



# NEWSLETTER

of the European Society for Animal Cell Technology

January 2014

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## *Word of the New Chairman*

Dear members and friends of ESACT,

During the last ESACT General Assembly in Lille a new ESACT Executive Committee (XC) was established. I feel very much honoured to be elected as the new chairman and to receive the trust of the membership to fulfil the task.

At this stage it is time to thank for the work of the previous committee, in particular the members who have formally terminated their activity. This concerns Martin Fussenegger, the chairman for the last 2 periods who has been responsible for leading the society to its current status – well recognized and wealthy. Under his leadership, the society has become legal and two very successful meetings, one in Vienna, 2011, the other in Lille, have been carried out. Stefanos Grammatikos has been a key person for ESACT. He has served in a series of XC committees with different functions. In particular, his functions as treasurer and secretary have been exemplary and we still profit from his energetic style and the role-models. He and his friend Elefterios Papoutsakis (Terry) who also served in the last round as a member of the XC were active in several ESACT meeting committees. We are happy that both of them as well as Martin did not retire from ESACT”, but are ready to donate their experience to future activities of ESACT.

Thanks also go to the activity of Yves-Jacques Schneider and his teams. The Scientific Meeting in Lille was a great success, scientifically and financially. Our society has profited greatly from this endeavour.

To fully appreciate this achievement you should read the article on the Lille meeting in this Newsletter issue.

I am very happy to chair a new committee with highly motivated, professional members who are ready to attack new challenges. You might ask what kind of

challenges we are facing in a situation where animal cell technology (ACT) is well established, the companies are doing well, research is active (e.g. several CHO genomes have been published) and ESACT is not only legal but also a wealthy society. These facts suggest that nothing needs to be changed and everything could continue along established lines. We believe, however, that this is the right time to tackle some points that were raised some time ago but were always overtaken by other items, seemingly, higher priority.

The first point concerns the question what ESACT is doing between the biannual meetings. In fact, for a few years now, several satellite meetings and courses have been held with ESACT support, either by direct involvement of ESACT members and/or by financial bursary support.

The XC has decided to extend this type of activity and to increase the number of courses offered. In 2014, we will announce 2 courses, one on Animal Cell Technology and the second, a one, new, about „compound screening with mammalian cells“. Thanks to the continuous input from Paula Alves and Quico Gòdia and with the new activity from Christa Burger, these courses will be offered at Llafranc, close to Barcelona. In addition, a further course on Vaccine production, organized by Paula Alves in collaboration with University College London, will take place in Oeiras, Lisbon under the umbrella of ESACT. This is to say thank you to the organizers and lecturers of these courses for their extra efforts. Our support for ACT courses in Latin-America will be continued by funding travel for course lecturers from ESACT. We hope that the example of these colleagues will enforce enthusiasm of others to help organize more courses or “donate” their time to serve as lecturers.

We are happy to continue our collaboration with our head of the ESACT secretariat, Dr. António Roldão. He is managing member support, the WEB site, the Newsletter, and a bundle of secretarial work of diverse nature.

A major new initiative concerns the support for engagement with, and career progression of, early career scientists into the ESACT sector. The XC is planning a new „institution“, the ESACT FRONTIERS PROGRAMME (EFP). A number of younger individuals shall be selected to form the initial EFP and receive financial and mentoring support from ESACT. The EFP shall start new actions and help to direct the

society into the future generations. Under the leadership of XC members Yvonne Genzel and Alan Dickson, and with support from Anne Tolstrup and Stefanos Grammatikos, this new institution within ESACT is in initial stages of establishment. With their help the initial EFP group will be established and become active during 2014 and the fledgling EFP will introduce itself during the next ESACT meeting (Barcelona 2015). We believe that such a group will express the interests of the younger generation and raise new activists for the welfare and the future of the society.

