

## Program for HPI 2016

<b>Wednesday June 29<sup>th</sup> – 15.00</b>				
<b>Opening session</b>				
<b>Chair: Freddy Haesebrouck &amp; Leif Andersen</b>				
	<b>Leif Andersen</b>	Denmark	Opening speech	10 - 15 min.
	<b>Manuel Amieva</b>	USA	The importance of infectious micro-niches, how <i>Helicobacter pylori</i> finds, colonizes and alters precursor cells and stem cells in the gastric glands	30 + 10 min.
HP-07	<b>C Blaecher</b> , N Gorié, E Bauwens, B Flahou, R Ducatelle, C Libert, RE Vandebroucke, F Haesebrouck, A Smet	Belgium	Influence of an experimental <i>Helicobacter suis</i> infection on the stomach-brain axis in mice	10 + 5 min.
HP-36	<b>M Alzheimer</b> , SM Tirier, M Schweinlin, M Metzger, H Walles , CM Sharma	Germany	Novel tissue-engineered human 3D infection models to study pathogenesis of <i>Helicobacter pylori</i> and <i>Campylobacter jejuni</i>	10 + 5 min.
<b>16.30 Coffee break</b>				

<b>Wednesday June 29<sup>th</sup> – 17.00</b>				
<b>Metabolism</b>				
<b>Chair: Annemieke Smet &amp; Christine Josenhans</b>				
	<b>Hilde De Reuse</b>	France	Evolution of <i>Helicobacter</i> and nickel metabolism	25 + 5 min
HP-13	A Vannini, E Pinatel, PE Costantini, S Pellicciari, D Roncarati, S Puccio, G De Bellis, C Peano, <b>A Danielli</b>	Italy	The <i>Helicobacter pylori</i> NikR regulon	10 + 5 min
HP-32	S Pernitzsch, B Aul, M Robbe-Saule, H De Reuse, <b>C Sharma</b>	Germany	Small RNA-mediated phase-variable gene expression control in the gastric pathogen <i>Helicobacter pylori</i>	10 + 5 min
<b>18.00 Dinner</b>				

<b>Thursday June 30<sup>th</sup> – 8.30</b>				
<b>Cellular immunity</b>				
<b>Chair: Richard Ferrero &amp; Karolina Rudnicka</b>				
	<b>Karen Robinson</b>	UK	Recent advances in cellular immunity to <i>H. pylori</i>	25 + 5 min
HP-03	<b>K Rudnicka</b> , A Matusiak, AP Moran, M Chmiela	Poland	Circulating natural killer t cells respond differently to <i>H. pylori</i> protein antigens and lipopolysaccharid	10 + 5 min
HP-18	<b>K Kaneko</b> , D Reddiar, D Letley, J Rhead, JC Atherton, K Robinson	UK	Modulation of B cells by <i>Helicobacter pylori</i> induces expansion of regulatory T cells	10 + 5 min
HP-19	<b>D Reddiar</b> , K Kaneko, J White, J Atherton, K Robinson	UK	IL-10-producing B and T lymphocytes during <i>H. pylori</i> infection	10 + 5 min
HP-35	<b>IC Arnold</b> , S Urban, F Piattini, A Müller	Switzerland	Myeloid cell response to <i>H. pylori</i> infection	10 + 5 min
<b>10.00 Break</b>				

Thursday June 30 <sup>th</sup> – 10.30				
Inflammatory signalling				
Chair: Markus Gerhard & Manuel Amieva				
	<b>Richard L. Ferrero</b>	Australia	The innate signalling pathways regulating <i>H. pylori</i> -induced inflammation	25 + 5 min
HP-21	<b>K D'Costa</b> , LS Tran, S Hicham, C Ecobichon, A Guanizo, J Ferrand, H Tye, S Preston, C Lefèvre, PA Johanesen, DJ Philpott, S Girardin, IG Boneca, RL Ferrero	Australia	Modifications of <i>Helicobacter pylori</i> peptidoglycan and their impact on NOD1-mediated host cell responses	10 + 5 min
HP-23	<b>LS Tran</b> , H Chaudhry, K D'Costa, A De Paoli, J Ferrand, BA Croker, SL Masters, RL Ferrero	Australia	NOD1 sensing of <i>Helicobacter pylori</i> infection modulates secretion of mature IL-18 in gastric epithelial cells	10 + 5 min
HP-26	R Semper, M Vieth, M Gerhard, <b>R Mejías-Luque</b>	Germany	<i>Helicobacter pylori</i> dampens host immune responses through the Nlrc4 inflammasome	10 + 5 min
12.00 Lunch				

