highlights from this Section are now summarized.

The Scientific Committee of the Section held its 57<sup>th</sup> meeting in Hamburg on 3 September 2006. ESAB had 850 members in September 2006, an encouraging increase of 104 members (14%) since April 2006.

The Symposium on **Multistep Enzyme Catalysed Processes** was held from 18-21 April 2006 in Graz/AT. There were more than 250 participants and the general impression was extremely positive. Eight to nine of the submitted papers will be published in a special issue of *Biocatalysis and Biotransformation*. The symposium on **Environmental Biocatalysis: From remediation with enzymes to novel green processes** was a good meeting, held in Cordoba/ES from 23-26 April. There were 155 participants, including many from the Americas. Also this symposium led to a special issue in *Biocatalysis and Biotransformation*. The **Laboratory Course on Directed Enzyme Evolution** in Vilnius/LT, 28 May – 2 June, was fully booked with 20 students. This was the first time that ESAB organised such a course but it worked out very well, thanks to the excellent preparatory work done by the Vilnius and Greifswald groups.

ESBES is now the largest section of EFB and their symposium **ESBES-6** in Salzburg/AT (27-30 August) was attended by 281 participants, among which many young scientists. Of the 50 applications from students, 10 papers were selected for oral presentation and 3 got a prize. There were good joint sessions with ESAB and the whole event was very positively received. The second symposium on **Protein Design and Evolution for Biocatalysis** took place in Greifswald/DE, from 30 August – 1 September. The meeting was very successful, the 148 participants stayed until the very end. Unfortunately Frances Arnold and Dan Tawfik were unable to come. There were 150 posters and a special issue of the *Biotechnology Journal* will be devoted to this symposium. York/UK was the venue for the 2nd Conference on **Renewable Resources and Biorefineries**, from 6-8 September. There were 170 participants, a little less than expected but the conference itself was good.

Future events in which ESAB will participate include the Third symposium on the alphaamylase family, Smolenice Castle, Slovakia (23-27 September); Protein design and evolution for biocatalysis, Sant Feliu, Spain, 22-25 May, 2008; and Biocat 2008 to be held in Hamburg (details to follow).

One of the star Sections in the Federation is the Young European and Biotech Network, a section run by young colleagues for graduate students and young post-doctoral scientists. Inevitably there was a fear when such an organization was formed that an initial burst of enthusiasm will give place to less activity as those who form the new organization move on in their careers. We are delighted to report that this has not happened within YEBN, where the second generation of the Section Board has moved YEBN from strength to strength. A fuller account of their activities can be downloaded as an appendix to these General Assembly Agenda papers, so just a few of their highlights will be mentioned here.

Last year, the YEBN was selected by the European Commission to be financed for networking activities. In December 2005 the YEBN Executive Board submitted to the European Commission a proposal for the call “Support of bodies active at European level in the field of Youth” under the European Commission Directorate for Education and Culture. This application was successful, resulting in a grant that, together with platinum sponsorship by Roche, has enabled the section to run a wide range of activities. They have also been selected to contribute an event next week as part of the 13th European Congress of Biotechnology (ECB13) - “SymBiosis: Science, Industry & Society”. YEBN are looking forward to welcoming you to a youthful and pleasant meeting with Europe's most relevant biotechnologist community.

Immediately after the Congress, the YEBN Executive Board, in cooperation with Associació de Biotecnòlegues de Catalunya (ASBTEC, <http://www.asbtec.org>), has the pleasure to announce you the YEBN Annual Meeting 2007. This meeting, hosted by ASBTEC, will take place here in Barcelona from 15th - 17th of September. As in previous years, the meeting will hold the annual YEBN General Assembly (GA), but for the first time this will be a 2-day scientific event with a second day dedicated to the Young Life Scientists and Biotechnologists, “BioYouth:YEBN@Symbiosis”.