### IMI2

#### **Brief Follow-up on the ESACT Executive Committee activities regarding the Integrated Medicines Initiative (IMI2)**

Many scientific ACT projects were supported by EU grants in the 80s and 90s. However, the programs of the commission from the past 10 years did not show explicit funding opportunities in this field. Instead, ACT comes as part of integrated activities. Already during the last ESACT periods, we asked how we can lobby the establishment of new programs. Our industrial platform partner, ACTIP (Animal Cell Technology Platform) has addressed this problem as well and we have directed letters with position papers to the EU Commission requesting better recognition of our work. As a result of these position papers and some lobbying by ACTIP a delegation from ESACT and ACTIP (Chantra Eskes, Luc Kupers, Hansjörg Hauser) was invited to Brussels to discuss the issue with Arnd Hoeveler, Head of Directorate F.4 “Advanced therapies and systems medicine” and his crew. We learned that the Commission recognizes our activity but will continue to look at it as a part of integral projects that are dedicated to, for example, the treatment of certain diseases. Our attention was directed towards IMI (Integrated Medicines Initiative), an initiative by which EC and industry (EFPIA) co-fund large projects. This led to an initiative, in which the above team, with input from both societies could add to the draft of IMI2, a program that is most probably launched in June 2014. While the general goal of this program was almost defined, we could establish a number of elements that match ACT components. We will keep the ESACT community informed and ask you to think about potential projects.

### **ESACT Annual General Assembly**

According to our constitution a General Assembly (GA)

will take place once per year. As you know, in the past, the GA was always scheduled to the Tuesdays of the biannual ESACT Scientific meetings in order to allow maximal participation. We intend to keep this tradition and organize the General Assemblies during the ESACT meetings (in years when the ESACT meeting is held e.g. 2015). All essential discussions will be on the agenda of these biannual GAs. The legally required GAs held during the intervening years (e.g. 2014) will show a minimal agenda and will be announced two months in advance to all members. We expect, however, that the required minimal quorum (40 members) might not be reached and, in such circumstances, a new date (at least 4 weeks later) will be defined and announced. For the second date, no quorum is required and the attending members will have a formal GA – however – without the power to make decisions that profoundly affect the society. This procedure, although cumbersome, is unavoidable. We expect that the GAs held in even years will only be attended by the Executive Committee and decisions will be restricted to Executive Committee issues. In summary, in future, during even years you will receive invitations to GAs that you might ignore.

*Hansjörg Hauser*

### *ESACT 2013 in Lille, France*

The 23<sup>rd</sup> ESACT Meeting took place in Lille from June 23<sup>rd</sup> to 26<sup>th</sup>. The motto of this year's Meeting was "Better Cells for Better Health". Let me summarize the main achievements and start with a few significant figures: 1000 (exactly) attendants from all over the world, 388 accepted abstracts, 336 posters, 11 invited lectures, 30 oral presentations selected from the abstracts and 20 short talks selected from the posters. From 130 bursary applications, more than 70 were funded. There were 9 industrial and 4 topical workshops, 85 exhibiting companies and 6 start up booths on a total exhibition floor space of 1035 m<sup>2</sup>. The Meeting had the pleasure to have 4 main sponsors: BD, GE Healthcare Life Sciences, Thermo Scientific and SAFC. These figures are totally comparable to recent previous meetings and confirm that the ESACT Meeting has become the reference forum for academic and industrial exchange, partnership and inspiration in the field of Animal Cell Technology.