Thursday June 30 <sup>th</sup> – 13.00				
Poster round 1				
Chair: Ming Chen & Tove Havnhøj Frandsen				
HP-02	<b>E Mnich</b> , K Rudnicka, A Gajewski, AP Moran, K Hinc, M Obuchowski, M Chmiela	Poland	The impact of <i>Helicobacter pylori</i> antigens on the healing process of gastric cellular barrier. An <i>in vitro</i> model of gastric epithelial cells and fibroblasts	
HP-05	<b>C De Witte</b> , B Flahou, R Ducatelle, A Smet, E De Bruyne, M Cnockaert, B Taminiou, G Daube, P Vandamme, F Haesebrouck	Belgium	<i>Fusobacterium gastroisuis</i> sp. Nov.: A major component of the porcine gastric microbiota	
HP-06	<b>C Blaecher</b> , E Bauwens, S Dobbs, J Dobbs, R Ducatelle, F Haesebrouck, A Smet	Belgium	A novel isolation protocol and probe-based RT-PCR for diagnosis of gastric infections with the zoonotic pathogen <i>Helicobacter suis</i>	
HP-20	KS Papadakos, S Breurec, B Martinez-Gonzalez, A Voulgari-Kokota, S Michopoulos, GJ Mantzaris, AF Mentis, <b>DN Sgouras</b>	Greece	Phylogenetic analysis of <i>Helicobacter pylori</i> isolates from Greek and Iranian origin may further support human ancient migration from Mesopotamia	
HP-45	S Puccio, E Pinatel, G Grillo, F Licciulli, F Ferrari, S Liuni, M Severgnini, A Vannini, G De Bellis, <b>A Danielli</b> , C Peano	Italy	HelicoMINE: an integrated DataBase and WebTools platform for <i>Helicobacter pylori</i> functional data analysis and visualization	
HP-46	<b>S Pombo</b> , I Boneca, N Buddelmeijer	France	Identification of Novel Cell Shape determinants in <i>Helicobacter pylori</i>	
HP-47	<b>M Nowaczyk</b> , P Jaworski, A Zawilak-Pawlik	Poland	The role of the N-terminus DnaA in assembly and regulation of <i>H. pylori</i> replication initiation complex	
HP-48	<b>R Tavares</b> , SK Pathak	Sweden	<i>Helicobacter pylori</i> protein HP1286 regulates responses of multiple cell types	
HP-52	<b>S Sharba</b> , C Su, M Constantino, R Bansil, S Lindén	Sweden	Investigating the relationship between human mucin carbohydrate repertoire, <i>Helicobacter pylori</i> adhesin expression, mucin binding ability and swimming behavior	

HP-53	<b>M Reines</b> , M Soerensen, P Morey, P Schlaermann, H Berger, TF Meyer	Germany	Ectopic expression of <i>H. pylori</i> CagA leads to trans-differentiation of human primary gastric cells	
HP-55	<b>S Wölffling</b> , F Boccellato, K Fritsche, A Imai, TF Meyer	Germany	Exploring the role of the Gastric Stromal Cells in the inflammatory response against <i>Helicobacter pylori</i>	

**Thursday June 30<sup>th</sup> – 14.00**

**Genomics and regulation I**

**Chair: Ichizo Kobayashi & Cynthia Sharma**

	<b>Sebastian Suerbaum</b>	Germany	Genome-wide analyses of chromosomal import patterns after natural transformation of <i>H. pylori</i> in vitro and during chronic infection	25 + 5 min.
HP-41	NJ Krüger, MT Knüver, A Zawilak-Pawlik, B Appel, <b>K Stingl</b>	Germany	Single cell analysis of <i>H. pylori</i> reveals a pH-dependent competence window fine-tuned by oxidative stress	10 + 5 min.
HP-30	<b>I Estibariz</b> , J Krebs, F Ailloud, T Aebischer, TF Meyer, B Bunk, C Spröer, J Overmann, S Suerbaum	Germany	<i>In vivo</i> genome and methylome adaptation of <i>Helicobacter pylori</i> BCS 100 during an experimental human infection study	10 + 5 min.
HP-40	<b>AHM van Vliet</b> , JG Kusters	The Netherlands	Functional genomics of virulence potential and antimicrobial resistance markers by in silico genotyping of <i>Helicobacter pylori</i>	10 + 5 min.
HP-44	<b>I Kobayashi</b>	Japan	Genome and epigenome evolution in <i>H. pylori</i>	10 + 5 min.

**15.30 Break**

**Thursday June 30<sup>th</sup> – 16.00**

**Genomics and regulation II**

**Chair: Eliette Touati & Arnoud van Vliet**

	<b>Scott Merrell</b>	USA	Characterization of <i>Helicobacter pylori</i> regulatory factors identifies a regulator of biofilm formation	25 + 5 min.
HP-17	<b>L El Mortaji</b> , E Galtier, S Aubert, C Schmitt, K Anger, Y Redko, Y Quentin, H De Reuse	France	Role of the sole DEAD-box RNA helicase of the gastric pathogen <i>Helicobacter pylori</i>	10 + 5 min.

**17.00 Business meeting, room B-21**

**18.00 Dinner**

**19.15 Visit to The Maritime Museum of Denmark**

**Friday July 1<sup>st</sup> – 8.30**

**Mucosal surface interactions I**

**Chair: Thomas Borén & Anna Arnqvist**

	<b>Han Remaut</b>	Belgium	Structure-function insights into polymorphic ABO glycan binding by <i>Helicobacter pylori</i>	25 + 5 min
HP-09	<b>R Bansil</b> , M Constantino	USA	Influence of helical shape on run-reverse corkscrew swimming of <i>H. pylori</i> in solutions as revealed by high-resolution imaging and rapid tracking	10 + 5 min.

