



JANUARY 2015

In this issue:

24th ESACT
Meeting -
Barcelona
2015

Page 3

ESACT XC
Election
2015

Page 4

ESACT
Frontiers
Program

Page 4

Upcoming
Events in
2015

Page 6

Previous
Events in
2014

Page 8



may, 31st to june, 3rd
www.esact2015.com



NEW

***ESACT
Frontiers Program***



Table of Contents

WORD OF THE CHAIRMAN	3
24TH ESACT MEETING - BARCELONA 2015	3
ESACT XC ELECTION 2015 - PROPOSAL FOR CANDIDATES	4
ESACT FRONTIERS PROGRAM	4
SHORT TERM ACTIONS	5
LONG TERM ACTIONS	5
UPCOMING IN 2015	6
ESACT EVENTS	6
ANIMAL CELL TECHNOLOGY COURSE 2015 – 5 TH EDITION	6
CELLS FOR COMPOUND SCREENING COURSE 2015 – 2 ND EDITION	6
EVENTS POWERED BY ESACT	7
12 TH PEACE CONFERENCE	7
BIOMANUFACTURING CHALLENGES OF IMMUNOTHERAPY 2015	7
PREVIOUS IN 2014	8
ESACT EVENTS	8
ANIMAL CELL TECHNOLOGY COURSE 2014 – 4 TH EDITION	8
CELLS FOR COMPOUND SCREENING COURSE 2014 – 1 ST EDITION	8
EVENTS POWERED BY ESACT	9
VACCINE BIOPROCESS DEVELOPMENT AND COMMERCIALIZATION WORKSHOP	9
VI LATIN AMERICAN SYMPOSIUM ON CELL CULTURE TECHNOLOGY 2014	10
ESACT OFFICE MATTERS	11

Key Upcoming Dates

24th ESACT Meeting

Barcelona 2015 – May 31st to June 3rd
Early-registration deadline: March 30th 2015
www.esact2015.com

Animal Cell Technology course 2015 5th edition

Llafranc 2015 – September 27th to October 1st
Early-registration deadline: June 30th 2015
Registration deadline: August 15th 2015
Bursary application deadline: June 30th 2015
www.esact.org

Cells for Compound Screening course 2015 2nd edition

Llafranc 2015 – September 23rd to 26th
Early-registration deadline: June 30th 2015
Registration deadline: August 15th 2015
Bursary application deadline: June 30th 2015
www.esact.org

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

ESACT e.V. is a non-profit organization serving the advancement of science (§§ 51 ff/German Abgabenordnung)
Registered under VR 14782 Amtsgericht Frankfurt am Main • Tax number 45 250 5569 9 Finanzamt Frankfurt am Main II
c/o SK Frankfurt • Zeilweg 42 • 60430 Frankfurt am Main • Germany

Word of the Chairman

Dear members and friends of ESACT,

The last letter appeared in January 2014. You might ask which kind of ESACT-relevant matters have been coming up since that time? To some extent it was a typical year “between two ESACT meetings”, wrapping up the previous and preparing for the next one. However, this is by far not all. A number of important actions have been taken or were prepared.

As in the previous year, ESACT has organized the meanwhile famous ACT course, organized by Paula Alves and Francesc Godia. For the first time another course on “Cells for Screening” has been implemented. This was assembled by Christa Burger, Paula Alves and myself. It seems that these courses will develop to a success story since they are becoming increasingly known and respected by companies and academics. This is to say thank you to the organizers and lecturers of these courses for their extra efforts. For more information see reports in this issue.

A well-known satellite meeting, traditionally organized by Sabine Geisse and colleagues from Novartis was held in Ittingen (Switzerland) will not be continued due to Sabine’s retirement. Many of you have been attending these small-sized and inspiring events and we are very grateful to Sabine and co-organizers for their activities. ESACT is a happy recipient of surplus money that has been gained from these meetings. Thanks a lot! This money has been dedicated to travel awards for younger scientists. Now, we are looking for volunteers who would like to start a similar endeavour. Interested individuals might present their ideas to the executive committee and can expect support if accepted.

Our support for ACT courses in Latin-America has been continued by funding travel for course lecturers from ESACT. This year’s course was organized by Claudia Altamirano in Valparaiso/Chile and attracted many attendants from all over Latin-America. Our close collaboration is paying out just looking to many attendees at ESACT meetings and the very enthusiastic work of our colleagues from abroad. ESACT also sponsored the registration of students in the Vaccines Bioprocess Development and Commercialization Course, organized by UCL at IBET last April.

