



Host Pathogens Cross Talk

Annecy, Les Pensières, September 24-26, 2007

Host-pathogen interaction is the most important factor in determining the fate of infection, including the severity of the disease. Pathogens possess highly evolved mechanisms for infection and for adaptation to various host cells, both of which protect them against the host immune system. Although the disease mechanisms vary considerably, most pathogens have virulence factors that interact with host molecules, often usurping normal cellular processes. These virulence factors may mimic host molecules, and mediate events as diverse as adhesion, invasion, anti-phagocytosis and intracellular parasitism. Complicated interplay between the pathogen and the host also include the interference with members of the commensal flora that is often underestimated. Thus the commensals represent the third player in host-pathogen interactions. Prokaryotic-eukaryotic communication might also occur through bacteria autoinducers.

The aim of this symposium is to focus on recent studies that have shed new light on the infection strategies of many pathogen by emphasizing their sophisticated infectious systems, their secreted virulence-associated proteins and the multi-functional role of these proteins in infection and in the severity of disease. Understanding, how pathogens employ intricate strategies to mimic and usurp host cell functions, and subvert cell signalling and host immune systems can help the design new therapeutic or prophylactic strategies.

Monday, September 24, 2007

17h30-18h30	Registration	
18h30-18h45	Welcome Address	C.Longuet
18h45-19h15	Keynote lecture : Eosinophils:new players in innate immunity	M. Capron
19h45	Welcome Dinner	

Tuesday, September 25, 2007

Session I: - Basics mechanisms of host pathogen interactions?

Chairperson : Olivier Schwartz

08h30-08h50	Example of Bacterial host cell interactions <i>Neisseria Meningitidis</i>	C.Tang
08h50-09h05	<i>Discussion</i>	
09h05-09h25	Example of Viral host cell interactions: a new role for microRNAs	M.Benkirane
09h25-09h40	<i>Discussion</i>	
09h40-10h00	<i>Toxoplasma gondii</i> and host-cell interactions	JF.Dubremetz
10h00-10h15	<i>Discussion</i>	
10h15-10h45	<i>Coffee break</i>	

Session II: - Modulation of host cell responses by human pathogens

Chairperson : Monique Capron , Jeff Almond

10h45-11h05	Modulation of host innate and adaptive immune mechanisms by intracellular bacterial pathogens.	JP Gorvel
11h05-11h20	<i>Discussion</i>	
11h20-11h40	Interaction of pathogens with innate cells: role of NK *T lymphocytes* during infection	F.Trottein
11h40-11h55	<i>Discussion</i>	
11h55-12h15	Toxins and immune system modulation	C.Montecucco
12h15-12h30	<i>Discussion</i>	
12h30-14h00	<i>Lunch</i>	
14h00-14h20	Regulatory T Cells and clearance of <i>M. Tuberculosis</i>	S.H.E Kaufmann
14h20-14h35	<i>Discussion</i>	
14h35-14h55	Natural resistance to HIV infection: role of APOBEC	G. Maga
14h55-15h10	<i>Discussion</i>	
15h10-15h40	<i>Coffee break</i>	

15h40-16h00	Ubiquitination of MHC-class1 and kaposi sarcoma virus	P.Lehner
16h00-16h15	<i>Discussion</i>	
16h15-16h 25	HIV Infection and cross talk with human cells	O.Schwarz
16h25-16h40	<i>Discussion</i>	
16h40-17h00	Evasion of host immunity by Salmonella Typhimurium	L.Krishnan
17h00-17h20	<i>Discussion</i>	
19h00	<i>Dinner</i>	

Wednesday, September 26, 2007

Session III: - Models systems to study host-pathogen interactions

Chairperson : C. Montecucco

08h30-08h50	Dictyostelium as host model for <i>Legionella</i> pathogenesis	M.Steinert
08h50-09h05	<i>Discussion</i>	
09h05-09h25	C.elegans as an alternative model host	J.Ewbank
09h25-09h45	<i>Discussion</i>	
09h45-10h05	The urinary track infection as a model of host-parasite interaction	C.Svanborg
10h05-10h25	<i>Discussion</i>	
10h25-11h00	<i>Coffee break</i>	
11h00-11h20	Pancreatitis models and coxsachie virus	G.Frisk
11h20-11h40	<i>Discussion</i>	

Session IV: - Overtaking host pathogen cross-talk through prevention or treatment

Chairperson : C.Tang

Vaccine development

11h40-12h00	Example of Schisto	A.Capron
12h00-12h20	<i>Discussion</i>	

12h20		
12h20-14h00	<i>Lunch</i>	
14h00-14h20	Example of Shigella polyside approach	L.Mulard
14h20-14h35	<i>Discussion</i>	
Drug development		
14h35-14h55	New therapies that target biofilm formation (case of staphylococci)	N.Harraghy
14h55-15h15	<i>Discussion</i>	
15h15-15h35	Closing remarks	T. Meyer
15h35-15h50	<i>Discussion</i>	
15h50-16.20	End of the meeting	