Looking back to the scientific content, we had the

opportunity to experience two brilliant keynote lectures by Arnold CAPLAN on adult human mesenchymal stem cells and their use in pre-clinical animal models of disease, and by Catherine VERFAILLIE on engineering liver tissue from stem cells. Nine excellent invited lectures by Marc PESCHANSKI, Judy LIEBERMAN, Kevin LEE, Dirk SCHÜBELER, Sally WARD, Toni CATHOMEN, Thierry VANDEN DRIESSCHE, Jorgen KJEMS and Dennis DISCHER added tremendous new information and inspiration on recent developments in the application of animal cells for human therapy. The entire oral programme, organized under 6 plenary sessions, was enriched by excellent presentations delivered by a very talented young generation of cell culture technologists. As usual, strong science was presented in the posters that were on display throughout the meeting. It required a lot of discipline to be able to look at all the posters, interact with the authors and benefit from the great science presented. For the Poster Prize, 20 posters were selected for short oral presentations and, based on the vote of the audience, 3 posters were awarded: (a) Profiling and engineering of microRNAs for enhancing recombinant protein productivity in Chinese Hamster Ovary cells (Loh Wan Pin – Poster B043); (b) Dynamic culture of human liver equivalents inside a micro-bioreactor for long-term substance testing (Eva Marie Materne – Poster D060) and (c) 13C-labeling dynamics of intra- and extracellular metabolites in CHO suspension cells (Judith Whareit – Poster B032).

As was the case with the Vienna Meeting two years ago, the extended abstracts will be rapidly published as a supplement at BMC Proceedings 2013 by <http://www.biomedcentral.com/bmcproc/supplements/7/S6/all>.

Workshops were held prior to the official opening of the meeting. Industrial workshops by ATMI, BD, Boehringer Ingelheim, GE Healthcare, IrvineScientific, Kerry, SAFC, Sartorius Stedim, and Thermo Scientific kept the audience engaged during the morning of Sunday, June 23. Following the industrial workshops, four topical workshops were held on therapeutic vaccines, metabolism and cell culture processes, CHO genome and batch versus continuous processing.

For the social events, after the traditional Traders Reception in the exhibition area on Sunday evening, on Tuesday afternoon, 9 different excursions were held ranging from guided tours of the old city of Lille to

neighbouring city visits such as Ghent and Bruges. After these excursions, the delegates gathered at the Museum of Fine Arts of Lille for a social and cultural cocktail. Finally, to celebrate the end of the meeting, a dinner was organized at the "Farmhouse of the Templars", followed by a party.

In summary the traditional format of ESACT Meetings was kept with no parallel oral sessions, an unparalleled industrial exhibition, a very attractive poster programme and rich social events. Furthermore, particular attention was devoted to the catering, with a "French touch".

Before ending up my contribution to the ESACT organization, I want to thank all those who helped me during the last three years: (i) the members of the Scientific Committee, i.e. Spiros AGATHOS, Martin FUSSENEGGER, Hansjörg HAUSER, Hitto KAUFMANN, Paula MARQUES ALVES, Otto MERTEN & Terry PAPOUTSAKIS who put together an impressive scientific programme by inviting excellent speakers, reviewing all abstracts and selecting the oral presentations; (ii) the Organizing Committee, i.e. Véronique CHOTTEAU, Elisabeth FRAUNE, Anne GREGOIRE, Cécile LEGALLAIS, Lætitia MALPHETES, Martine MARIGLIANO, Mercedes SEGURA & John WERENNE, as well as, with a special thank, Stefanos GRAMMATIKOS, Annie MARC & Otto MERTEN, who spent a lot of time to manage the poster organization, commercial exhibition, workshops, catering and social events that largely contribute to the mood of the meeting; (iii) the past ESACT Executive Committee for keeping the ESACT values at a level of excellence and, in particular, Nicole BORTH, Alan DICKSON and Francesc GODIA for personal support; (iv) last, but not least, Daniel CHETRIT, Lise DARONNAT, Valéry LIENARD and Afaf YAHIAOUI from our PCO, Le Public Système (Paris), as well as the technical staff of Lille Grand Palais Congress Centre for their excellent work

Let us now move to the 24<sup>th</sup> ESACT Meeting that will take place in the beautiful city of BARCELONA. Based on his previous experience in Granada, I fully trust Francesc GODIA and his team who will perfectly manage the scientific and practical organization of this event!

