## ORGANIZING COMMITTEE

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## FEE and APPLICATION

**150 Euros for academic participants and 250 Euros for industry participants.**

The fee covers course registration and materials (ebook).

A **limited number of grants**, covering the course fee (not travel cost), are provided by ESACT and ACTIP. Applicants to the grants should indicate it in the course application, together with a motivation statement. Priority will be given to young PhD students from Academia.

**All applications should be sent before August, 31st. Accepted applicants will be notified until September, 7th and should confirm and complete payment by September 15th, 2020.**

## AIM

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.

## COURSE OUTLINE

1. Principles of immunology and virology
2. Cell lines for vaccines production
3. Upstream process development and intensification
4. Analytical and potency assays
5. Downstream processing of viral vaccines
6. Vaccine formulation and delivery systems
7. Equipment, QbD and PAT
8. Regulatory issues
9. Vaccine markets and immunization policies
10. Several case studies for vaccine development and manufacturing, presented by international experts

**Insights from WHO and Bill and Melinda Gates Foundation.**

## LECTURERS

Amine Kamen (McGill, Canada), Reingard Grabherr (Boku, Austria), Leo van der Pol (IntraVac, The Netherlands), Yvonne Genzel (MPI, Germany), Francesc Gòdia (UAB, Spain), Cristina Peixoto (iBET, Portugal), Patricia Leung-Tack (Sanofi-Pasteur, France), Emma Petiot (CPE-Lyon Engineer School, France), Isabelle Knott (GSK, Belgium), Erin Sparrow (WHO, Switzerland) and Ray Prasad (Bill and Melinda Gates Foundation,USA).

**information – registration – course programme**
**www.esact.org.**

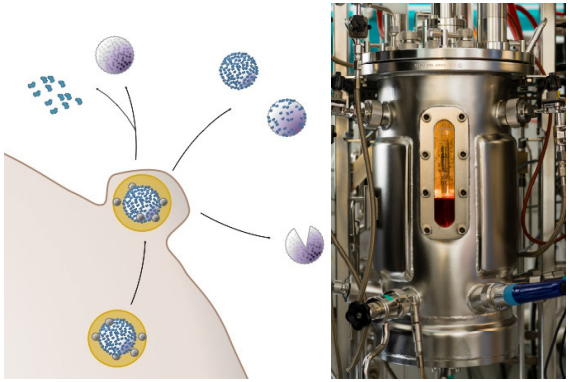
ESACT

# CELL CULTURE-BASED VIRAL VACCINES

**FIFTH EDITION**

September 28th – October 2nd, 2020

Virtual Mode



Photos: Ehl & MPI, Magdeburg

**With the contribution of:**

McGill · UAB Universitat Autònoma de Barcelona · iBET · MAX PLANCK INSTITUTE FOR DYNAMICS OF COMPLEX TECHNICAL SYSTEMS MAGDEBURG · ACTIP

## PROGRAMME (will be updated for virtual mode!)

| | Sunday 27.09. | Monday 28.09. | Tuesday 29.09. | Wednesday 30.09. | Thursday 01.10. |
|---|---|---|---|---|---|
| 8.30 - 9.45 | Arrival to Barcelona/Girona airports and transfer to Hotel Terramar in Llafranc<br><br>Check-in Hotel | **Introduction viral vaccines and course outlines**<br>A. Kamen, McGill | **Upstream Process development**<br>Y. Genzel, MPI | **Recombinant vaccines (I): VLPs**<br>F. Gòdia, UAB | **Case study: Influenza vaccines – present and future**<br>I.Legastelois, Sanofi-Pasteur |
| | | Coffee break | | | |
| 10.15 - 11.30 | | **Principles of virology and immunology**<br>E. Petiot, CPE-Lyon | **Upstream Process Intensification**<br>Y. Genzel, MPI | **Vaccine formulation and delivery systems**<br>L. Van der Pol, IntraVac | **Novel vaccination modalities and therapeutic vaccines**<br>A. Kamen, McGill |
| | | | | | |
| 11.45 - 13.00 | | **Immunology/Virology/Cell physiology for vaccine production**<br>E. Petiot, CPE-Lyon | **Analytical and Potency assays**<br>E. Petiot, CPE-Lyon | **Case study: Cervarix vaccine: from baculovirus technology to first human vaccine**<br>I.Knott, GSK | **Bill & Melinda Gates Foundation Programme for Global Health**<br>R. Prasad, Senior Advisor BMGF |
| | | Lunch and Free time | | | |
| 15.00 - 16.15 | | **Cell lines for vaccine production**<br>I.Knott, GSK | **Downstream Processing of Viral Vaccines**<br>C. Peixoto, iBET | **QbD and PAT in vaccine development**<br>E. Petiot, CPE-Lyon | Course adjournement, hotel check-out and departure to airport |
| | | Coffee break | | | |
| 16.45 - 18.00 | | **Case study: Polio vaccinces**<br>L. Van der Pol, IntraVac | **Case study: Rotavirus Vaccines, Progress in HIV Vaccines**<br>J. Flores | **Global Regulatory Compliance**<br>E. Sparrow, WHO | |
| | | | | | |
| 18.15 - 19.30 | | **Vaccine markets and immunization policies**<br>E. Sparrow, WHO | **Workshop**<br>Y. Genzel, A. Kamen, C. Peixoto | **Clinical Development**<br>J. Flores, PATH | |
| | | Free time | | | |
| 21.00 | Welcome and dinner | Dinner | | | |



## REGISTRATION and CONTACT

**Registration deadline is August 31st, 2020.**
**A limited number of grants are sponsored by ESACT and ACTIP to cover registration fees.**

**Information – registration – course programme on our website**

**www.esact.org/courses**