

Les Pensières Center for Global Health, Veyrier-du-Lac, France, May 6-17, 2024

FINAL PROGRAM

Organized by

The University of Geneva and the Mérieux Foundation





With the co-sponsorship of

- Africa Centres for Disease Control and Prevention
- Bill & Melinda Gates Foundation
- Centers for Disease Control and Prevention (CDC)
- Coalition for Epidemic Preparedness Innovations (CEPI)
- European Centre for Disease Prevention and Control (ECDC)
- European & Developing Countries Clinical Trials Partnership (EDCTP)
- European Society for Paediatric Infectious Diseases (ESPID)
- Johns Hopkins Bloomberg School of Public Health
- International Pediatric Association
- National Foundation for Infectious Diseases (NFID)
- National Institutes of Health (NIH/NIAID-USA)
- World Health Organization

| MONDAY | 6 MAY 2024 | |
|-------------|---|---|
| | | Alain Máriann. Duaideat Fandation Máriann |
| 09:00 | Opening and objectives of the course | Alain Mérieux, President, Fondation Mérieux |
| 00:00 | Malana and helefore | Kamel Senouci, Director, ADVAC, University of Geneva |
| 09:30 | Welcome and briefing | Bénédicte Pansier, Director, Les Pensières Center for Global Health, |
| | | Fondation Mérieux |
| SESSION 1 - | THE VACCINES JOURNEY: FROM VACCINES TO VACCINATION & THE | Chair: Adam Finn, University of Bristol, UK |
| IMPACT OF \ | /ACCINES | |
| 09:40-10:05 | From research to individual protection: the A-to-Z vaccine's journey | Arnaud Didierlaurent, University of Geneva |
| 10:05-10:25 | Discussion | |
| 10:25-10:50 | A quick overview of the vaccinology concepts | Kamel Senouci, University of Geneva |
| 10:50-11:10 | Discussion | |
| 11:10-11:40 | Break | |
| 11:40-12:05 | Measuring vaccination's impact in populations | Roy Anderson , London Centre for Neglected Tropical Disease Research, Imperial College, UK |
| 12:05-12:25 | Discussion | |
| 12:25-12:40 | Time for students to reflect personally on the learnings | |
| 12:40-14:00 | Lunch | |
| 14:00-14:25 | Where are we with vaccine-preventable diseases & immunization coverage worldwide: the state of the immunization | Kate O'Brien, WHO, Geneva |
| 14:25-14:45 | Discussion | |
| 14:45-15:10 | The determinants of a good immunization coverage and how GAVI is supporting countries to reach more children | Aurelia Nguyen, Gavi, The Vaccine Alliance, Geneva |
| 15:10-15:30 | Discussion | |
| 15:30-15:55 | Using vaccines to solve a public health problem: the example of Polio eradication | Ananda Bandyopadhyay, Bill & Melinda Gates Foundation, USA |
| 15:55-16:15 | Discussion | |
| 16:15-16:30 | Time for students to reflect personally on the learnings | |
| 16:30-18:30 | Self-presentation of individual participants (background, interests in life) | |
| 18:30-19:00 | welcome reception | |
| 19:00 | Dinner | |