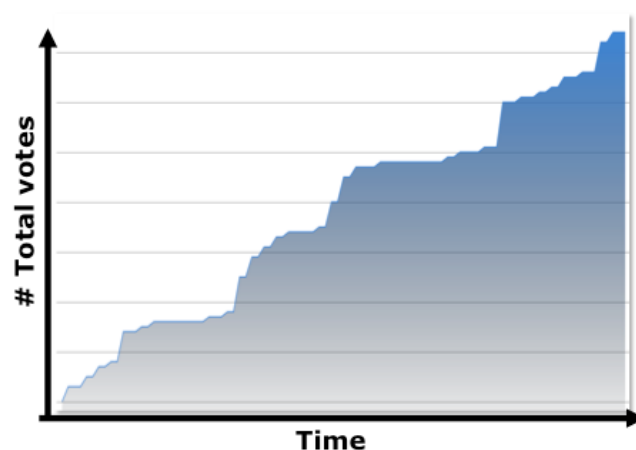
See you in Barcelona!

*Yves-Jacques Schneider*

### *ESACT XC Elections*

The election of ESACT's Executive Committee for the period 2013-2015 took place from 23 April to 23 June 2013. The election process run entirely within the ESACT website [www.esact.org](http://www.esact.org) (under members restricted area). ESACT members were allowed to vote in 4 persons from a list of 7 candidates, Alan Dickson, Amine Kamen, Dethardt Müller, Friedemann Hesse, Jonathan Dempsey, Yves-Jacques Schneider and Yvonne Genzel.

The results were announced during the 23rd ESACT meeting in Lille at the ESACT General Assembly on 25 June 2013. The total number of eligible members was 279 of which 74 have voted (26.5%). The voting evolution was as follows:



The elected regular members were Alan Dickson, Amine Kamen, Dethardt Müller and Yvonne Genzel.

The new XC of ESACT for the period 2013-2015 is:

<b>Chairman</b>	Hansjörg Hauser
<b>Vice-Chairman</b>	Paula Alves
<b>Treasurer</b>	Nicole Borth
<b>Secretary</b>	Hitto Kaufmann
<b>Regular Members</b>	Alan Dickson Amine Kamen Dethardt Müller Yvonne Genzel
<b>Meeting Chairman</b>	Francesc Godia

*Antonio Roldao*  
*ESACT Officer*

## UPCOMING in 2014

### ESACT Events

#### Animal Cell Technology course 2014 – 4<sup>th</sup> edition

September 28 – October 2, 2014, Llafranc, Spain

**Coordinators:** Francesc Gòdia (UAB, Spain) and Paula Alves (IBET, Portugal)

After the interest received by the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> edition and the excellent feed-back from the attendants, the 4<sup>th</sup> edition of the ACT course will be organised by the ESACT (European Society of Animal Cell Technology) in Llafranc, Costa Brava/Spain, from 28<sup>th</sup> September to 2<sup>nd</sup> October 2014. 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. 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. Confirmed 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 Toslstrup (Boehringer Ingelheim, Germany). Other information can be found soon in [www.esact.org](http://www.esact.org).

*Francesc Gòdia and Paula Alves*

#### Cells for Compound Screening - ESACT course, 1<sup>st</sup> edition

October 2 – 5, 2014, Llafranc, Spain

**Coordinators:** Christa Burger (Merck KGaA, Germany), Hansjörg Hauser (HZI, Germany) and Paula Alves (IBET, Portugal)

ESACT (European Society for animal Cell Technology) offers a training course that 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 course will be held in Llafranc, Costa Brava/Spain, from October 2<sup>nd</sup> to October 5<sup>th</sup> 2014.

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

*Christa Burger, Hansjörg Hauser and Paula Alves*

### Events Powered by ESACT

#### Vaccine Bioprocess Development and Commercialization

April 14 – 16, 2014, Oeiras, Portugal

University College London in collaboration with the Instituto de Biologia Experimental Tecnológica (iBET)

is organizing its Vaccine Development course for 14<sup>th</sup> - 16<sup>th</sup> April 2014 in Oeiras, Portugal.