The already announced initiative to attract early career scientists into ESACT, the ESACT Frontiers Programme (EFP) has been successfully implemented and you will

find a first report in this newsletter. Many thanks to Yvonne Genzel and Alan Dickson who have taken the final steps for the initiation. I hope you will hear much more from this group.

In preparation of the IMI2 (Integrated Medicines Initiative) we have joint forces with our industrial platform partner, ACTIP (Animal Cell Technology Platform), and lobbied for opening it to ACT matters. The real good news is that our interests have been implemented into the strategic research agenda for IMI-2 with the known focus on personalized medicine in way that manufacturing topics are within scope.

Meanwhile we have already defined the site and the chairman for the ESACT 2017 Meeting: Matthieu Stettler will “invite“ us to Lausanne!

I wish you a healthy and happy New Year. I am sure you did not forget a major event in 2015 and you are looking forward to a brilliant 2015 meeting in Barcelona. Hope to meet you there.

Hansjörg Hauser

24th ESACT Meeting - Barcelona 2015

The 24th ESACT Meeting will be celebrated in Barcelona from 31st May to 3rd June 2015. The meeting venue will be Palau de Congressos de Barcelona. The lemma of the congress is C2P2: Cells, Culture, Products, Patients.



As in previous ESACT Meetings, there will be a program with oral presentations, poster presentations, a parallel exhibition and a social program, including the visit to some of the most attractive monuments in the city, such as Sagrada Familia. On Sunday 31st May, before the start of the official program of the meeting, a series of Workshops will be organised. ESACT members can propose topical workshops to the meeting chair until February 15th at francesc.godia@uab.cat, as well as any other suggestion for the meeting.

At the deadline for poster abstract presentation, 350 were received, showing a great interest in the meeting. All the information related to C2P2 can be obtained through www.esact2015.com. Deadline for early registration is 15th March 2015.

Francesc Gòdia

ESACT XC Election 2015 - Proposal for candidates

The elections to the ESACT Executive Committee are coming up. The next Committee will be elected during the General Assembly at the 24th ESACT meeting in Barcelona, Spain on June 2015.

An email asking for nominations has been sent to all ESACT members. Please fill-in the form attached to that e-mail and return it by e-mail to roldao@esact.org together with a short CV and a motivation statement (both from the candidate). You can also propose yourself; in this case, please contact Paula Alves (p.alves@esact.org) until February 8th 2015.

Please respect strictly the deadline for your response: February 15th, 2015.

The elections will be prepared and done electronically. A newsletter presenting all nominates CV and motivation letter, the dates for the online elections and the electronic election procedure will be prepared and circulated by March 2015.

We thank you for your active participation in this process and look forward to seeing you again in Barcelona.

Paula Alves and António Roldão

ESACT Frontiers Program

ESACT Frontiers Program (EFP) is an initiative within the European Society for Animal Cell Technology focused on promoting career progression and active engagement of young generations to ESACT and to the field of Animal Cell Technology (ACT).

EFP mission is to facilitate the cooperation and knowledge exchange among scientists, and especially young scientists, of the ACT community and to provide an easy-to-access platform to connect young researchers with ESACT senior members.

EFP will also launch initiatives to challenge early-career researchers to promote academia-industry interaction, and to support innovative and/or unconventional ideas helping to open ESACT to future trends of science and technology. With this, the next generation of ESACT scientists gets a platform to influence the development of the society and can give the young generation of scientists a voice in our community.

EFP was founded in 2014 and the first group was selected out of 15 brilliant candidates by the ESACT Executive committee. The group represents early-career scientists and engineers from academic, governmental and private institutions:

- Mercedes Segura, Bluebird bio (Cambridge, MA, USA)
- Simon Ausländer, ETH Zurich (Basel Area, Switzerland)
- Emma Petiot, University Claude Bernard Lyon 1 (Lyon, France)
- Ana Filipa Rodrigues, iBET (Oeiras, Portugal)
- Markus Heine, Fraunhofer Institute for Toxicology and Experimental Medicine, ITEM (Braunschweig, Germany)
- Christopher Sellick, MedImmune (Cambridge, UK)
- Verena Lohr, ProBioGen AG (Berlin, Germany)

This group will be partially renewed every two years (next renewal: ESACT meeting 2017). Application procedures for the next Frontiers group will be available on EFP webpage (through www.esact.org) from Jan-May 2017. Until then, EFP welcomes and encourages suggestions and ideas from all members of the ACT community, particularly young members. Contact us at ESACT_Frontiers@esact.org.