| TUESDAY 7 MAY 2024 | | |
|--------------------|--|---|
| | HOW VACCINES WORK | Chair: Arnaud Didierlaurent, University of Geneva |
| 09:00-09:25 | How are vaccine responses elicited? What a vaccinologist should know about the basic aspects of immunological responses (a) B-cell responses | Claire-Anne Siegrist, University of Geneva |
| 09:25-09:45 | Discussion | |
| 09:45-10:15 | Break | |
| 10:15-10:40 | How are vaccine responses elicited? What a vaccinologist should know about the basic aspects of immunological responses (b) T-cell responses | Claire-Anne Siegrist, University of Geneva |
| 10:40-11:00 | Discussion | |
| 11:00-11:25 | Use and limitations of correlates of immunity in vaccinology | Andrew Pollard, University of Oxford, UK |
| 11:25-11:45 | Discussion | |
| 11:45-11:55 | Time for students to reflect personally on the learnings | |
| 11:55-13:25 | Lunch | |
| 13:25-13:50 | Vaccines and mucosal immunity | Adam Finn, University of Bristol, UK |
| 13:50-14:10 | Discussion | |
| 14:10-14:55 | Vaccines and immunological memory Quiz - Q&A | Claire-Anne Siegrist, University of Geneva |
| 14:55-15:20 | Immunological memory | Rafi Ahmed, Emory University, USA |
| 15:20-15:40 | Discussion | |
| 15:40-16:10 | Break | |
| 16:10-16:35 | Tailoring vaccine immunogenicity with adjuvants | Arnaud Didierlaurent, University of Geneva |
| 16:35-16:55 | Discussion | |
| SESSION 3 - | VACCINE TECHNOLOGY, MANUFACTURING AND APPROVAL (Part | Chair: Emily Erbelding, Director, DMID, NIH, USA |
| 1/4) | (| |
| 16:55-17:20 | Landscape in vaccine and immunization technologies | Cristina Cassetti, NIH-NIAID, USA |
| 17:20-17:40 | Discussion | |
| 17:40-18:00 | Time for students to reflect personally on the learnings | |
| 18:00-19:00 | Mentoring | |
| 19:00 | Dinner | |

| WEDNES | WEDNESDAY 8 MAY 2024 | | |
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| | VACCINE TECHNOLOGY, MANUFACTURING AND APPROVAL (Part | Chair: Emily Erbelding, Director, DMID, NIH, USA | |
| 09:45-10:10 | Concepts of Chemistry, Manufacturing, and Controls (CMC) for vaccines | Ozzie Berger, Hillevax, USA | |
| 10:10-10:30 | Discussion | | |
| 10:30-11:00 | Break | | |
| 11:00-11:25 | The role of Regulatory Agencies | Marco Cavaleri EMA | |
| 11:25-11:45 | Discussion | | |
| 11:45-12:30 | Time for students to reflect personally on the learnings | | |
| 12:30-13:45 | Lunch | | |
| 13:45-16:00 | Small Group Exercise 1 How to manage regulatory requirements during vaccine development and vaccine production in both HICs and LMICs Participants to share own country's experience and case study-role playing (4 groups) | Facilitators Ozzie Berger, Hillevax, USA, Arnaud Didierlaurent, University of Geneva, Norman Baylor, Biologics Consulting Inc., USA; Pieter Neels, Vaccine- advice, Belgium, David Kaslow, US Food and Drug Administration, Marco Cavaleri EMA, Veronica Gambillara, Pureos Bioventures, Switzerland, Luis Jodar, Pfizer Inc., USA | |
| 16:00-16:30 | Break | | |
| 16:30-18:00 | Interactive Session 1: Special lecture from Industry | | |
| Special lecture: THE 8th LAMBERT LECTURE | | | |
| 18:05-18:10 | Introduction | Paul-Henri Lambert | |
| 18:10-18:50 | RSV vaccines from research to implementation | Barney Graham | |
| 18:50-19:00 | Discussion | | |
| 19:00 | Dinner | | |

