

20th ADVANCED COURSE OF VACCINOLOGY- 2019

MONDAY 13 MAY 2019		Theme Coordinator: Adam Finn (University of Bristol, UK)
09:00	Opening	Alain Mérieux , President, Fondation Mérieux
09:20	Definition of the course objectives	Philippe Duclos , Director of the ADVAC Course
SESSION 1a - THE MULTIFACETED NATURE OF VACCINOLOGY		Chairperson: Edwin Asturias , Children's Hospital Colorado, USA
09:50-10:30	Opening Lecture: How to develop a new program of immunization	David Salisbury , former Director of Immunisation, Department of Health, UK
10:30-10:50	Discussion	
10:50-11:20	Break	
11:20-12:00	Access to vaccination in GAVI countries and at global level	Aurelia Nguyen , GAVI Alliance, Geneva
12:00-12:20	Discussion	
12:20-14:00	Lunch	
14:00-14:30	The challenge of malaria vaccines and of their potential introduction	Mary Hamel , WHO
14:30-14:50	Discussion	
14:50-15:10	Break	
15:10-16:50	SESSION 1b - Special lectures from Industry	
16:50-17:50	Debate on mandatory vs voluntary vaccination	Adam Finn with Hanna Nohynek , National Institute for Health and Welfare, Helsinki, Finland
17:50-19:00	Self-presentation of individual participants (background, interests in life...) & Welcome reception	

SESSION 1b - Special lectures from Industry		
15:10-15:40	Role of DC vaccine industry for meeting global needs	Suresh Jadhav , Executive Director, Serum Institute of India, Pune, India
15:40-16:00	Discussion	
16:00-16:30	Development and production of vaccines for global use: the role of vaccine industry	Luis Jodar , Chief Medical and Scientific Affairs Officer, Pfizer Inc. USA
16:30-16:50	Discussion	

Theme Coordinator : Adam Finn (Bristol, UK)

TUESDAY 14 MAY 2019		
SESSION 2 - HOW VACCINES WORK		Chairpersons: Adam Finn and Daniel Pinschewer, University of Basel, Switzerland
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	Break	
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, UK
12:10-12:40	Common discussion	
	Lunch	
14:15-14:45	Vaccines and mucosal immunity	Adam Finn, University of Bristol, UK
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, University of Geneva
16:00-16:20	Break	
16:20-17:00	Advances in vaccine and immunization technologies	Cristina Casetti, NIH-NIAID, USA
17:00-17:20	Discussion	
17:20-18:00	Immunological memory	Rafi Ahmed, Emory University, USA
18:00-18:20	Discussion	

WEDNESDAY 15 MAY 2019		Theme Coordinator: Hanna Nohynek (National Institute for Health and Welfare, Helsinki)
	SESSION 3 - DECISION-MAKING IN VACCINE RESEARCH AND PRECLINICAL DEVELOPMENT	Chairpersons: Carole Heilman , former Director, DMID/NIAID, USA
09:00-09:40	How do vaccines cause adverse events?	Neal Halsey , Johns Hopkins B. School of Public Health, Baltimore, USA
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	Veronica Gambillara , (Zurich)
11:40-12:00	Discussion	
12:00-12:40	Progress with RSV and Zika vaccines: how new technologies can change viral vaccine development	Barney Graham , Vaccine Research Center, NIAID, NIH, Bethesda, USA
12:40-13:00	Discussion	
	Lunch	
14:30-16:00	Regulatory considerations A round table debate	Chair: Carole Heilman Norman Baylor , Biologics Consulting Group, Inc., USA, Pieter Neels , Vaccine-advice, Belgium, Saeedeh Fakhrzadeh , Iran
16:00-16:20	Break	
16:20-16:50	The complexity of quality control in vaccine manufacturing,	Philippe Juvin , Lyon, France
16:50-17:10	Discussion	
17:20-18:20	Debate: Dealing with human challenge studies.	Joris Vandeputte , IABS and Pieter Neels , Vaccine-advice, Belgium Introduction by Joris Vandeputte (IABS) (5 min)