To support and promote networking of YEBN community, strategic and planning meetings have been organized with delegates of YEBN Institutional Members, Projects, Task Groups in the following locations:

- Cambridge, Feb '06 ( EB meeting)
- Vienna, Mar '06 (Internal Meeting)
- Brussels, Jun '06 (EB meeting)
- Lisbon, Jul '06 (Internal Meeting)
- Strasbourg, Oct '06 (Annual Meeting) \*
- Barcelona, Dec '06 (EB meeting)

The major challenge facing the Board of YEBN is to identify financial support for its future activities. This Section undoubtedly will provide the European Biotechnology industries with talented, well-trained personnel in future; any company wishing to buy into this organisation is invited to contact its Chair, Marc J. Brehme, M.Sc. at [marc.brehme@yebn.org](mailto:marc.brehme@yebn.org); or via the Section E-mail: [eb@yebn.org](mailto:eb@yebn.org)

The first EFB Section to be formed was ESBES – the European Section on Biochemical Engineering Science. For many years, the Working parties that formed this first Section of the EFB were scientifically amongst the most active communities within our Federation, but with a few notable exceptions, these activities largely lapsed in the first years of the new millennium. Since early in 2005, excellent leadership by Marin Berovic from Ljubljana, with professional secretarial and organisational support from Dr Willi Meyer, DECHEMA, and a

new group of Working Group Chairmen, have in the last two years rebuilt the Section into a dynamic, functional organisation. Each year they are involved in at least one major event, alternating between the ESBES Congress in “even” years and making a major contribution to the European Congresses of Biotechnology in “odd” years. Their activities will be prominent for all of next week, where each of the Working Groups will make their mark on this year’s Congress. A full report of their other activities, including the participation of some of the Working Groups in CAB10 in Cancun, in the “International Conference on Biopartitioning and Purification” in Lisbon, and the organisation of a Summer School “Systems Biotechnology meets Biochemical Engineering”, can be found as an Appendix to the Agenda papers.

The Section Board, supported by DECHEMA, organised an excellent, well-attended ESBES Congress attended in Saltsburg, 27-30 August 2006, and plans for the 2008 ESBES Congress, probably to be held in Slovenia, are currently being finalized.

Next year Professor Alois Jungbauer, Vienna, will succeed Marin as the Chair of ESBES: Alois, you have a very hard act to follow, so we wish you every success in keeping this vital Section at the centre of our activities.

Several other EFB Sections are currently either in their start-up phase, or are currently being reorganised by new Section Boards. These include the new section on Green Biotechnology, for which Marc Zabeau from Gent is taking the lead; and the Functional Genomics Section, which is being reinvigorated Professor Mike Taussig, Cambridge. The Nanobiotechnology Section (Chair: Pastora Martinez, Barcelona) is becoming increasingly active, and the EFB Executive Board looks forward to working closely with representatives of this vital sector in the coming years. Klaus Amman continues to provide website fora under the Biodiversity Section: he would welcome more participation from other interested colleagues.

The Pharma Medical Biotechnology Section (also known as EAPB) is currently an Associate Section with Sven Stegemann, Bornem, Belgium as its Chairman. This Section is currently negotiating full integration into the EFB.



It already runs a well-established journal, the European Journal of Pharmaceutics and Biopharmaceutics. Visit their website, which is directly linked to the EFB-central website under the Sections heading, for further information of their other activities.

The Chairman of the Section for Medicine Development is Jorgen Dirach from Copenhagen. The section is growing steadily with 701 members in January-2007. In 2006, the primary focus for the section has been their engagement in the Innovative Medicines Initiative (IMI) launched by the European Commission and EFPIA (European Federation of Pharmaceutical Industries and Associations). The first version of the Strategic Research Agenda (SRA) was issued in 2005. Following the public consultation in the autumn of 2005, a number of revisions were made to the SRA and a version 2 was issued in 2006. The major change to the Education & Training part, which the EFB Medicines Development Section is responsible for, is the increase in the PhD programme to 480 PhD grants.