| SESSION 3 - | VACCINE TECHNOLOGY, MANUFACTURING AND APPROVAL (Part 3/4) | Chair: Emily Erbelding, Director, DMID, NIH, USA |
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| 09:00-09:25 | Delivering a pandemic vaccine in 100 Days: what does it take? | Jakob Cramer, CEPI, UK |
| 09:25-09:45 | Discussion | outed ordinary out 1, ord |
| 09:45-10:45 | Interactive session 2 Everything you always wanted to know on what makes funders support research-development: ask all your questions to governmental agency, venture capitalists, industry and philanthropic organizations. Q&A | Panelists: Emily Erbelding, DMID, NIH, USA, Veronica Gambillara, Pureos Bioventures, Switzerland, Luis Jodar, Pfizer Inc., USA; Jakob Cramer, CEPI, UK |
| 10:45-11:00 | Break | |
| SESSION 4 - | ASSESSING VACCINES IN CLINICAL TRIALS (Part 1/2) | Chair: Edwin Asturias, Children's Hospital Colorado, USA |
| 11:00-11:25 | Clinical trials: an overview of issues to be considered | Myron Levine, University of Maryland, USA |
| 11:25-11:45 | Discussion | |
| 11:45-12:10 | Introduction to statistical aspects of clinical trials, part 1: defining sample size | Peter Smith, London School of Hygiene and Tropical Medicine, UK |
| 12:10-12:30 | Discussion | |
| 12:45-15:00 12:30-13:10 working lunch | Small group exercise 2 How to design, recruit volunteers for, and analyze the results of selected phase II trials: Group 1 S. aureus Group 2 Ebola Group 3 Dengue Group 4 RSV Group 5 Monkeypox Group 6 Typhoid conjugate vaccines Group 7 Coronavirus | Facilitators: Veronica Gambillara Pieter Neels Norman Baylor & Anna Durbin Romina Libster Kari Johansen Kamel Senouci Emily Erbelding |
| 15:00-15:25 | Assessing herd protection and vaccine effectiveness (and use for licensure) | John Clemens, International Vaccine Institute (IVI), Republic of Korea |
| 15:25-15:45 | Discussion | |
| 15:45-16:10 | Clinical trials: role of a Data Safety Monitoring Board (DSMB) | Robert Heyderman, University College London, UK |
| 16:10-16:30 | Discussion | |
| 16:30-16:50 | Break Challanas Trials | Obela Obla haradal Oallana Landar IIIK |
| 16:50:17:15 17:15-17:25 | Human Challenge Trials Discussion | Chris Chiu, Imperial College London, UK |
| | | |
| 17:25-17:45 | Time for students to reflect personally on the learnings | |
| Special lectu | re: THE 16 TH PLOTKIN LECTURE | |
| 17:45-17:50 | | |

| 17:50-18:30 | Climate Change and Immunization | Kate O'Brien, WHO Geneva |
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| 18:30-18:55 | Discussion | |
| 19:00 | Dinner | |

| FRIDAY 10 MAY 2024 | | |
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| SESSION 5 - | VACCINE SAFETY - ASSESSMENT OF ADVERSE EFFECTS | Chair: Kari Johansen, Public Health Agency, Sweden |
| 09:00-09:25 | How do vaccines cause adverse events? | Kawsar Talaat, Johns Hopkins Bloomberg, School of Public Health, Baltimore, USA |
| 09:25-09:45 | Discussion | |
| 09:45-10:10 | Vaccination and immune-mediated diseases | Christiane Eberhardt, University of Geneva |
| 10:10-10:30 | Discussion | |
| 10:30-11:00 | Break | |
| 11:00-11:25 | WHO Guidance on how to detect and manage safety issues | Madhav Balakrishnan, WHO, Geneva |
| 11:25-11:45 | Discussion | |
| 11:45-12:10 | Population-based post-licensure surveillance | Nick Andrews, UKHSA, UK |
| 12:10-12:30 | Discussion | |
| 12:30-14:00 | Lunch | |
| 14:00-14:25 | Immunization safety in low- and middle-income country vaccination programs | Kamel Senouci, University of Geneva |
| 14:25-14:45 | Discussion | |
| SESSION 4 - | ASSESSING VACCINES IN CLINICAL TRIALS (Part 2/2) | Chair: Hanna Nohynek, Finnish Institute for Health and Welfare, Finland |
| 14:45-15:10 | Introduction to statistical aspects of clinical trials, part 2: statistical assessment and reporting of phase 3 trials | Peter Smith, LSHTM, UK |
| 15:10-15:30 | Discussion | |
| 15:30-15:45 | Break | |
| 15:45-17:45 | Small group exercise 3 Designing and analyzing the results of selected phase 3 trials Seven Groups | Facilitators: Nick Andrews, Brad Gessner, Kari Johansen, Romina Libster, Pieter Neels, Hanna Nohynek, Peter Smith |
| 17:45-18:45 | Time for students to reflect personally on the learnings & Mentoring | |
| 17:45-18:45 | Parallel sessions | Madhav Balakrishnan, WHO, Geneva |
| | Only session 5. AEFI: Causality assessment | |
| 19:00 | Dinner | |

