

April 2016

In this issue:

Word of the
Chairman

Page 3

25th ESACT
Meeting –
Lausanne
2017

Page 3

ESACT
Frontiers
Programme

Page 4

ESACT
Grants

Page 5

Upcoming
Events in
2016

Page 6



In December 2015, the ESACT XC visited the venue which will host the 2017 ESACT meeting (Swiss Tech Convention Centre in Lausanne, Switzerland)

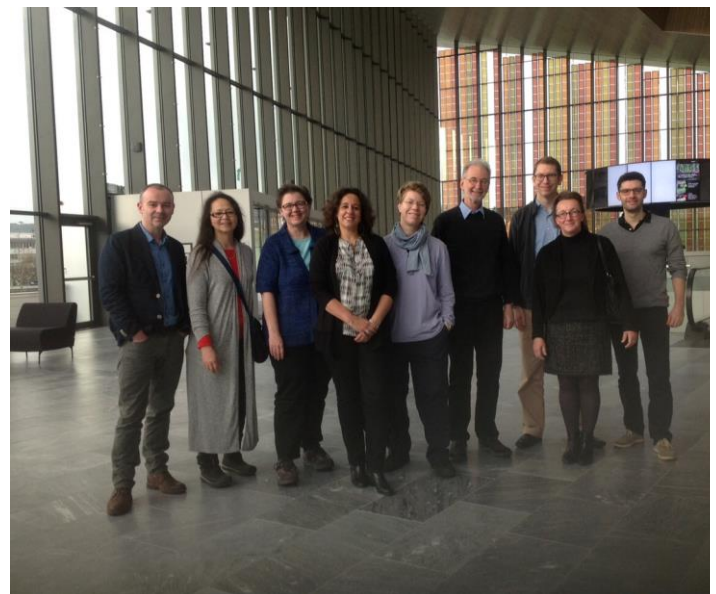


Table of Contents

WORD OF THE CHAIRMAN	3
25TH ESACT MEETING - LAUSANNE 2017	3
ESACT FRONTIERS PROGRAMME	4
ESACT GRANTS	5
UPCOMING IN 2016	6
ESACT EVENTS	6
ANIMAL CELL TECHNOLOGY COURSE 2016 – 6 TH EDITION	6
CELL CULTURE-BASED VIRAL VACCINES COURSE 2016 – 1 ST EDITION	6
EVENTS POWERED BY ESACT	8
ESACT OFFICE MATTERS	11

Key Upcoming Dates

Animal Cell Technology course 2016 6th edition

Llafranc 2016 – September 25th to 29th
Early-registration deadline: June 30th 2016
Bursary application deadline: June 30th 2016
Registration deadline: August 15th 2016

Cell Culture-Based Viral Vaccines course 2016 – 1st edition

Llafranc 2016 – September 21rd to 23th
Early-registration deadline: June 30th 2016
Bursary application deadline: June 30th 2016
Registration deadline: August 15th 2016

ESACT Frontiers Retreat 1st edition

Lyon 2016 – October 20th to 22nd
Abstract submission deadline: April 18th 2016
Early-registration deadline: July 18th 2016
Bursary application deadline: July 18th 2016
Registration deadline: September 26th 2016

European Society for Animal Cell Technology - ESACT e.V. : www.esact.org

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Word of the Chairman

Dear members and friends of ESACT,

Again, we are in a year “between two ESACT meetings”, wrapping up the previous and preparing for the next one. This Newsletter will inform you about on-going and new actions taken by ESACT.

Most important for most of you are the biennial meetings. The next year’s one to take place in Lausanne is presented in more detail below. We are happy to announce that we could identify volunteers for the 2019 meeting. Anne Tolstrup (Biogen/Iddec) together with Mikael Rordam Andersen (DTU) presented a convincing concept that was approved by the XC. Thus, we can look forward to an exciting meeting in Copenhagen. We are very happy that after the meeting in Tylösand, Sweden we can rejoin in Scandinavia after a pause of 18 years.

ESACT is increasingly investing in support for the next generation of ACT scientists.