The first EFP meeting took place in Leiden, The Netherlands, in October 2014 under the leadership of the ESACT XC members Yvonne Genzel and Alan Dickson. During this meeting, the group structure and organization was settled and a list of short and long term actions was proposed

Short term actions

EFP will be formally presented during the ESACT meeting 2015 (Barcelona) and will chair the Poster Prize Contest. In the spirit of supporting innovative ideas, EFP will also co-chair the “Emerging Technologies” session together with Hitto Kaufmann.

Additionally, EFP will be organizing a new video contest “C2P2 in 90sec”. All authors from submitted abstracts and registered attendees of ESACT 2015 meeting will be invited to upload a video, up to 90 seconds, connecting their research to the ESACT 2015 theme: C2P2 – Cells, Culture, Patients, Products. The best videos will be presented during the meeting and three winners will be selected. This initiative responds to a new trend in the career market, where recruitment is based on short videos (e.g.: video CVs).

Long term actions

EFP proposes to organize the ESACT frontiers meeting, in-between ESACT meetings for the younger ACT community members, a platform for interaction, exchange of ideas and an opportunity to present their work. This meeting will be associated to another EFP initiative – launchyourcareer – a job market with sessions and workshops on career management and development. Additional actions under consideration include visiting grants, support on industry-academia interaction, science hack days, new teaching formats, prizes for best master and PhD thesis.

UPCOMING in 2015

ESACT Events

Animal Cell Technology course 2015 – 5th edition

After the interest received by the last 4 editions and the excellent feed-back from the attendants, the 5th edition of the ACT course will be organised by ESACT in Llafranc, Costa Brava/Spain, from September 27th to October 1st 2015.

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. The Course comprises lectures covering the main topics of Animal Cell Technology:

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

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

Lecturers include Terry Papoutsakis (University Delaware, USA), Manuel Carrondo and Paula Aves (iBET, Portugal), Hansjörg Hauser (HZI, Germany), Francesc Gòdia (UAB, Spain), Ashraf Amanullah (Gilead, USA) and Anne Tosltrup (Boehringer Ingelheim, Germany).

More information can be found soon in www.esact.org.

Francesc Gòdia and Paula Alves

Cells for Compound Screening course 2015 – 2nd edition

After the interest received by the 1st edition and the very positive participant's feedback, the organizers decided to launch a second edition of the Cells for Compound Screening course. This course will be organised by ESACT and it will be held in Llafranc, Costa Brava/Spain, from September 23rd to 26th 2015.

The course covers all important aspects of mammalian cell based screens for the identification of biologically active compounds. The course focuses on cell production and use for compound screening, establishment, criteria as well as different formats and use of physiological relevant cellular assays with good reproducibility.

The aim of the course is to train interested individuals (PhD students, Engineers, Post-Docs, Technicians, Interested established scientists) from Industry and Academia. We are offering basic and pharmaceutical industry Know-How to a broader community. The course will cover the following topics:

1. Target Identification and validation
2. Preclinical testing
3. Assay Development and validation
4. Cell line selection
5. Cell material production and validation
6. Frequently used cellular HTS assays
7. Complex cellular assays
8. Equipment and logistic

Lecturers include Paula Alves (iBET, Portugal), Rosalia Arrebola (Sanofi, France), Christa Burger (Merck, Germany), Hansjörg Hauser (HZI, Germany), Stephanie Hennen (Uni Bonn, Germany), Eberhard Krauß (Germany), Heinz Ruffner (Novartis, Switzerland), and Carsten Pieck (Merck, Germany).

More information can be found soon in www.esact.org.

Paula Alves, Christa Burger and Hansjörg Hauser

Events Powered by ESACT

12th PEACe conference

The 12th Conference on Protein Expression in Animal Cells (12th PEACe) will take place September 20-24, 2015 at the Loews Coronado Beach in San Diego, CA.



From Monday to Thursday, the 7 sessions including an industrial workshop will follow the now established tradition of a PEACe meeting with presentations from selected leaders in the field of animal cell technology. The value of this type of meeting in an inspiring environment is certainly in the congenial atmosphere that is conducive to a free interchange of ideas from the almost equal mix of industrial and academic participants. As established at the 11th PEACe conference, several student bursaries will be awarded. Abstracts are currently being accepted and a sizeable number of abstracts will be chosen for oral presentations. For those who prefer to present a poster, there will be a Poster competition with a cash award.