| SATURDA | Y 11 MAY 2024 | |
|-------------|---|---|
| SESSION 6 - | ETHICAL ISSUES | Chair: Kari Johansen, Public Health Agency, Sweden |
| 09:00-09:25 | Applied ethics in immunization programs and practice | Keymanthri Moodley, Stellenbosch University, South Africa |
| 09:25-09:45 | Discussion | |
| 09:45-10:10 | Principles, guidelines and frameworks for ethical considerations in clinical trials of vaccines | Catherine Slack, University of KwaZulu-Natal, South Africa |
| 10:10-10:30 | Discussion | |
| 10:30-10:50 | Break | |
| 10:50-13:00 | Small group exercise 4 Ethical considerations in vaccine trials Seven Groups | Facilitators: Edwin Asturias, Kawsar Talaat, Kamel Senouci, Kari Johansen, Pieter Neels, Catherine Slack, Romina Libster |
| 13:00-13:10 | Time for students to reflect personally on the learnings of the morning | |
| 13:10-13:40 | Lunch | |

| MONDAY ' | 13 MAY 2024 | |
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| 08:50-09:00 | Ethical considerations in vaccine trials: Recap | Catherine Slack, University of KwaZulu-Natal, South Africa |
| SESSION 2 - | HOW VACCINES WORK (cont.) | |
| 09:00-09:25 | Non-specific effects of vaccines | Nigel Curtis, The Royal Children's Hospital, Melbourne, Australia |
| 09:25-09:45 | Discussion | |
| SESSION 7 - | DECISION MAKING FOR VACCINES (Part 1/2) | Chair: Kamel Senouci, University of Geneva |
| 09:45-10:10 | The decision-making processes for vaccines use: global, regional and local perspectives | Rudzani Muloiwa, University of Cape Town, South Africa |
| 10:10-10:30 | Discussion | |
| 10:30-11:00 | Break | |
| 11:00-11:25 | The example of the WHO SAGE decision making processes | Joachim Hombach, WHO Geneva |
| 11:25-11:45 | Discussion | |
| 11:45-12:10 | The role of health economics (including modelling) as a tool in analyzing vaccine policy | Marc Brisson, Laval University |
| 40.40.40.00 | options | |
| 12:10-12:30 | Discussion | |
| 12:30-13:30 | Lunch | |
| 13:30-15:30 | Small group exercise 5, Part 1 | |
| | Decision-making for the evaluation and impact assessment of new vaccines introduced in selected countries: safety and effectiveness | |
| | Part 1: Preparation and data analysis | Facilitators: |
| | Group 1 Rotavirus | Umesh Parashar |
| | Group 2 HPV | Kamel Senouci & Sabrina Bacci |
| | Group 3 Dengue | Brad Gessner & Hanna Nohynek |
| | Group 4 Coronavirus HIC | Kari Johansen |
| | Group 5 Malaria | Kathy Neuzil |
| | Group 6 RSV Adults | Keipp Talbot |
| | Group 7 RSV | Janet Englund & Naveen Thacker |
| 15:30-16:00 | Break | Vallet Eligiana & Naveen Thacker |
| | UPDATES ON VACCINES (part 1/3) | Chair: Anna Durbin, Johns Hopkins B. School of Public Health, USA |
| 16:00-16:25 | Response to polysaccharide and conjugate vaccines | David Goldblatt, University College London, UK |
| 16:25-16:45 | Discussion | |
| 16:45-17:25 | Pneumococcal conjugate vaccines: Efficacy and limitations of available vaccines and | Ron Dagan, Soroka Medical Center, Beer Sheva, Israel |
| | existing and potential vaccination strategies | Keith Klugman, Bill & Melinda Gates Foundation, USA |
| 17:25-17:45 | Discussion | |
| 17:45-18:30 | Mentoring | |
| 18:30-18:45 | Time for students to reflect personally on the learnings & Mentoring | |
| 19:00 | Dinner | |