Vaccines represent a challenging area of development. There are many antigen designs and expression systems, all of which impact on the upstream and downstream process steps. This course seeks to use a combination of lectures and case studies to allow delegates to appreciate the different scale-up strategies within the complex regulatory framework for these multifarious biologics.

A team of outstanding international experts has agreed to join us in exploring the issues related to process development, regulation and commercialization of new vaccine products. The speakers will be available during the course for direct discussion and networking opportunities.

Speakers from MedImmune, CSL, Pfizer, Protein Sciences, GE Healthcare and GSK will focus on the key technical aspects critical for success and integrate those with an understanding of the regulatory environment.

The course is priced at £1,450 and includes meals and accommodation. Early booking is recommended to avoid disappointment. Additionally, ESACT will sponsor the registration of 5 students to attend the course. Details on how to apply are posted on the website

<https://www.ucl.ac.uk/biochemeng/industry/mbi/courses/VBDC>.

**Tarit Mukhopadhyay**

### VI Latin American Symposium on Cell Culture Technology (VI SLATCC)

**November 6 – 8, 2014, Valparaíso, Chile**

The VI Latin American Symposium on Cell Culture Technology (VI SLATCC) provides Latin American researchers and professionals, as well as international participants, the ability to share and discuss results and experiences in different fields of animal cell culture applications such as biopharmaceuticals, vaccine production and the use of stem cells.

The SLATCC is held every two years since 2004, including oral presentations, panel discussions and poster exhibitions. The first edition was held at Universidad Federal do Rio de Janeiro, Brazil, where many teachers presented their researches. The following [ESACT Newsletter January 2014](#)

editions were held in San Paulo, Brazil (2006), Havana, Cuba (2008), Montevideo, Uruguay (2010), Santa Fe, Argentina (2012). This edition will be held in Valparaíso, Chile on November 6-8 2014 and it will be organized by the Biochemical Engineering School, Faculty of Engineering (Pontificia Universidad Católica de Valparaíso). By March, more information about deadlines and other important data will be released.

Following the VI SLATCC, the theoretical and practical course "Animal Cell Culture Technology" will be held (November 9 – 14, 2014). For additional information, please contact the following email or phone number: [claudia.altamirano@ucv.cl](mailto:claudia.altamirano@ucv.cl); +56 (0322) 273646/273641

**Claudia Altamirano and Julio Berrios**

### Events on TOPICS Related with ESACT

#### Genome Scale Science for CHO Production Cells: Genomes, -Omics and Big Data

**March 13 – 14, 2014, Vienna, Austria**



organized by ACIB, the Austrian Center of Industrial Biotechnology in collaboration with [www.CHOfgenome.org](http://www.CHOfgenome.org)

[www.CHOfgenome.org](http://www.CHOfgenome.org) aims at providing the scientific community with tools, software and infrastructure to take full advantage of the now available genomic information for CHO cells. After a jamboree to coordinate tasks towards this goal, we will hold a workshop, open to the public, to present the current state of the art in genome scale science for CHO production cell lines.

The workshop will be held at BOKU University (Muthgasse 11, 1190 Vienna, Austria) from March 13<sup>th</sup> (4pm) to March 14<sup>th</sup> (5pm) 2014. For further details please contact [chogenome2014@acib.at](mailto:chogenome2014@acib.at). Preliminary programme, registration, abstract submission and further information can be found at the website [www.acib.at/chogenome2014](http://www.acib.at/chogenome2014).

