

19th ADVANCED COURSE OF VACCINOLOGY- 2018

MONDAY 7 MAY 2018		Theme Coordinator: Adam Finn (Bristol, UK)
09:00	Opening	Benoît Miribel, Director General, Fondation Mérieux Bénédicte Pansier, Director, Les Pensières Center for Global Health
09:20	Definition of the course objectives	Paul-Henri Lambert, Director of the ADVAC Course
SESSION 1a - THE MULTIFACETED NATURE OF VACCINOLOGY		Chairperson: Edwin Asturias (USA)
09:50-10:35	<i>Opening Lecture:</i> Impact of vaccination on disease epidemiology	Roy Anderson, Director LCNTDR Imperial College, London, UK
10:35-10:55	Discussion	
10:55-11:25	Break	
11:25-12:00	Access to vaccination in GAVI countries and at global level	Jon Pearman, GAVI Alliance
12:00-12:20	Discussion	
12:20-13:50	Lunch	
13:50-14:30	How to develop a new program of immunization	David Salisbury, former Director of Immunisation at the Department of Health, UK
14:30-14:50	Discussion	
15:00-17:00	SESSION 1b - Special lectures from Industry	
17:00-18:00	Debate on mandatory vs voluntary vaccination	Adam Finn with Hanna Nohynek
18:00-19:00	Self-presentation of individual participants (background, interests in life...) & Welcome reception	

SESSION 1b - Special lectures from Industry		
15:00-15:30	Role of DC vaccine industry for meeting global needs	Suresh Jadhav , Executive Director, Serum Institute of India,
15:30-15:50	Discussion	
15:50-16:20	Development and production of vaccines for global use: the role of vaccine industry	Luis Jodar , Vice president, Global Vaccines, Medicines Development Group and Scientific Affairs at Pfizer Inc
16:20-16:40	Discussion	

TUESDAY 8 MAY 2018		Theme Coordinator : Adam Finn (Bristol, UK)
SESSION 2 - HOW VACCINES WORK		Chairpersons: Adam Finn and Daniel Pinschewer (University of Basel)
09:00-09:30	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
09:30-10:00	Discussion	
10:00-10:30	<u>Break</u>	
10:30-11:00	What a vaccinologist should know about the basic aspects of immunological responses b-T-cell responses	Claire-Anne Siegrist, University of Geneva
11:00-11:30	Discussion	
11:30-12:10	Use and limitations of correlates of immunity in vaccinology	Andrew Pollard, University of Oxford
12:10-12:40	Common discussion	
	<u>Lunch</u>	
14:15-14:45	Vaccines and mucosal immunity	Adam Finn, University of Bristol
14:45-15:05	Discussion	
15:05-16:00	Vaccines and immunological memory Quiz and general discussion	Adam Finn, University of Bristol & Claire-Anne Siegrist
16:00-16:20	Break	
16:20-17:00	Advances in vaccine and immunization technologies	Christina Casseti (NIH-NIAID)
17:00-17:20	Discussion	
17:20-18:10	3 rd Paul-Henri Lambert Lecture Immunological memory	Rafi Ahmed, Emory University
18:10-18:30	Discussion	

WEDNESDAY 9 MAY 2018		Theme Coordinator : Hanna Nohynek (THL, Helsinki)
	SESSION 3 – DECISION-MAKING IN VACCINE RESEARCH AND PRECLINICAL DEVELOPMENT	Chairpersons: Carole Heilman (former Director, DMID/NIAID)
09:00-09:40	How do vaccines cause adverse events?	Neal Halsey , Johns Hopkins B. School of Public Health, Baltimore
09:40-10:00	Discussion	
10:00-10:30	Vaccine adjuvants	Martin Friede , WHO, Geneva
10:30-10:50	Discussion	
10:50-11:10	Break	
11:10-11:40	From pre-clinical research to vaccine development: Examples of go-no-go decisions	Georges Thiry , France
11:40-12:00	Discussion	
12:00-12:40	HIV vaccines	Pascal Pognard , Grenoble-Alpes-University, France
12:40-13:00	Discussion	
	Lunch	
14:30-16:00	Regulatory considerations A round table debate	Chair: Carole Heilman Norman Baylor (BCG), Pieter Neels (Vaccine-advice, Belgium), Lucky Slamet (Indonesia) with discussants from Industry
16:00-16:20	Break	
16:20-16:50	The complexity of quality control in vaccine manufacturing,	Fabrice Geoffroy , Lyon
16:50-17:10	Discussion	
17:30-18:30	Special debate How to build a vaccine biotech development plan towards initial proof of concept and have it funded by investors?	Carole Heilman (Chair), Michael Kowarik (Zurich), Georges Thiry (France) and selected ADVAC students

