



Happy New Year for 2015! We wish you success and good health, and look forward to working with you again.

This year we will continue promoting research and innovation for the safe, sustainable, and beneficial use of the life sciences. With this in mind, our EFB Institutional Members have been invited to send a representative to attend the EFB Executive Board meeting on Saturday 24th January in Barcelona. The aim is to develop a strategic plan for the upcoming years, specifically to find ways to improve benefits and opportunities to our members.

Thank you for supporting the European Federation of Biotechnology.

## 6th International Conference On Analysis Of Microbial Cells at the Single Cell Level

19-22 July 2015. Retz - Austria



### Registration and abstract submission now open!

The **EFB Section on Microbial Physiology** is organising the **6th International Conference On Analysis Of Microbial Cells at the Single Cell Level**. This meeting will focus on methods for the analysis of single cells that allow us to dissect the behaviour of individual cells and understand their population kinetics. The 6th meeting on Single Cell Analysis of Microbial Cells will again bring together experts in the field and highlight new technologies as well as applications of existing tools.

**For more information or to register, please [click here](#)**

### EFB Events

#### **Bacterial electron transfer processes and their regulation - 2015**

*organised by EFB Microbial Physiology*

*Section*

March 15-18 2015

**Maceira (Torres Vedras) - Portugal**

#### **Recombinant Protein Production 8**

*organised by EFB Microbial Physiology*

*Section*

22-24 April 2015

**Mallorca-Spain**

#### **Plant Biotechnology: Green for Good III**

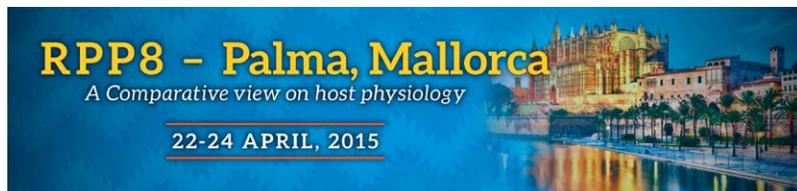
*organised by Czech Republic RBO*

15-18 June 2015

**Olomuc-Czech Republic**

## Upcoming Events

### 8th Conference on Recombinant Protein Production - RPP8 22 – 24 April 2015



The early registration and **poster** abstract submission will close on **31<sup>st</sup> January 2015**. Do not miss this opportunity!

**Register Now!**

For information about confirmed speakers please [click here](#).

## Events organised by our EFB Institutional Members

### Enhancing Molecular Bioscience Education *organised by Biochemical Society - UK*



#### **Registration now open!**

30-31 March 2015, Cambridge, UK

An upcoming education workshop aims, through lectures, demonstrations, group discussion and posters sessions, to share novel ideas and approaches with bioscience educators, to enhance the student experience and potentially improve their employment prospects. The workshop, run by the Biochemical Society and the Federation of European Biochemical Societies, includes mentoring, integrated teaching for mixed abilities, engaging with large teaching groups, interactive sessions with tablets.

### 6th International Conference On Analysis Of Microbial Cells At The Single Cell Level

*organised by EFB Microbial Physiology*

*Section*

July 19-22 2015

**Retz-Austria**

### 12th Biotrans - 2015

*endorsed by EFB Applied Biocatalysis Section*

*- ESAB*

July 26-30 2015

**Vienna - Austria**

### Microbial Stress: From Molecules To Systems - 2015

*organised by EFB Microbial Physiology*

*Section*

12 - 15 November 2015

**Sitges - Spain**

### 3rd meeting on Applied Synthetic Biology in Europe

*organised by EFB Microbial Physiology*

*Section*

Early 2016

**More information soon...**

## EFB Institutional Member's Events

### Prions as novel epigenetic determinants in fungi

*organised by SCI - UK*

16 January 2015

**London - UK**

### Photonic chip enabled non- invasive glucose biosensor

*organised by SCI - UK*

23 January 2015

**London - UK**

### Dead or Alive? Airborne Particles

*organised by SCI - UK*

Read more

09 February 2015

**London - UK**

### **Enhancing Molecular Bioscience Education**

*organised by Biochemical Society - UK*

30-31 March 2015

**Cambridge - UK**

### **Biofuels - hype or reality?**

*organised by SCI - UK*

28 April 2015

**London - UK**

### **Biofuels - hype or reality? organised by SCI - UK**

Organised by the SCI Biotechnology Technology Group; the [Biofuels "Hype or Reality" conference](#) will take place at SCI, 14-15 Belgrave Square, London on 28 April 2015.

The event provides the opportunity to discuss pros and cons, opportunities and also challenges that the biofuel process encounters. In particular, in the context of scientific and technological developments including global innovation and production, biofuel generations, sustainability, legislation, regulations and policies. In addition to these, the trends in mineral fuel oil pricing, and new discoveries pose a critical question on the future of biofuels: is biofuel agenda a hype or reality in the 21st Century?

#### **For more SCI Events:**

#### **Prions as novel epigenetic determinants in fungi**

16 January 2015. **London - UK**

#### **Photonic chip enabled non-invasive glucose biosensor**

23 January 2015. **London - UK**

#### **The Role of Chemists in the Discovery of New Medicines**

02 February 2015. **London - UK**

#### **Dead or Alive? Airborne Particles**

09 February 2015. **London - UK**

#### **The war against mosquito-borne diseases - changing minds, changing times**

11 March 2015. **London - UK**

#### **That's not my Nanobot: Is nanotechnology living up to the hype?**

23 March 2015. **London - UK**



**EFB thanks the following partners for their support**



## New Biotechnology Special Issue: Synthetic Biotechnology

The EFB Journal New Biotechnology published in November a special thematic issue based upon the 2013 Synthetic Biology meeting in Malaga organised by the EFB Microbial Physiology and the Bioengineering and Bioprocessing Sections. For a complete list of contents of this issue, [click here](#).

### Glycoengineering of yeasts from the perspective of glycosylation efficiency

Most strategies used for glycoengineering rely on the modification of the lipid-linked oligosaccharide biosynthesis for the generation of the substrate for Golgi-localized glycosyltransferases. However, modifications in the lipid-linked oligosaccharide biosynthesis often result in the accumulation of intermediate structures and cause hypoglycosylation of client proteins. In order to ensure complete N-glycosylation, the flow of lipid-linked oligosaccharide through the biosynthetic pathway and the transfer of the oligosaccharide from the donor lipid onto the protein have to be optimized. A promising tool to improve site occupancy is the expression of protozoan oligosaccharyltransferases, which possess altered specificities for the oligosaccharide and also for the protein acceptor site. Furthermore, flipping of the lipid-linked oligosaccharide into the ER lumen can be improved by overexpression of an artificial flippase. Improving the glycosylation efficiency ensures that not only homogeneous N-glycan structures are generated, but also client proteins are fully glycosylated.

[Read more](#)