In this sense, the ESACT course programme is being continued. In 2016 the famous Animal Cell Technology course will again take place. This year for the first time a course on „Vaccine Technologies“ is announced (see this Newsletter). The course on „Compound Screening with Mammalian Cells“ will be reoriented and held again in 2017. In addition to Paula Alves and Quico Gòdia, Amine Kamen and Yvonne Genzel are responsible to run these courses at Llafranc, Costa Brava.

The ESACT Frontiers Programme (EFP) group has already been successfully contributing to the Barcelona meeting with several activities. A major event is being prepared by the group: The “EFP Retreat” invites early career scientists to a Retreat (see announcement in this Newsletter). It is important to acknowledge this meeting by supporting your students or early career scientists to participate.

Another way of ESACT support for young scientists concerns the ESACT grants (see this Newsletter). Please encourage your team members to apply.

A long-term effort from ACTIP (Animal Cell Technology Platform) and ESACT is now paying out. The IMI2 (Integrated Medicines Initiative) will announce a programme on ACT-specific subjects. The call is expected to be published in the next few months.

We are welcoming Els van den Berg as a new administrative assistant. Els will work together with António Roldão to run the ESACT secretariat. We recognized that a number of important long-term items have been left unattended in the last years and Els and Antonio will now have the time to take care of them.

Hansjörg Hauser

25th ESACT Meeting - Lausanne 2017

As previously announced, the 25th ESACT meeting will take place in Lausanne, Switzerland, from May 14 to 17, 2017. The **registration** and **abstract submission** will open in September 2016 on the meeting website (www.esact2017.com). In the meantime, please get in touch if you wish to contribute to the conference organization and/or to the scientific programme.

Please be informed that **symposia sessions** will take place on Sunday May 14 from 11:00 to 15:30, ahead of the conference opening. Each of the symposia will have a duration of one and a half hour and there will be up to a maximum of 3 parallel sessions. Please contact me if you wish to sponsor or lead one of those symposia.

Looking forward to seeing you all in Lausanne in 2017.

Matthieu Stettler



ESACT Frontiers Programme

ESACT Frontiers members proudly present the 1st ESACT Frontiers Retreat, a meeting dedicated to young scientists working in cell culture technologies. Aligned with the mission of ESACT Frontiers Program (EFP), this meeting aims to promote career progression and active engagement of younger generations to the field of Animal Cell Technology. The retreat will have **Scientific Sessions**, with slots for oral and poster presentations saved for young researchers and with inspiring talks from keynote speakers of academia and industry. These scientific sessions are the most classical aspect of the meeting. In fact, a great part of the retreat will be taken by the **Career Development Sessions**, aiming to develop personal skills, creative thinking, interaction with peers and extend the professional network. The career development sessions will feature the **Think Tank Workshop**, where groups of participants will work together to find a creative solution for a challenging problem, the **Mentoring Workshop**, to provide an assortment of important working, selling and management skills and the **Career Options Workshop**, where experienced and young scientists are brought together for an open discussion about the different professional lives – academia, industry or start-ups. There are no specific age/position restrictions to attend the meeting. However, priority will be given to Master/PhD Students or scientists/engineers with less than 7 years after completing the degree providing there are registration limitations, as the meeting is especially designed to younger scientists.

The 1st ESACT Frontiers Retreat **will take place from 20th to 22nd of October in Lyon**, France, at the Novotel Hotel Gerland. Conference and accommodation will be at the same place to make the most of attendees' time to enjoy the sessions, the workshops and to network with peers. The hotel is located close to the Biodistrict, an attractive centre of Biotechnology featuring Universities, start-ups and big pharma companies. All the information related to this retreat, including programme, registration and abstract submission, can be found at <http://www.esactfrontiers-retreat2016.com/>.

Abstract submission deadline: April 18th 2016



New EFP member

EFP has selected a new member to join the group from a secret voting pool out of 3 candidates. Paulo Fernandes joins us from Autolus (London, UK), where he has been working on process development and manufacturing of viral vectors to engineer T cells. Welcome Paulo! The ESACT Frontiers members would also like to thank Markus for his contributions to this group from September 2014 to January 2016.