		Theme Coordinator: Hanna Nohynek , (THL, Helsinki)
	THURSDAY 16 MAY 2019	
	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, USA
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 , London School of Hygiene and Tropical Medicine, 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: Five Groups- Themes and Facilitators: Group 1 Rotavirus Veronica Gambillara Group 2 <i>S. aureus</i> Pieter Neels Group 3 Dengue Norman Baylor Group 4 Zika Edwin Asturias Group 5 RSV Adam Finn	
12:40-13:10	Buffet lunch	
13:50-14:20	Assessing herd protection and vaccine effectiveness (and use for licensure)	John Clemens , International Centre for Diarrheal Disease Research, Bangladesh
14:20-14:40	Discussion	
14:40-15:10	Clinical trials: role of a Data Safety Monitoring Board (DSMB) (with several examples of intervention)	Penny Heaton , Bill & Melinda Gates Medical Research Institute, Seattle, USA
15:10-15:30	Discussion	
15:30-15:50	Break	
15:50-16:30	THE 4th LAMBERT LECTURE Challenges and prospects for new tuberculosis vaccines	Helen McShane , University of Oxford, UK
16:30-16:50	Discussion	
17:10-18:30	Special "Debate": From Ideas to Implementation: The realities of funding for vaccine research	Carole Heilman (Chair), Veronica Gambillara (Zurich), Penny Heaton (Bill & Melinda Gates Medical Research Institute, Seattle, USA) and selected ADVAC students

	FRIDAY 17 MAY 2019	Theme Coordinator : Neal Halsey (Johns Hopkins B. School of Public Health, 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, USA
09:30-09:50	Discussion	
09:50-10:20	Vaccination and autoimmune diseases	Paul-Henri Lambert , University of Geneva
10:20-10:40	Discussion	
10:40-11:00	Break	
11:00-11:30	Population-based post-licensure surveillance	Nick Andrews , Public Health England, UK
11:30-11:50	Discussion	
11:50-12:20	Vaccination and narcolepsy	Hanna Nohynek , THL, Finland
12:20-12:40	Discussion	
12:40-14:00	Lunch	
14:00-14:30	Immunization safety in developing country vaccination programs	Philippe Duclos , ADVAC
14:30-14:50	Discussion	
14:50-15:20	Addressing vaccine hesitancy	Noni McDonald , Dalhousie University, Halifax, Canada
15:20-15:40	Discussion	
15:40-16:00	Break	
	SESSION 6– ASSESSING VACCINES IN CLINICAL TRIALS (II)	Chairperson: Hanna Nohynek
16:00-16:30	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 , LSHTM, UK
16:30-16:50	Discussion	
16:50-19:00	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
	Five Groups	Facilitators: Edwin Asturias, Hanna Nohynek, Penny Heaton, Peter Smith, Kari Johansen

	SATURDAY 18 MAY 2019	Theme Coordinator: Kari Johansen (European Centre for Disease Prevention and Control, Stockholm, Sweden)
	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 (ECDC)
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 (Dodet Bioscience, France) 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 20 MAY 2019	
08:40-09:00	Report on Ethics session	Catherine Slack , University of KwaZulu-Natal, South Africa
	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 , Consultant, 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, USA
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	
12:00-12:40	Dengue vaccines	Anna Durbin , Johns Hopkins B. School of Public Health, Baltimore, USA
12:40-13:00	Discussion	
13:00-14:00	Lunch	
14:00-14:30	Response to polysaccharides and conjugates vaccines: basic aspects	David Goldblatt , University College London, UK
14:30-14:50	Discussion	
14:50-15:20	Pneumococcal conjugate vaccines: Available vaccines for children and adults: Efficacy and limitations	Moderator: Hanna Nohynek Ron Dagan , Soroka Medical Center, Beer Sheva, Israel
15:20-15:50	Existing and potential vaccination strategies	Keith Klugman , Bill & Melinda Gates Foundation, USA
15:50-16:10	Discussion	
16:10-16:30	Break	
16:30-17:00	Non-specific effects of vaccines	Nigel Curtis , The Royal Children's Hospital, Melbourne
17:00-17:20	Discussion	
17:20-18:40	Debate: Does a vaccine have to protect against a VPD that kills to matter to politicians and parents?	Chair: Ron Dagan , Soroka Medical Center, Beer Sheva, Israel