		Theme Coordinator : Hanna Nohynek (THL, Helsinki)															
	THURSDAY 10 MAY 2018																
	SESSION 4 - ASSESSING VACCINES IN CLINICAL TRIALS (I)	Chairpersons: Hanna Nohynek															
09:00-09:40	Clinical trials: an overview of issues to be considered	Myron Levine , University of Maryland															
09:40-09:55	Discussion																
09:55-10:25	Introduction to statistical aspects of clinical trials 1- Defining sample size: practical approaches and examples	Peter Smith , LSTMH, UK															
10:25-10:40	Discussion																
10:40-11:00	Break																
11:00-13:45	How to design, recruit volunteers for, and analyze the results of selected phase II trials Small group exercise #1: Six Groups- Themes and Facilitators:																
<i>12:40-13:10 lunch buffet</i>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Group 1</td> <td style="width: 35%;">Rota</td> <td style="width: 50%;">Georges Thiry</td> </tr> <tr> <td>Group 2</td> <td>S.aureus</td> <td>Pieter Neels</td> </tr> <tr> <td>Group 3</td> <td>dengue</td> <td>Norman Baylor</td> </tr> <tr> <td>Group 4</td> <td>Zika</td> <td>Edwin Asturias</td> </tr> <tr> <td>Group 5</td> <td>Respiratory syncytial v</td> <td>Adam Finn</td> </tr> </table>	Group 1	Rota	Georges Thiry	Group 2	S.aureus	Pieter Neels	Group 3	dengue	Norman Baylor	Group 4	Zika	Edwin Asturias	Group 5	Respiratory syncytial v	Adam Finn	
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Group 5	Respiratory syncytial v	Adam Finn															
13.50-14.20	Assessing herd protection and vaccine effectiveness (& use for licensure)	John Clemens , ICCDR-B, Bangladesh															
14:20-14:40	Discussion																
14:40-15:10	Clinical trials: role of a DSMB (with several examples of intervention)	Penny Heaton , Bill & Melinda Gates Foundation															
15:10-15:30	Discussion																
15:30-15:50	Break																
15:50-16:20	Challenges and prospects for new tuberculosis vaccines	Helen McShane , University of Oxford															
16:20-16:40	Discussion																
17:00-18:30	Dealing with human challenge studies. A debate with introduction by Joris Vandeputte (IABS) (5 min)	Joris Vandeputte (IABS), Pieter Neels															

FRIDAY 11 MAY 2018		Theme Coordinator : Neal Halsey (Baltimore)
	SESSION 5- VACCINE SAFETY - ASSESSMENT OF ADVERSE EFFECTS	Chairpersons: Kari Johansen and Neal Halsey
09:00-09:30	Lessons from previous adverse effects of vaccination and Assessment of causal relationships	Neal Halsey, Johns Hopkins B. School of Public Health, Baltimore
09:30-09:50	Discussion	
09:50-10:20	Vaccination and autoimmune diseases	Paul-Henri Lambert, Director ADVAC
10:20-10:40	Discussion	
10:40-11:00	Break	
11:00-11:30	Population-based post-licensure surveillance	Nick Andrews, HPA, UK
11:30-11:50	Discussion	
11:50-12:20	Immunization safety in developing country vaccination programs	Philippe Duclos, ADVAC
12:20-12:40	Discussion	
12:40-14:00	<u>Lunch</u>	
14:00-14:30	Addressing vaccine hesitancy and risk communication through the lens of HPV vaccine	Noni McDonald, Dalhousie Univ, Halifax Canada
14:30-14:50	Discussion	
14:50-15:20	Vaccination and narcolepsy	Hanna Nohynek, THL Finland
15:20-15:40	Discussion	
	SESSION 6- ASSESSING VACCINES IN CLINICAL TRIALS (II)	Chairperson: Hanna Nohynek
15:40-16:20	Introduction to statistical aspects of clinical trials 2- Statistical assessment of phase 3 trials - including new methods to measure efficacy e.g. ebola-VSV, LAIV	Peter Smith , LSTMH, UK
16:20-16:40	Discussion	
16:40-19:00	Small group exercise #2: Designing and analyzing the results of selected phase III trials	Objective: To understand how to critically appraise and compare phase III trial results
	Introduction to the Group Work Exercise	Hanna Nohynek
	Six Groups	Facilitators: Edwin Asturias, Hanna Nohynek, Penny Heaton, Peter Smith, Kari Johansen