ESACT Frontiers Group



ESACT Grants

The ESACT has initiated the ESACT Grant Program which aims at supporting young scientist (students and post docs within three years of their graduation) to attend meetings, workshops or courses other than those organised by ESACT, to either learn about topics of relevance to Animal Cell Technology or to present their results in this field. The proposal was approved by members during the General Assembly in Barcelona.

Applications including a motivation statement are to be submitted to the ESACT office in due time for the deadlines (January 1st, May 1st and September 1st each year) and will be reviewed by the XC. Grants provided are a contribution towards coverage of registration fee, accommodation or travel. In addition, each recipient is awarded a 3-years free ESACT membership. The review of the grant application is considered equal to a membership review. For more detailed information follow the link on the ESACT homepage. Application deadlines are January 1st, May 1st and September 1st each year.

Nicole Borth

UPCOMING in 2016

ESACT Events

Animal Cell Technology course 2016 – 6th edition

After the interest received by the previous five editions and the excellent feed-back from the attendants, the 6th edition of the ACT course will be organised by the ESACT (European Society of Animal Cell Technology) in Llafranc, Costa Brava/Spain, from 25th – 29th September 2016. ESACT is presenting this activity as one more contribution to the community involved in the use of animal cells in Biotechnology and Biomedicine.

The Course is planned in an intensive four-day schedule with a number of participants limited to 30 in order to facilitate the interaction among them and with the lecturers. Lecturers will stay for most of the Course duration. The Course comprises lectures covering the main topics of Animal Cell Technology:

1. **Cell line development**
2. **Cellular mechanisms**
3. **Genomics and proteomics**
4. **Post-translational modifications**
5. **Bioreactor design**
6. **Bioreactor scale-up and scale-down. Single use bioreactors**
7. **Downstream processing**
8. **Integrated bioprocess for cell based vaccines**
9. **Economical aspects of ACT bioprocesses**
10. **Integrated bioprocess for protein production**
11. **Integrated bioprocess for stem cells**
12. **Industrial perspectives of ACT**

The program has slots dedicated to the preparation and presentation of case studies by participants, and discussion groups with the lecturers.

Confirmed lecturers include Terry Papoutsakis (University Delaware, USA), Manuel Carrondo and Paula Alves (iBET, Portugal), Hansjörg Hauser (HZI, Germany), Francesc Gòdia (UAB, Spain), Stefanos Grammatikos (UCB Pharma SA, Belgium) and Anne Tolstrup (Biogen-Idec, Denmark). Other information can be found in www.esact.org.

Registration deadline is August 15, 2016

For further information: www.esact.org.

Francesc Gòdia and Paula Alves

Cell Culture-Based Viral Vaccines course 2016 – 1st edition

ESACT (European Society for Animal Cell Technology) offers an introductory intensive course in cell culture produced viral vaccines to meet the needs of the rapidly expanding research and development in academia and industry in the field. This course introduces the basic principles of vaccination and manufacturing of viral vaccines. Also, the course will provide an overview of the advanced strategies to respond to the challenges of new and established viral infection diseases. The course has been designed to benefit those starting their research activity in this field, both from Academia, Industry or Public Health Agencies. It is also of interest for those wishing to up-date their knowledge and know-how in cell production of viral vaccines.

The course will cover the following topics:

1. **Principles of Immunology and virology:** classification of viruses, what vaccine elicits what immune response
2. **Cell lines for vaccines production:** from adherent to suspension and primary to designer cell line
3. **Upstream Process development:** from batch to high cell density, microcarrier-based or using suspension cells
4. **Analytical assays, potency assays, QbD and PAT:** how to analyse virus amount, process attributes, purity
5. **Downstream Processing:** purifying of whole viruses, the burden of host cell protein and DNA
6. **Vaccine Formulation:** requirements of the different vaccines – from bait to needle or nanopatch

Case studies for special vaccines:

1. **Recombinant vaccines:** Virus like particles (VLPs) and vectored vaccines
2. **Case study: Polio vaccines:** overview on history, upstream processing and regulation

3. **Case study: Dengue vaccine development**
Vaccine approaches, clinical studies
4. **Case study: Influenza vaccines:** pandemic, seasonal vaccine, recombinant to egg-based vaccine

Insights from WHO and Bill and Melinda Gates Foundation.