The Scientific Advisory Board includes Kelvin H. Lee

(University of Delaware), Mike Betenbaugh (Johns Hopkins University) and Nicole Borth (BOKU University and ACIB)

*Nicole Borth*

### Cell Culture Engineering XIV

**May 4-9, 2014, Quebec City, Canada**

Since 1988, the Cell Culture Engineering conferences have been held bi-annually and have developed into the leading global venue for the academic, industrial and regulatory communities for intensive interactions and debates to create solutions for improving human health and life by enabling rapid development and high quality manufacturing of an ever increasing number of viral vaccines, recombinant proteins and monoclonal antibodies. The 2014 conference will be the 14<sup>th</sup> conference in this highly successful series and will be held at one of the most beautiful urban resort hotels, the Fairmont Le Château Frontenac, nestled in the heart of Old Quebec City. (<http://www.fairmont.com/frontenac-quebec/>)

This Cell Culture Engineering XIV conference will bring together about 300 selected participants of top academic, industrial and governmental researchers from all over the world. We will celebrate the tradition of high quality and relevant accomplishments and debate future solutions in the area of animal cell culture science and engineering. Consistent with this excellent tradition, the scientific program will focus on topics ranging from the frontiers of fundamental biologic science around animal cells, the engineering challenges of cell culture process development and implementation, the latest regulatory concepts such as QbD and design space for improving process design and product quality, strategies for accelerating development of high quality and cost effective biosimilars, and opportunities for international collaborations.

To keep with a well established tradition of balancing the participation of academics and industry representative, the CCE XIV Conference is co-chaired by Prof. Amine Kamen, Bioengineering Dept, McGill University and Dr. Weichang Zhou, Vice President, Biologics Process Development, Wuxi App Tec Co., Ltd. China.

The program will consist of invited and solicited oral

presentations and poster presentations (<http://www.engconf.org/conferences/biotechnology/cell-culture-engineering-xiv-2/>).

Looking forward to meeting you all in the most European city of North America, Quebec City by May 2014.

*Amine Kamen*

### Vaccine Technology V

**June 8-13, 2014, Playa del Carmen, Mexico**

### 27<sup>th</sup> Annual and International JAACT Meeting

**November 10-14, 2014, Kitakyushu, Japan**

## *PREVIOUS in 2013*

### **ESACT Events**

#### **Animal Cell Technology course 2013 – 3<sup>rd</sup> edition**

The Third Course on Animal Cell Technology organized by ESACT took place in Hotel Terramar, in Llafranc (Girona, Spain), from September 28<sup>th</sup> to October 3<sup>rd</sup>. 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 27 participants, both from academy and industry, from seventeen different countries in the World.

Seven lecturers covered the four days intensive program of lectures: Elephterios Papoutsakis (U. Delaware, USA), Manuel Carrondo (IBET, Portugal), Hansjörg Hauser (HZI, Germany), Paula Alves (IBET, Portugal), Ana Teixeira (IBET, Portugal), Anne B. Tolstrup (Boehringer Ingelheim) and Francesc Gòdia (UAB, Spain). The days in Llafranc were pleasant, the program was very intensive, but still allowing a daily break on the beach. The interaction among lecturers and participants was very dynamic. On Tuesday evening, the group visited some spots in the area and enjoyed a dinner in Castell d'Empordà.

The opinion from the participants was excellent, and this certainly encourages organizing the Course again in 2014.

The Fourth Course on Animal Cell Technology organized by ESACT will also be in Llafranc (Girona, Spain), from 28<sup>th</sup> September to 2<sup>nd</sup> October 2014. The full announcement will be ready early in 2014 in the ESACT website. All members of ESACT are encouraged to promote the Course in their Companies and Institutions.