SATURDAY 12 MAY 2018		Theme Coordinator: Kari Johansen (ECDC)
	SESSION 7 - ETHICAL ISSUES Ethical considerations related to vaccine trials and implementation of vaccines in organized programs - available principles, guidelines and frameworks	Chairperson: Kari Johansen.
09:00-09:45	Principles, guidelines and frameworks for ethical considerations in clinical trials of vaccines	Catherine Slack, University of KwaZulu-Natal, South Africa
09:45-10:30	Applied ethics in immunization programs and practice	Noni McDonald, Dalhousie University, Halifax, Canada
10:30-10:40	Pick up and bring coffee/tea/fruit to group exercise	
10:40-13:00	Small group exercise 3: ETHICAL CONSIDERATIONS IN MALARIA VACCINE TRIALS	Coordinated by Kari Johansen, Betty Dodet and Catherine Slack
	Six Groups Facilitators: Catherine Slack, Betty Dodet, Noni McDonald, Kari Johansen, Pieter Neels,	
13:00	Lunch	

		Theme Coordinator : Mark Miller (NIH)
	MONDAY 14 MAY 2018	
08:40	Report on Ethics session	Catherine Slack
	SESSION 8.1 - INTRODUCING NEW VACCINES INTO VACCINATION PROGRAMMES (1)	Chairperson: Hanna Nohynek, THL, Finland
09:00-09:30	Disease burden and the public health value of vaccines	Annelies Wilder-Smith, WHO
09:30-09:50	Discussion	
09:50-10:20	Health economics (including modelling) as a tool in analyzing vaccine policy options	Mark Miller, NIH
10:20-10:50	Discussion	
10:50-11:10	Break	
11:10-11:40	Challenges and solutions in making evidence-based national vaccination policies and recommendations	Philippe Duclos, ADVAC
11:40-12:00	Discussion	
12:00-12:30	Immunization coverage gaps: overcoming the chronic challenges	Philippe Duclos
12:30-12:50	Discussion	
12:50-14:00	Lunch	
14:00-14:30	Response to polysaccharides and conjugates vaccines: basic aspects	David Goldblatt, University College London
14:30-14:50	Discussion	
14:50-16:15	Pneumococcal conjugate vaccines: 1- Available vaccines: Efficacy and limitations (i) in children, 35 min + 10 min specific discussion (ii) in adults, 30 min+ 10 min specific discussion	Moderator: Hanna Nohynek Ron Dagan, Soroka Medical Center, Beer Sheva Kate O'Brien, Johns Hopkins School of Public Health
16:15-16:35	Break	
16:35-17:25	2- Existing and potential vaccination strategies, 40 min + 10 min specific discussion	Keith Klugman, Bill & Melinda Gates Foundation
17:30-18:30	Debate: should we vaccinate elderly with pneumococcal vaccines Keith Klugman, David Goldblatt & Kate O'Brien	Chair: Hanna Nohynek

TUESDAY 15 MAY 2018		Theme Coordinator : Mark Miller (NIH)
	SESSION 8.2 - INTRODUCING NEW VACCINES INTO VACCINATION PROGRAMMES (2)	Chairperson: Bernard Fritzell, Bordeaux
09:00-09:40	Influenza biology, new vaccines and vaccination strategies for different age groups	Kathy Neuzil, CVD, Baltimore
09:40-10:00	Discussion	
10:00-10:40	Vaccine responses and efficacy in the elderly	Keipp Talbot, Vanderbilt University
10:40-11:00	Discussion	
11:00-11:20	Break	
11:20-12:00	Special lecture: The population biology of bacterial pathogens and its importance for vaccination strategies	Richard Moxon, Oxford University
12:00-12:20	Discussion	
12:20-13:30	Lunch	
13:30-14:10	Meningococcal vaccines (including the MenA-conjugate experience)	Ray Borrow, PHE UK
14:10-14:30	Discussion	
14:30-15:00	Success and challenges with rotavirus and norovirus vaccines	Umesh Parashar, CDC
15:00-15:20	Discussion	
15:20-16:50	Small group exercise 4: Decision-making for the evaluation and impact assessment of new vaccines introduced in selected countries: safety and effectiveness	Chairperson: Bernard Fritzell, Bordeaux Organized by Kari Johansen and Hanna Nohynek
	Objective: To learn what facts are needed in a decision-making process and how other factors influence the outcome 6 Groups Vaccines: Rotavirus, HPV, Influenza, Dengue, Mening	Facilitators: Mark Miller, Hanna Nohynek, Kari Johansen, Edwin Asturias, Brad Gessner, Keipp Talbot, Umesh Parashar, Kathy Neuzil, Will Schluter
16:50-17:20	History of Vaccines and Vaccination	Stanley Plotkin, University of Pennsylvania
17:20-17:30	Discussion	
17:30	Soccer game North vs South of the World	

