

Day	Time	Type	Topic	Who
Day 1 Upstream	8:45	Introduction	Welcome, overview for the week/explanation of breaks, ice breakers	Dr. Yoon
	9:15	Break		
	9:30	Topic 2	Upstream - Cell-line Development	
	10:15	Break	Morning Snack Break	
	10:30	Topic 3	Upstream - Media Development	
	11:15	Break		
	11:30	Topic 4	Upstream - Cell-Culture Scale-Up	
	12:15	Lunch	Lunch - Catered by Uni	
	1:15	Topic 5	Upstream - Bioreactor Development and Operation	
	2:00	Break		
	2:15	Topic 6	Upstream - Harvest Technology I	
	3:00	Break	Afternoon Snack Break	
	3:15	Topic 7	Upstream - Harvest Technology II	
	4:00	Break		
	4:15	Topic 8	Upstream - Industrial Case Studies of Upstream Processes	
5:00	End of day			
Day 2 Downstream	8:30	Topic 1	Downstream - Processing Technology Current Status, Challenges, and Future	
	9:15	Break		
	9:30	Topic 2	Downstream - Chromatography	
	10:15	Break	Morning Snack Break	
	10:30	Topic 3	Downstream - Membrane Filtration I	
	11:15	Break		
	11:30	Topic 4	Downstream - Membrane Filtration II	
	12:15	Lunch	Lunch - Catered	
	1:15	Topic 5	Downstream - Cryo Technology	
	2:00	Break		
	2:15	Topic 6	Pilot Facility and Automation in Bioprocessing Development and Manufacturing	
	3:00	Break	Afternoon Snack Break	
	3:15	Topic 7	Downstream - EXTRA TOPIC TBD	
	4:00	Break		
	4:15	Topic 8	Downstream - Industrial Case Studies of Downstream Processes	
5:00	End of day			
Day 3 Analytics	8:30	Topic 1	Analytical Technology - Current Status, Challenges, and Future	
	9:15	Break		
	9:30	Topic 2	Analytics - Protein Characterization	
	10:15	Break	Morning Snack Break	
	10:30	Topic 3	Analytics - Bioassay I	
	11:15	Break		
	11:30	Topic 4	Analytics - Bioassay II	
	12:15	Lunch	Lunch - Catered External (light, Life Alive?)	
	1:15	Topic 5	Analytics - Technologies for Clinical Bioprocessing	
	2:00	Break		
	2:15	Topic 6	Analytics - Regulatory Submission	
	3:00	Break	Afternoon Snack Break	
	3:15	Topic 7	Analytics - CMC Analytical Strategies	

	4:00	Group photo	Group Photo	
	4:15	Happy Hour	Happy hour/banquet	
Day 4 Regulatory & Gene Therapy	8:30	Topic 1	Regulatory Filing I	
	9:15	Break		
	9:30	Topic 2	Regulatory Filing II	
	10:15	Break	Morning Snack Break	
	10:30	Topic 3	FDA Regulatory Review I	
	11:15	Break		
	11:30	Topic 4	FDA Regulatory Review II	
	12:15	Lunch	Lunch - Catered by Uni	
	1:15	Topic 5	Gene Therapy - Science	
	2:00	Break		
	2:15	Topic 6	Gene Therapy - Manufacturing and Application	
	3:00	Break	Ice cream Break	
	3:15	Topic 7	Gene Therapy - Development	
	4:00	Break		
4:15	Topic 8	Gene Therapy - Case Studies		
5:00	End of day			
Day 5 mRNA & Cell Therapy	8:30	Topic 1	mRNA Therapeutics - Science and Development I	
	9:15	Break		
	9:30	Topic 2	mRNA Therapeutics - Science and Development II	
	10:15	Break	Morning Snack Break	
	10:30	Topic 3	Cell Therapy I	
	11:15	Break		
	11:30	Topic 4	Cell Therapy II	
	12:15	Lunch	Closing Speech and To-Go Lunch	Dr. Yoon