Session 1: Maximizing Production from Cell Hosts

Session 2: Transient Technologies

Session 3: Assembly of Protein-Protein Complexes

Session 4: Cell Culture for Virus Production

Session 5: Monitoring and Controlling Post-translational Modifications

Session 6: Trends in Bioprocessing

PEACe is organized by PEIS, a not for profit organization. For additional information please visit: www.peace-conference.org

Bruno Begin

Biomanufacturing Challenges of Immunotherapy 2015

Second edition of this workshop will be organized by the Center of Molecular Immunology (CIM) in Havana during November 2015. Planned to be a biannual workshop, first edition took held in 2013 with more than hundred works presented in lectures and posters. The first edition was successful in engaging participants in fruitful discussion on technical hurdles to expand immunotherapeutic agents' availability for an extended use in treatment of several diseases.

Since our last meeting the potential and achievements of immunotherapy has continue to grow. Recently, the 2014 annual meeting of American Society of Clinical Oncology (ASCO) predicted an increase use of immunotherapy for cancer, with potential demand reaching more than 50% of all cancer treatments. Unfortunately, development time and costs for new immunotherapy drug candidates continue to grow, which makes the use of these medicines unavailable for most of the patients who need the treatments.

CIM is inviting the scientific community to meet again in Havana to discuss recent advances in product development and manufacturing technologies for immunotherapy. Lectures and posters will be accepted covering topics like cell line development, cell culture for glycoprotein and antibody production, antigen processing for therapeutic vaccines, downstream platforms, formulation development, regulatory trends, as well as process economics and design. It is also an excellent opportunity to know Cuban Biotech achievements, visiting scientific centers and enjoy the beauty of old Havana.

Please follow the link bioit.cim.co.cu/biomit/ to access the website of the meeting.

Adolfo Castillo

PREVIOUS in 2014

ESACT Events

Animal Cell Technology course 2014 – 4th edition

The Fourth Course on Animal Cell Technology organized by ESACT took place in Hotel Terramar, in Llafranc (Girona, Spain), from September 28th to October 2nd 2014. This is an introductory course, providing an overview of the field, from the more basic aspects to the final applications. It is targeted to those starting their research activity in Animal Cell Technology, both from Academia or Companies. It is also of interest to those wishing an up-date of the state-of-the-art of Animal Cell Technology in a short intensive Course. The course was well attended, with a total of 30 participants, both from academy and industry, from fourteen different countries in the World.

Seven lecturers covered the four days intensive program: Elephterios Papoutsakis (U. Delaware, USA), Manuel Carrondo (iBET, Portugal), Hansjörg Hauser (HZI, Germany), Paula Alves (iBET, Portugal), Ashraf Amanullah (Gilead, USA), Anne B. Tolstrup (Boehringer Ingelheim, Germany) and Francesc Gòdia (UAB, Spain). The days in Llafranc were pleasant, with some rain in the first couple of days. The program was very intensive, but still allowing a daily break. The interaction among lecturers and participants was very dynamic. On Tuesday evening, the group visited the

Dali Museum in Figueras and enjoyed a dinner in Mas Pou. The opinion from the participants was excellent, and this certainly encourages organizing the Course again in 2015.

The Fifth Course on Animal Cell Technology organized by ESACT will also be in Llafranc (Girona, Spain), from September 27th to October 1st 2015. The full announcement will be ready early in 2015 in the ESACT website. All members of ESACT are encouraged to promote the Course in their Companies and Institutions.

Francesc Gòdia and Paula Alves

Cells for Compound Screening course 2014 – 1st edition

For the first time ESACT offered a course on “Cells for Compound Screening”. It was held in group interaction supporting setting of Llafranc following the Third Course on Animal Cell Technology from October 2 – 5. The emphasis was to offer theory and currently used screening approaches to identify biological active compounds using mammalian cells. Topics covered Target Identification and Validation, Preclinical Testing, Assay Development and Validation, Cell Line Selection,



Cell Material Production and Validation, Cellular HTS assays as well as Equipment and Logistics. Attendants included PhD students, Engineers, Post-Docs, Technicians and established scientists from Industry and Academia.

Lectures were given by Paula Alves (iBET), Rosalia Arrebola (Sanofi), Christa Burger (Merck), Hansjörg Hauser (HZI), Carsten Pieck (Merck), Heinz Ruffner (Novartis), Eberhard Krausz (VIP) and Ramona Schrage (Uni. Bonn). All lecturers stayed for the full time of the course and acted as coaches for the attendants. These interactions turned out to be quite dynamic. The participant's feedback was accordingly very positive and motivated the organizers to launch a second edition in 2015.