	Theme Coordinator : Edwin Asturias	
	WEDNESDAY 16 MAY 2018	
	SESSION 9 - SELECTING APPROPRIATE VACCINATION STRATEGIES	Chairperson: Edwin Asturias and Janet Englund
	1. Vaccination and pregnancy	
08:45-09:30	Scientific basis, main issues and applications	Janet Englund , Children's Hospital and Regional Medical Center, Seattle
09:30-09:50	Discussion	
	2. Vaccination in early life	
09:50-10:20	Advantages and limitations	Claire-Anne Siegrist , University of Geneva
10:20-10:40	Discussion	
10:40-11:00	Break	
	3. Vaccination schedules	
11:00-11:30	Past, present and future - is there some rationale?	Edwin Asturias , Children's Hospital Colorado
11:30-11:50	Discussion	
	Special lecture	
11:50-12:20	The challenge of malaria vaccines and of their potential introduction	Vasee Moorthy , WHO
12:20-12:40	Discussion	
12:40-16:00	Parallel working group sessions (with sandwich lunch)	
	1.National decision-making for immunization programmes	Will Schluter , CDC, and Philippe Duclos
	2.Clinical vaccinology: patients' problem solving	Claire-Anne Siegrist and Alessandro Diana (UNIGE)
	3. New approaches towards vaccination e-registries	Kari Johansen (ECDC)
16:00-16:20	Break	
	Special lecture: THE 11th PLOTKIN LECTURE:	
16:20-16:30	Introduction and Chair	Edwin Asturias
16:30-17:15	Precision vaccines: Bringing precision medicine to vaccinology	Ofer Levy , Harvard Medical School
17:15-17:45	Discussion	
18:00	Departure to Château de Menthon Visit and special reception	

THURSDAY 17 MAY 2018		Theme Coordinator : Edwin Asturias
		Chairperson: Edwin Asturias
09:00-09:40	Vaccination in immune-compromised individuals, including HIV positive patients	Janet Englund, Children's Hospital and Regional Medical Center, Seattle
09:40-10:00	Discussion	
	<u>Special lectures: New vaccines</u>	
10:00-10:30	HPV vaccines	Margaret Stanley, Cambridge University
10:30-10:50	Discussion	
10:50-11:10	Break	
11:10-11:40	CMV vaccines in development	Stanley Plotkin, University of Pennsylvania
11:40-12:00	Discussion	
12:00-12:30	Dengue vaccines	Anna Durbin, Johns Hopkins B. School of Public Health, Baltimore
12:30-12:50	Discussion	
12:50-13:45	<u>Buffet Lunch</u>	
13:45-14:15	Special lectures: Global challenges for pertussis vaccines	Kathy Edwards, Vanderbilt University School of Medicine
14:15-14:45	Discussion	
14:45-15:30	Progress with RSV and Zika vaccines: how new technologies can change viral vaccine development	Barney Graham (NIH)
15:30-15:50	Discussion	
	<u>Elimination and eradication strategies : the future</u>	Chair: Stanley Plotkin
15:50-16:15	Polio	Ananda Bandyopadhyay, Bill & Melinda Gates Foundation
16:15-16:40	Measles, and rubella	Katrina Kretsinger, WHO
16:40-17:00	Discussion	
17:00-17:30	Vaccine research in low and middle income countries: the example of rotavirus	Roger Glass, Fogarty International Center, Bethesda
17:30-17:50	Discussion	
17:50	CME credits Diploma ceremony	Stanley Plotkin, Alain Mérieux and Paul Henri Lambert

	FRIDAY 18 MAY 2018	
	SESSION 10: FACING THE MEDIA	Chairperson: Edwin Asturias
08:45-13:00	Interactive session	Deborah Hall , Broadcaster and Media Affairs Consultant, London,
	Introduction to media dynamics: How to best deliver vaccinology-related messages to different interest groups Lunch	(Organized by Edwin Asturias)
14:30	Closure of the Course	