Confirmed lecturers include Amine Kamen (McGill, Canada), Reingard Grabherr (Boku, Austria), Isabelle Knott (GSK, Belgium), Leo van der Pol (IntraVac, The Netherlands), Yvonne Genzel (MPI, Germany), Francesc Godia (UAB, Spain), Cristina Peixoto (iBET, Portugal) as well as speakers from Sanofi-Pasteur, WHO and Bill and Melinda Gates Foundation. Other information can be found in www.esact.org.

Registration deadline is August 1, 2016

For further information: www.esact.org.

Amine Kamen, Yvonne Genzel and Francesc Godia

Events Powered by ESACT



Biochemical and Molecular Engineering conference

The 20th edition of the Biochemical and Molecular Engineering conference continues on a long tradition of bringing together the Biochemical Engineering community from around the world. The central theme of this year's meeting will highlight *The Next Generation of Biochemical Engineering: From nanoscale to industrial scale* by showcasing innovative solutions emerging from both academia and industry. Our goal is to bring together academics and industrial participants for vibrant exchange of ideas while enjoying the amenities of the Fairmont hotel in beautiful Newport Beach, CA. We hope to see you in Newport Beach, July 16th to 20th, 2017.

Co-Chairs:

Wilfred Chen, University of Delaware, USA

Nicole Borth, Universität für Bodenkultur, Vienna, Austria

Stefanos Grammatikos, UCB Pharma, Belgium

Cell culture engineering XV

This ECI Conference will take place from May 8th to 13th 2016 in Greater Palm Springs Area, California, USA. For more details, follow this link:

<http://www.engconf.org/conferences/biotechnology/cell-culture-engineering-xv/#header9>

Vaccine Technology VI

From June 12th to 17th, 2016 the Vaccine Technology VI meeting will be held in Albufeira, Portugal.

Program Co-Chairs:

Manon Cox, CEO, Protein Sciences Corporation, USA

Nathalie Garcon, CEO and CSO, Bioaster, France

Tarit Mukhopadhyay, Senior Lecturer, University College London, UK

Laura A. Palomares, Professor, IBT, National University of Mexico (UNAM), Mexico.

Building on the success of the last five Vaccine Technology conferences, we are very excited to announce that Vaccine Technology VI is scheduled for June 12 – 17, 2016 and will take place at the Grande Santa Eulalia Resort, in Albufeira, Portugal. This conference is a gathering of key scientific and engineering leaders in the vaccine field. The goal of the meeting is to bring together experts in a forum where we can discuss the challenges and solutions to strategic technological issues facing vaccine discovery, development, and worldwide access. The opportunity to gather a multi-disciplinary group of participants, in a collegial setting that fosters dialog and networking, will allow continuation of the rapid progress that has been fostered by the previous five conferences. More information can be found in

<http://www.engconf.org/conferences/biotechnology/vaccine-technology-vi/>.

JAACT2016 Kobe, Japan

The 29th Annual and International Meeting of the Japanese Association for Animal Cell Technology (JAACT) will be held at the Kobe International Conference Center in Kobe, Japan on November 9-12, 2016



15th BELACT Meeting

On May 26th, the 15th BELACT meeting will be held in Louvain-la-Neuve, Belgium. The BELgium group for Animal Cell Technology (BELACT) was founded in 1992 and has a long affiliated history with the ESACT society. BELACT seeks at bridging together the scientists from academia and from industry in Belgium, and also

from neighboring countries such as France and Luxembourg. Belgium is known to be a place with many pharma/biotech companies (to name a few: Genzyme/Sanofi, UCB, GSK Vaccines, and numerous innovative small-scale companies) and many renowned universities that are performing cutting edge research in cell biology and biotechnology.

