

Sunday 05.10.		Monday 06.10.	Tuesday 07.10.	Wednesday 08.10.	Thursday 9.10.	Friday 10.10.
9.00 - 9.45	Arrival to Barcelona/Girona airports and transfer to Hotel Terramar in Llafranc Check-in Hotel	Short introduction of participants and lecturers All	Upstream Process development T. Zinnecker, MPI (08)	Case study veterinary vaccines: HVT vaccines (Herpesvirus of turkeys) I. Jordan, ProBioGen (16)	mRNA vaccines I. Jordan, (24)	
9:45-10:00						
10.00 - 10.45		Introduction viral vaccines and course outline L. Cervera, UAB (01)	Upstream Process Intensification T. Zinnecker, MPI (9)	Recombinant vaccines: VLPs L. Cervera, UAB (17)	Vaccine markets and immunization policies A. Vilajeliu, WHO (25)	
10:45-11:15		Coffee break				
11.15 - 12.00		Basic virology for antigen design P-J Cardona, UAB (02)	Downstream Processing of Viral Vaccines C. Peixoto, iBET (10)	Case study: polio vaccines I. Knott, GSK (18)	Case study: influenza vaccines T. Zinnecker, MPI (26)	
12:00-12:15						
12.15 - 13.00		Basic immunology for vaccine design P-J Cardona, UAB (03)	Product characterization C. Peixoto, iBET (11)	Case study: Cervarix vaccine: from baculovirus technology to first human vaccine I. Knott, GSK (19)	Feed-back/ Course adjournment, hotel check-out	
13:00-15:00		Lunch and Free time				
15.00 - 15.45		Cell lines for vaccine production I. Knott, GSK (04)	Case study: TB P-J Cardona, UAB (12)	Case study: tech transfer into GMP for early phase trials C. Green, Oxford (20)	Departure to airport	
15.45-16.00						
16.00 - 16.45		Viral Biosafety and Potency assays C. Logvinoff, Sanofi (05)	Case study: response to pandemic situation C. Green, Oxford (13)	Case study: YFV vaccines & neurovirulence testing C. Logvinoff, Sanofi (21)		
16.45-17.15		Coffee break				
17.15 - 18.00		Vaccine formulation /Adjuvants J. Ruano, HIPRA (6)	Case study: Modified Vaccinia Ankara (MVA) vaccines I. Jordan, ProBioGen (14)	BMGF role in global vaccine development P. A. Gibert, BMGF (22)		
18.00-18.15						
18.15 - 19.00		Case-study: microcarrier-based cultivation J. Ruano, HIPRA (7)	Workshop C. Peixoto, L. Cervera (15)	Workshop presentations by participants (23)		
20:00	Welcome and dinner	Dinner				