The Section has been raising awareness by giving presentations at the following events. Education & Training roundtable, Medicon Valley Academy. Copenhagen, Denmark. Building Open Innovation Platforms in Bioscience, ScanBalt Intellectual Property Knowledge Network, EFB, Medicon Valley Academy. Copenhagen, Denmark. Faculty of Pharmaceutical Medicine, International Committee. London, UK

Symposium on Biomarkers in Drug Development: From Discovery to Validation. Dublin, Ireland. FIGON Medicines Days 2006. Lunteren, The Netherlands. ACRP 2006 European Conference on Risk and Risk Management. Brussels, Belgium. Top of Biomarkers Symposium, Danish Medicines Agency, BioLogue, Medicon Valley Academy. Copenhagen, Denmark. FEBS 2006 Youth Congress. Istanbul, Turkey. Plataforma Tecnológica Española Medicamentos Innovadores. Santiago de Compostela, Spain. EFB, VINNOVA roundtable on Process Analytical Technologies. Brussels, Belgium. DIA 18th Annual EuroMeeting. Paris, France. EuroCenter Conference on Technology Platforms. Copenhagen, Denmark. EUFEPS Committee for Industrial Research Relations. Brussels, Belgium. ScanBalt & Medicon Valley Academy, Stakeholder Meeting: Patient Recruitment and Clinical Trials. Copenhagen, Denmark.

Finally, the Microbial Physiology section Chaired by EFB Vice-President Jeff Cole, Birmingham, UK, continues to flourish as one of the most active parts of the Federation. This year they have been partners in a course on Pichia Biotechnology organised by the School of Biotechnology, KTH Stockholm, Sweden, 20-22 February 2007. Nominated by the Section Chair, Joost Teixeira De Mattos has completed a superb task as Secretary to the Congress Organising Committee. On behalf of the Section, Pau Ferrer and Antonio

Villaverde (Barcelona) have organized a workshop entitled “Cell engineering for high quality protein production”.

The main activities of the Section since the Copenhagen General Assembly and plans for future activities have been a series of well-supported residential symposia on a series of themes. Each theme is organized by a small group of enthusiasts, usually including mainly younger members of the Federation. An excellent meeting on Microbial Respiratory Chains held in Tomar, Portugal, in March 2006 ranged from the synthesis and regulation of microbial respiratory chains to structural biology of electron transfer complexes in both bacteria and fungi. The 4th Recombinant Protein Production meeting held in Barcelona, 21 -23 September 2006 was again over-subscribed by more than 50 disappointed colleagues despite an attendance of 250 participants. The next meeting in this series will be held in Alghero, Sardinia, in September 2008. As the attendance at this meeting will be strictly limited to 220 participants due to the capacity of both the hotel and the conference venue, this meeting will certainly be over-subscribed, so early registration is essential to avoid disappointment.

Earlier this year, the third meeting in the series Physiology of Yeasts and Filamentous Fungi was held in Helsinki from June 13-16, 2007 organised by Merja Penttilä and Markku Saloheimo, VTT Finland. Once again it was an excellent, well-attended meeting at which cutting-edge science was presented.

Plans for the third meeting on Analysis of Microbial Cells at the Single Cell level are already well advanced. This meeting will be held at Elbresidenz, Bad Schandau, (near Dresden) in Germany in Spring 2008 (Proposed date 22 to 24 May 2008). The meeting is being organised by Susann Mueller, with help from Hazel Davey and Diethard Mattanovich.

The Section is also planning a meeting entitled Microbial response to environmental stress. The meeting is being organised by Pete Lund, Birmingham, UK, Paola Branduardi (Milan) and Michael Sauer (Vienna) and will be held at Semmering, Austria in May 2009. The

meeting will bring people interested in microbial stress response from different areas. Both prokaryotic and eukaryotic microbes should be covered, as well as work on lab strains and wild type strains (e.g. pathogenic strains). The idea appears to be timely in the post-genomic area, with high throughput methods and new modelling concepts. One concept should be to go from single cells to populations.

In summary. many of our Sections are doing well and are more active now than they were two years ago. This success story in no way hides the fact that

some of the sections need help from volunteers who can spend a little time each month helping with their activities.

Please contact the relevant Section Chairman if you are willing to offer help. For contact details, go to [EFB-central.org](http://EFB-central.org).

Jeff Cole; August 2007.