Paula Alves, Christa Burger and Hansjörg Hauser

Events Powered by ESACT

Vaccine Bioprocess Development and Commercialization Workshop

The University College London in collaboration with the Instituto de Biologia Experimental Tecnológica (iBET) organized in April 2014 the Vaccine Bioprocess Development and Commercialization Workshop.

The course run at iBET in Portugal and counted with a team of outstanding international experts that covered issues related to process development, regulation and

commercialization of new vaccine products. Speakers list included Barry Buckland (BiologicB, Wellcome Trust), Debbie Drane (CSL), Tarit Mukhopadhyay (UCL), Paula Alves (iBET), Manuel Carrondo (iBET), Andrew Bacon (Stabilitech), Martin Reers (Biological E Pvt India), Martin Wisner (Bioreliance), Ingrid Long (GE Healthcare), Mark Proctor (Astra Zeneca), Indresh Srivastava (Protein Sciences Corp), Alain Pralong (GSK) and Steve Kolodziej (Pfizer). They focused on the key technical aspects critical for success and integrate those with an understanding of the regulatory environment.

Academic delegates (10 from iBET and 9 from UCL) and industrial delegates (19 – from Crucell, Janssen, Statens Serum Institut, Merck KGaA, Public Health England and Gates Foundation) attended the workshop.

A total of 11 applications for ESACT sponsorship were received, from the EU, Tunisia and Brazil. While efforts were made to invite from a wide selection, flight times and prices proved to be a limiting factor. Therefore the following 5 PhD/Postdocs were sponsored: Benjamin Blaha (UCL), Jin Jing (Jenner Institute, UK), Daniel O'Conner (Oxford Vaccines Group, UK), Hugo Soares (iBET) and Ricardo Dias (BioFig, University of Lisbon).

In 2015 the course will be run at MIT (<https://www.ucl.ac.uk/>) and in 2016, there are plans to bring it back to the EU, most probably in London.

Tarit Mukhopadhyay



VI Latin American Symposium on Cell Culture Technology 2014

The 6th Latin American Symposium on Cell Culture Technology (SLATCC 2014), held in Valparaiso, Chile, brought together researchers from Argentina, Brazil, Uruguay, Cuba, Mexico, Spain, Portugal and Germany.

With the participation of about 150 academics and researchers from America and Europe, it took place at the Pontificia Universidad Católica de Valparaiso the 6th version of Latin American Symposium on Technology Cell Culture-SLATCC 2014, event that was organized by the School of Biochemical Engineering under the auspices of the ESACT.

The meeting included seminars, plenary lectures and poster or oral presentations, in which various topics were addressed, such as bioreactors operation for animal cells culture, production of antibodies and proteins for cancer immunotherapy, biopharmaceutical production, viral and recombinant vaccines, recovery and purification of biopharmaceuticals, stem cells and tissue engineering, as well as new strategies in stem cell culture, among others.

Dr. Claudia Altamirano and Dr. Julio Berrios, the organisers of the meeting, were very satisfied with the of the conferences, emphasising the presence of participants coming from different areas of Latin America and the world, that have shared their experiences and results. They were also very pleased that the SLATCC, that has been held in different Latin American cities for ten years, has been turning into a tradition that helps to highlight this area of biotechnology in Latin America and the world.

Claudia Altamirano and Julio Berrios



ESACT Office Matters

Important Reminder

I would like to stress once again that the official ESACT e.V. bank account to which you should transfer the membership fees, if you wish to use this method, is the following:

Bank name: Deutsche Bank Privat-Und
Geschaeftskunden Ag

Account Nr: 0189191

BLZ: 27070024

IBAN: DE55 2707 0024 0018 9191 00

SWIFT Code: DEUTDEDB270

ESACT e.V. Address: SK Frankfurt, Zeilweg 42,
60430 Frankfurt am Main, Germany

Please note that for transfers in Euros within Germany the Account Nr and BLZ are needed while for transfers outside Germany IBAN and SWIFT Code are needed. All bank transfers should be in Euro. Membership fees are 20€/year and all costs associated with the transfers should be assumed by the members.

We encourage all ESACT members to use the bank transfer method rather than the PayPal system for the payment of membership fees due to economic reasons related with the transaction cost of PayPal for ESACT. In the era of online banking, transferring into the ESACT account should be as easy as PayPal.

All ESACT accounts in Belgium, Switzerland and the UK to which ESACT members were used to transfer their membership fees have been closed. Therefore, future payments of membership fees must be done to the ESACT e.V. bank account provided above.

António Roldão