*Francesc Gòdia and Paula Alves*

### **Events Powered by ESACT**

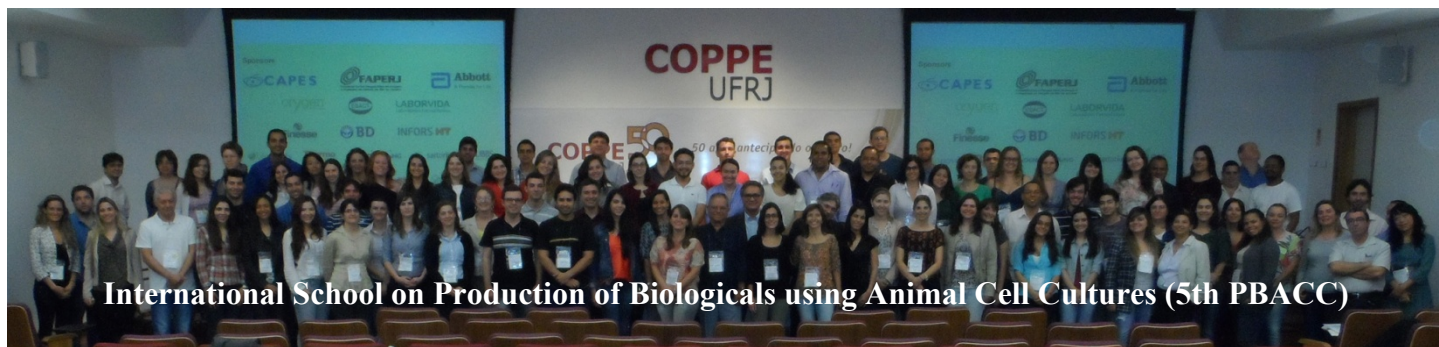
#### **International School on Production of Biologicals using Animal Cell Cultures (5<sup>th</sup> PBACC)**

In the first week of August 2013, the "5th International School on Production of Biologicals using Animal Cell Cultures (5<sup>th</sup> PBACC)" took place at the Federal University of Rio de Janeiro (Brazil) under the auspices of the Cell Culture Engineering Laboratory of COPPE-UFRJ. This intensive training course on animal cell technology gathered 125 people, including invited speakers and participants, from 10 different countries.



**Animal Cell Technology course 2013 – 3<sup>rd</sup> edition**





ESACT was one of the sponsors of the course and many ESACT members were among the speakers. The course covered topics such as basic aspects of animal cell cultivation, cell line development, post-translational modifications, medium design, bioreactors and operation modes, cell retention devices, product purification, regulatory issues and much more (see [www.peq.coppe.ufrj.br/biopharma](http://www.peq.coppe.ufrj.br/biopharma)). In addition to a common programme of theoretical lectures held each day, each afternoon had parallel interactive case study sessions that gave participants the opportunity for detailed small group discussions with speakers and other session participants. Amongst the speakers at case study sessions were 4 members of the Brazilian regulatory authority (ANVISA).

On the last day of the event, the afternoon session was dedicated to a round-table entitled "The biopharmaceutical industry in Brazil", where big and small biopharma companies had the opportunity to discuss the activities of the growing Brazilian health biotech sector.

This event was the 5th edition of a biannual training course series that was initiated in 2004 in Rio de Janeiro, and, up to now, more than 500 people have benefited from this high level training in animal cell technology. The 6th PBACC edition will be held in Rio in 2015.

Together with the PBACC series, the "Latin-American Seminar on Animal Cell Technology (SLATCC)" was created in 2004 in Rio. After being held in Rio in 2004, in São Paulo in 2006, in Cuba in 2008, in Uruguay in 2010 and in Argentina in 2012, the 6th edition of this Latin-American animal cell technology conference will take place in Chile in the last quarter of 2014. More information on the conference can be obtained by contacting the conference chair, Prof. Claudia Altamirano ([claudia.altamirano@ucv.cl](mailto:claudia.altamirano@ucv.cl)).