TUESDAY 21 MAY 2019		Theme Coordinator : Mark Miller (NIH)
	SESSION 8.2 - INTRODUCING NEW VACCINES INTO VACCINATION PROGRAMMES (2)	Chairperson: Bernard Fritzell , Bordeaux, France
09:00-09:40	Influenza biology, new vaccines and vaccination strategies for different age groups	Kathy Neuzil , Center for Vaccine Development, University of Maryland, Baltimore, USA
09:40-10:00	Discussion	
10:00-10:40	Vaccine responses and efficacy in the elderly (including the specific example of the Zoster vaccine)	Keipp Talbot , Vanderbilt University, USA
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	Martin Maiden , Oxford University, UK
12:00-12:20	Discussion	
12:20-13:30	Lunch	
13:30-14:10	Meningococcal vaccines	Ray Borrow , Public Health England, UK
14:10-14:30	Discussion	
14:30-15:00	Success and challenges with rotavirus and norovirus vaccines	Umesh Parashar , Centers for Disease Control, Atlanta, USA
15:00-15:20	Discussion	
15:20-15:40	Break	
15:40-17:10	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 , BFL Conseils, Bordeaux, France 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, Shingles, Men B	Facilitators: Mark Miller, Hanna Nohynek, Kari Johansen, Edwin Asturias, Brad Gessner, Keipp Talbot, Umesh Parashar, Kathy Neuzil, Ray Borrow
17:10-17:40	History of Vaccines and Vaccination	Stanley Plotkin , University of Pennsylvania, USA
17:40-18:00	Discussion	
18:00	Soccer game North vs South of the World	

		Theme Coordinator: Edwin Asturias
	WEDNESDAY 22 MAY 2019	
	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, USA
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, USA
11:30-11:50	Discussion	
	Special lecture	
11:50-12:30	Impact of vaccination on disease epidemiology	Roy Anderson , Director, London Centre for Neglected Tropical Disease Research, Imperial College, London
12:30-12:50	Discussion	
12:50-16:00	Parallel working group sessions (with sandwich lunch)	
	1. National decision-making for immunization programmes	Christoph Steffen , WHO and Philippe Duclos , ADVAC
	2. Clinical vaccinology: patients' problem solving	Claire-Anne Siegrist and Alessandro Diana , University of Geneva
	3. New approaches towards vaccination e-registries	Kari Johansen , ECDC, Sweden and Carolina Danovaro , WHO
16:00-16:20	Break	
	Special lecture: THE 12th PLOTKIN LECTURE:	
16:20-16:30	Introduction and Chair	Edwin Asturias , Children's Hospital Colorado, USA
16:30-17:15	CEPI and emerging infections	Richard Hatchett , CEPI
17:15-17:45	Discussion	
18:00	Departure to Château de Menthon Visit and special reception	

		Theme Coordinator : Edwin Asturias
THURSDAY 23 MAY 2019		
		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, USA
09:40-10:00	Discussion	
	Special lectures: New vaccines	
10:00-10:30	HPV vaccines	Margaret Stanley , Cambridge University, UK
10:30-10:50	Discussion	
10:50-11:10	Break	
11:10-11:40	CMV vaccines in development	Stanley Plotkin , University of Pennsylvania, USA
11:40-12:00	Discussion	
12:00-12:30	Global challenges for pertussis vaccines	Kathy Edwards , Vanderbilt Vaccine Research Program, USA
12:30-12:50	Discussion	
12:50-13:30	Buffet Lunch	
13:30-14:00	HIV vaccines	Brigitte Autran , INSERM, France
14:00-14:20	Discussion	
	Outbreaks' control: Elimination and eradication strategies	Chair: Stanley Plotkin , University of Pennsylvania, USA
14:20-15:00	Immunization coverage gaps: overcoming the chronic challenges	Philippe Duclos , ADVAC
15:00-15:20	Discussion	
15:20-15:40	Break	
15:40-16:10	Polio	Ananda Bandyopadhyay , Bill & Melinda Gates Foundation, USA
16:10-16:40	Diphtheria, measles and rubella	Ann Lindstrand , WHO, Switzerland
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. USA
17:30-17:50	Discussion	
17:50-18:20	Highlights from ADVAC 20	Romina Libster , USA, Vanderbilt University
18:20	CME credits Diploma ceremony	Stanley Plotkin, Alain Mérieux and Philippe Duclos

	FRIDAY 24 MAY 2019	Thematic supervisor: Edwin Asturias
	SESSION 10: FACING THE MEDIA	Chairperson: Edwin Asturias
08:30-12:45	Interactive session	Deborah Hall , Broadcaster and Media Affairs Consultant, London, UK
	Introduction to media dynamics: How to best deliver vaccinology-related messages to different interest groups	
10:30-10:50	Break	
	Introduction to media dynamics: How to best deliver vaccinology-related messages to different interest groups (continued)	
12:45	Closure of the Course and Lunch	