| SESSION 8 | - UPDATES ON VACCINES (part 2/3) | Chair: Anna Durbin, Johns Hopkins B. School of Public Health, Baltimore, USA |
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| 08:30-08:55 | HPV vaccines | Margaret Stanley, Cambridge University, UK (VIA ZOOM) |
| 08:55-09:15 | Discussion | |
| 09:15-09:40 | Typhoid vaccines | Kathy Neuzil, Center for Vaccine Development, University of Maryland, Baltimore, USA |
| 09:40-10:00 | Discussion | |
| 10:00-10:25 | Break | |
| 10:25-10:50 | Meningococcal vaccines | Shamez Ladhani, UKHSA, UK |
| 10:50-11:10 | Discussion | |
| 11:10-11:35 | Vaccines against arboviruses (Dengue, Zika, Chikungunya) | Anna Durbin, Johns Hopkins Bloomberg School of Public Health, USA |
| 11:35-11:55 | Discussion | - |
| 11:55-12:05 | Time for students to reflect personally on the learnings | |
| 12:05-13:35 | Lunch | |
| 13:35-14:00 | Rotavirus and norovirus vaccines | Umesh Parashar, Centers for Disease Control, Atlanta, USA |
| 14:00-14:20 | Discussion | |
| 14:20-14:45 | Flu vaccines | Kathy Neuzil, University of Maryland, Baltimore, USA |
| 14:45-15:05 | Discussion | |
| 15:05-15:30 | COVID vaccines | Hanna Nohynek, Finnish Institute for Health and Welfare, Finland |
| 15:30-15:50 | Discussion | • |
| 15:50-16:20 | Break | |
| SESSION 7 | - DECISION MAKING FOR VACCINES (Part 2/2) | |
| 16:20-17:30 | Small group exercise 5, Part 2 | |
| | Decision-making for the evaluation and impact assessment of new vaccines introduced in | |
| | selected countries: safety and effectiveness | |
| | Part 2: Presentations, discussion and conclusions | Facilitators: |
| | Group 1 Rotavirus | Umesh Parashar |
| | Group 2 HPV | Kamel Senouci & Sabrina Bacci |
| | Group 3 Dengue | Brad Gessner & Hanna Nohynek |
| | Group 4 Coronavirus HIC | Kari Johansen |
| | Group 5 Malaria | Kathy Neuzil |
| | Group 6 RSV Adults | Keipp Talbot |
| | Group 7 RSV | Janet Englund & Naveen Thacker |
| 17:30-17:45 | Time for students to reflect personally on the learnings | |
| 17:45-18:30 | Alumni session | Jennifer Moisi & Rudzani Muloiwa |
| 18:30 | Cocktail-Diner | |

| WEDNES | DAY 15 MAY 2024 | |
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| SESSION 9 - | SELECTING APPROPRIATE VACCINATION STRATEGIES | Chair: Janet Englund, Children's Hospital and Regional Medical Center, Seattle, USA |
| 09:00-09:25 | Vaccination and pregnancy | Janet Englund, Children's Hospital and Regional Medical Center, Seattle, USA |
| 09:25-09:45 | Discussion | |
| 09:45-10:10 | Vaccination in early life | Christiane Eberhardt, University of Geneva |
| 10:10-10:30 | Discussion | • |
| 10:30-11:00 | Break | |
| 11:00-11:25 | Vaccination schedules: Past, present and future - is there some rationale? | Edwin Asturias, Children's Hospital Colorado, USA |
| 11:25-11:45 | Discussion | |
| 11:45-12:10 | Vaccine responses and efficacy in the elderly | Keipp Talbot, Vanderbilt University, USA |
| 12:10-12:30 | Discussion | |
| 12:30-12:55 | Vaccination in immuno-compromised individuals, including HIV positive patients | Janet Englund, Children's Hospital and Regional Medical Center, Seattle, USA |
| 12:55-13:20 | Discussion | |
| 13:20-14:30 | Lunch | |
| 14:45-17:00 | Parallel sessions | |
| | 1.National decision-making for immunization programmes | Christoph Steffen WHO Geneva & Melinda Wharton, US-CDC |
| | 2.Clinical vaccinology: patients' problem solving | Alessandro Diana, and Christiane Eberhardt, University of Geneva |
| | 3.New approaches towards vaccination e-registries | Julia Stowe, UKHSA, UK, Carolina Danovaro, WHO Geneva, and Kari |
| | | Johansen, Public Health Institute, Sweden |
| | 4. Cold Chain management | Souleymane Kone, WHO Geneva |
| | 6. Monitoring immunization program performance | Jan Grevendonk & Laure Dumolard, WHO Geneva |
| 17:00-17:30 | Time for students to reflect personally on the learnings | |
| 17:30-19:00 | Social time (Soccer game, Pétanque, Mölkky) | |
| 19:00-19:30 | Light refreshment | |
| 19:30 | Dinner | |