This year, the BELACT meeting will be entitled *New Technologies for Animal Cell Culture*. As major technology shifts have occurred in the last decades, we see that, while cell monitoring and analysis has been traditionally performed at a bulk population level, novel strategies and tools for harnessing cellular heterogeneities at the single cell level have been developed towards a better understanding of bioprocesses. In addition, while the development of 3D cultures has emerged as a major breakthrough in biological sciences, the time-resolved regulation and monitoring of cells is considered as the 4th dimension playing important role in the regulation of cell physiology. Moreover, it is becoming clearer that a better understanding and control of the hydrodynamics in bioreactor modulates mecano-transduction and mass transfer regulating the quality of stem cell derived products. As these new technologies advance, they will have important implications in recombinant protein production, drug screening or tissue engineering. These advances will be discussed, among others topics, by leading scientists from major French and Belgian universities and companies working in the field. To mention a few, Stefaan De Smedt (UGhent) will give a keynote about the use of nanotechnology for the delivery of nucleic acids. Franck Delvigne (ULg) will talk about dynamic single cell analysis for bioprocess control. The last session of the meeting will be dedicated to the translation of single cell technologies into new business models: keynotes will be given by Jose Castillo, CTO of Univercells, and by Denis Dufrane, CSO of Novadip. More information about the meeting can be obtained by sending an email to the official email address: belact2016@gmail.com.

Jérémie Barbau & Sébastien Sart,

Chairs of the 15th BELACT meeting

Yves-Jacques Schneider,

Chairman of BELACT

A purple-tinted poster for the BioTech 2016 event. The text is white and includes the event title, location, dates, and workshop information. The background shows a laboratory setting with various pieces of equipment.

BioTech 2016
**Biopharmaceutical Manufacturing
and Single-Use Technologies**
Call for Abstracts
Wädenswil, Switzerland
5th and 6th September 2016
Post-conference workshop:
7th September 2016
Mini-symposium:
7th & 8th September 2016
www.biotech2016.ch

BioTech 2016 event on "Biopharmaceutical Manufacturing and Single-Use Technologies"

Single-use devices and corresponding technologies have become well-accepted in biopharmaceutical manufacturing over the past 15 years. They are available for all upstream, downstream, formulation and filling steps. The first complete single-use production facilities are in operation (WuXi PharmaTech in Shanghai) or under construction (Alvotech in Reykjavik and Polpharma Biologics in Gdansk). In addition, there is an obvious trend towards replacing re-usable equipment at existing production facilities with single-use counterparts.

Our conference will update the participants on the latest knowledge and developments in the field of biopharmaceutical manufacturing and single-use technology. It will also provide a perfect opportunity for networking and discussions with manufacturers, suppliers, users, regulatory specialists and representatives of organizations that support the implementation of single-use devices worldwide. The conference program includes speeches and poster presentations, followed by a number of parallel workshops, which will be run by leading companies in the sector.

The main topics of the conference are:

- Production facilities of the future
- Challenges in mAb and vaccine production
- Biosimilars and microbial products
- Implementation of single-use technology in the development and manufacturing of cell therapeutics

Subsequent to Biotech 2016, there will also be a post-conference workshop and a mini-symposium. The post-conference workshop, entitled “DECHEMA’s single-use specialists meet partners”, will provide a forum for presenting and discussing existing and new training courses, which include single-use systems and technologies. The mini-symposium after the post-conference workshop will focus on “In vitro cultivation of plant cell and tissue cultures for GMP and non-GMP products”.

ESACT Office Matters

Change at the ESACT Office

In December 2015 I was appointed by the Executive Committee as Administrative Assistant at the ESACT Office. Just a few lines to introduce myself to you:

From a personal point of view:

I am Dutch, I am married, I live on the Costa Blanca in Spain, I speak English, German, French, Spanish and, of course, Dutch.

From a professional point of view:

I have worked in the Dutch Foreign Service for many years. East Germany, Poland, Tunisia, Norway, Nigeria, Ethiopia, Saudi Arabia are a few countries where I worked for longer or shorter periods of time.

After that I spent 2 years in Saudi Arabia, where I worked in a Law Office with 2 German lawyers.

Back in The Netherlands I worked at the Head Office of Boehringer Mannheim, which was called Corange in Amsterdam. And later as Secretary of the Chairman of the Board of Reed Elsevier, an Anglo-Dutch combination of a newspaper/information company.

In 2008 I was asked to run the Secretariat of ACTIP and I have been doing so ever since.

Due to this change at the ESACT Office, there is also a change in contact details. Mine are as follows:

Email: elsvdberg@esact.org

Telephone: +34 667 410 269

I very much look forward to working and meeting with you all!

Els van den Berg