*Leda Castilho*

## Events on TOPICS Related with ESACT

### 11<sup>th</sup> PEACe

One hundred and fifty one participants attended the exclusive conference of Protein Expression in Animal Cells (PEACe) in the splendour of the Canadian Rocky Mountains at Kananaskis from September.22<sup>nd</sup> to 26<sup>th</sup> 2013. The meeting was preceded on the Sunday with a monoclonal antibody symposium organized by the Canadian network MabNet. Here graduate students from the network presented recent data on a program that aims to develop platform technologies for Mab production. This generated considerable interest and discussion with the invited panel of international expertise. From Monday to Thursday the 7 sessions including an industrial workshop followed the now established tradition of a PEACe meeting with presentations from selected leaders in the field of animal cell technology. An opening keynote lecture by Ron Weiss of MIT described the gene and metabolic networks of cells in terms of engineering circuitry. This provided a visionary insight into possible future modalities of therapeutic protein production through synthetic biology. Highlights in two sessions on cell engineering included recent developments in metabolic profiling, and the control of cellular functionality by signal molecules such as mTOR and selected iRNAs. There followed an interesting discussion on the genetic variability of CHO as a platform cell line for protein production. Large-scale transient protein expression is now a viable technology for rapid production of selected target proteins as expounded in a session on the topic. Monoclonal antibodies are now dominant as biopharmaceuticals and it was appropriate that descriptions were given on novel structures that have emerged such as the single domain antibodies. Participants were treated to an excellent review of the problems encountered in bringing the first FDA approved recombinant influenza vaccine to market in a session focused on novel bioprocesses. A session on

stem cells provided an update on the use of induced pluripotent cells and their application in the clinic. The value of this type of meeting is certainly in the congenial atmosphere that occurs in a secluded retreat that is conducive to a free interchange of ideas from the almost equal mix of industrial and academic participants. This the 11<sup>th</sup> biennial meeting of PEACe benefited by an increased number of graduate students who participated fully in the conference proceedings and discussion. An exciting social program was integrated into the meeting agenda and included visits to the famous Lake Louise, Johnson Canyon and a cowboy ranch for dinner. We now look forward to PEACe 12<sup>th</sup> which is planned to be held in an idyllic spot in Southern California in September 2015. So, please put this in your diary.

*Michael Butler*

### **Biomanufacturing Challenges of Immunotherapy 2013 – 1st edition**

The First Workshop “Biomanufacturing Challenges of Immunotherapy 2013” organized by Center of Molecular Immunology (CIM) took place in Hotel Palco, in Havana (Cuba), from November 5th to 8th. This was the first of biannual workshops with the purpose to discuss how to manufacture therapeutic vaccines and antibodies to allow chronic treatments with these drugs at affordable prices looking for an increased impact of immunotherapy in the society. Main topics covered: fermentation technology for manufacturing of antibodies and glycoproteins, alternative methods for downstream processing of antibodies at large scale, regulatory challenges of immunotherapy, manufacturing platforms for therapeutic vaccines, and formulation and characterization of immunotherapeutic agents. The program was organized in five plenary sessions, a poster session, sponsor exhibits and working meetings (38 oral presentations and 86 posters). For a more interactive experience and a greater opportunity to learn about topics and technologies, poster and vendor exhibits remained available during the fourth days of the event. Each session was an interactive forum where each participant could learn multiple viewpoints and answer the most pressing questions. There were plenty of opportunities for all participants to debate and interact.

The workshop was well attended with a total of 140 participants, 27 of them were foreign participants from nine countries. Delegates came from biotech, diagnostic

and supplier companies, regulatory agencies as well as from universities. The opinion from the participants was excellent. They acknowledge the advanced work of Cuban biotech in the field of biotechnology and the importance of the ideas exchange about bioprocessing for immunotherapy. The Second Workshop “Biomanufacturing Challenges of Immunotherapy 2015” organized by CIM will also be in Havana, on November this year. The full announcement will be ready early in 2014 in the workshop website <http://bioit.cim.co.cu/bioIT/>

*Adolfo Castillo*

## *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:

Deutsche Bank  
Account Nr: 0189191  
BLZ: 27070024  
IBAN (EUROS): DE55 2707 0024 0018 9191 00  
IBAN (GBP): DE28 2707 0024 0018 9191 01  
BIC: DEUTDEDB270

Please note that for transfers in Euros within Germany the Account Nr and BLZ are needed while for transfers outside Germany IBAN and BIC are needed. All bank transfers should be in Euro or GBP. Membership fees are 20€/year or 17GBP/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. Effective immediately, for future payments of membership fees please use the ESACT e.V. bank account provided above.

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