| THURSDAY 16 MAY 2024 | | |
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| | VACCINE TECHNOLOGY, MANUFACTURING AND APPROVAL (Part 4/4) | Chair: Edwin Asturias, Children's Hospital Colorado, USA |
| 08:30-08:55 | The complexity of quality control in vaccine manufacturing | Philippe Juvin, Sanofi Pasteur, Lyon, France (via ZOOM) |
| 08:55-09:15 | Discussion | |
| SESSION 8 - | UPDATES ON VACCINES (Part 3/3) | Chair: Edwin Asturias, Children's Hospital Colorado, USA |
| 09:15-09:40 | Malaria vaccines | Mary Hamel, WHO, Geneva |
| 09:40-10:00 | Discussion | |
| 10:00-10:30 | Break | |
| 10:30-10:55 | Cholera vaccines | Alejandro Cravioto, National Autonomous University of Mexico |
| | Discussion | |
| 11:15-11:40 | Tuberculosis vaccines | Helen McShane, University of Oxford, UK |
| 11:40-12:00 | Discussion | |
| 12:00-12:10 | Time for students to reflect personally on the learnings of the morning | |
| 12:10-13:45 | Lunch | |
| SESSION 10 - | - REACHING SPECIFIC GROUPS | Chair: Kamel Senouci, University of Geneva |
| 13:55-14:20 | How to better reach the zero-dose or under-vaccinated children in LMICs | Narendra Arora, INCLEN, India |
| 14:20-14:40 | Discussion | |
| 14:40-15:05 | Life-course vaccines: how to better reach individuals from childhood to elderly? | Ann Lindstrand, WHO, Switzerland |
| 15:05-15:25 | Discussion | |
| 15:25-15:55 | Break | |
| 15:55-16:20 | The determinants of vaccine acceptance | Eve Dube, Université de Laval |
| 16:20-16:40 | Discussion | |
| 16:40-17:05 | Interactive session 3 | Steve Lewandowsky, Bristol University |
| | How to address vaccine hesitancy at individual and community levels? | Eve Dube, Université de Laval |
| | | Naveen Thacker, International Pediatric Association |
| | | Alejandro Cravioto, National Autonomous University of Mexico |
| 17:05-17:25 | Discussion | |
| 17:25-17:35 | Time for students to reflect personally on the learnings of the afternoon | |
| 17:45 | Departure to hotels (check bus schedule) | |
| 18:45 | Departure from Les Pensières to Les Cassines for the special reception | |

| FRIDAY 17 | FRIDAY 17 MAY 2024 | | |
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| SESSION 11: | FACING THE MEDIA: WHAT THE VACCINOLOGIST SHOULD KNOW IN | Chair: Kamel Senouci, University of Geneva | |
| | THE CONTEXT OF VACCINE HESITANCY AND | | |
| | ANTI-IMMUNIZATION LOBBY | | |
| 08:30-10:30 | Interactive session 4 Introduction to media dynamics: How to best deliver vaccinology-related messages to different interest groups | Deborah Hall, Broadcaster and Media Affairs Consultant, London, UK | |
| 10:30-10:50 | Break | | |
| 10:50-13:00 | Introduction to media dynamics: How to best deliver vaccinology-related messages to different interest groups (continued) | | |
| 13:00-14:00 | Lunch | | |
| SESSION 12: | CLOSING | Chair: Kamel Senouci, University of Geneva | |
| 14:00:14:30 | Time for participants to complete the final evaluation | | |
| 14:30-15:00 | Diploma ceremony, awarding of CME credits and closure of the course | Kamel Senouci, Director, ADVAC, University of Geneva | |

| WEDNESDAY 8 MAY 2024: SPECIAL LECTURE FROM INDUSTRY | | |
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| SESSION 3 – VACCINE TECHNOLOGY, MANUFACTURING AND APPROVAL | | |
| 16:30-18:00 | Interactive Session 1 From ideas to implementation - the realities of funding for vaccine research and development in the private sector | Veronica Gambillara , Pureos Bioventures, Switzerland, Luis Jodar , Pfizer Inc., USA |
| | Two 45-minutes sessions (2 groups switching) Group A: Veronica Gambillara Group B: Luis Jodar | |