HP-10	<b>M Padra</b> , EC Skoog, A Åberg, P Gideonsson, I Obi, A Arnqvist, SK Lindén	Sweden	Binding of <i>Helicobacter pylori</i> to human gastric mucins via the BabA adhesin cause aggregation that inhibits proliferation and is regulated via ArsS	10 + 5 min.
HP-15	<b>K Moonens</b> , P Gideonsson, S Subedi, J Bugaytsova, A Debraekeleer, E Romač, S Muyldermans, T Borén, H Remaut	Belgium	Countering the <i>Helicobacter pylori</i> blood group antigen binding adhesin BabA	10 + 5 min.
HP-33	<b>Y Chernov</b> , J Bugaytsova, A Shevtsova, T Borén	Sweden	Acid-sensitive depolymerization of BabA multimers into monomers is reversible	10 + 5 min.
<b>10.00 Break</b>				

<b>Friday July 1<sup>st</sup> – 10.30</b>				
<b>Mucosal surface interactions II</b>				
<b>Chair: Sara Lindén &amp; Han Remaut</b>				
	<b>Thomas Borén</b>	Sweden	<i>Helicobacter pylori</i> – A sweet and sour experience	25 + 5 min.
HP-01	<b>W Gonciarz</b> , M Walencka, E Mnich, A Gajewski, M Chmiela	Poland	IL- 33 and MMP-9 as markers of gastric epithelial cell barrier damage and inflammatory response. <i>In vivo</i> model of <i>H. pylori</i> infection in <i>Cavia porcellus</i>	10 + 5 min.
HP-37	<b>I Amorim</b> , A Smet, F Haesebrouck, CA Reis, F Gärtner <sup>a</sup>	Portugal	<i>Helicobacter spp.</i> in the gastric mucosa of Portuguese dogs	10 + 5 min.
<b>12.00 Lunch</b>				

<b>Friday July 1<sup>st</sup> – 13.00</b>				
<b>Poster round 2</b>				
<b>Chair: Karen A. Krogfelt &amp; Annemieke Smet</b>				
HP-27	S Wüstner, F Anderl, C Sachs, M Vieth, <b>R Mejias-Luque</b> , M Gerhard	Germany	Role of <i>Helicobacter pylori</i> $\gamma$ -glutamyl transferase in gastric colonization and bacterial persistence	
HP-29	<b>S Bats</b> , D Pscheniza, C Bergé, L Terradot, C Josenhans	Germany	Characterization of the <i>H. pylori</i> cagPAI protein CagN	
HP-39	Z Muñoz, A Mendez, K Ikuko, MM Bravo, C Rizzato, K Thorell, R Torres, F Aviles, F Canzian, <b>J Torres</b>	Mexico	Whole genome sequence and phylogenetic analysis shows <i>Helicobacter pylori</i> strains from Latinamerican groups have followed a unique evolution pathway	
HP-42	<b>O Sokolova</b> , M Naumann	Germany	Induction of NF- $\kappa$ B by <i>Helicobacter pylori</i> requires MyD88, but not intracellular TLRs and RIG-I	
HP-43	<b>G Mori</b> , N Doniselli, F Vallese, R Percudani	Italy	Peroxidatic activity and heme-binding of <i>Helicobacter pylori</i> catalase-like protein	
HP-49	M Constantino, S Sharba, F Haesebrouck, S Lindén, <b>R Bansil</b>	USA	Characterization of swimming behavior of <i>H. suis</i> by high-resolution imaging and rapid tracking	
HP-50	E Bauwens, <b>C Blaecher</b> , N Gorié, C Ducatelle, C Libert, RE Vandenbroucke, F Haesebrouck, A Smet	Belgium	Impact of a <i>Helicobacter heilmannii</i> infection on the gut-brain axis and gut-microbiome	

HP-51	N Doniselli, B Fermi, G Mori, <b>R Percudani</b>	Italy	The BTLCP protein KapA drives the periplasmic export of <i>H. pylori</i> catalase by a hitchhiking mechanism through the twin arginine translocation system	
HP-54	P Jaworski, M Nowaczyk, R Donczew, M Klajner, <b>A Zawilak-Pawlik</b>	Poland	Assembly of the replication initiation complex on <i>H. pylori</i> bipartite <i>oriC</i>	

<b>Friday July 1<sup>st</sup> – 14.00</b>				
<b>Pathogenesis</b>				
<b>Chair: Hilde De Reuse &amp; Freddy Haesebrouck</b>				
	<b>Lene Juel Rasmussen</b>	Denmark	The role of microbial pathogenesis in genome instability of human host: Degradation of DNA repair and mitochondrial bioenergetics.	25 + 5 min.
HP-04	<b>C De Witte</b> , B Flahou, I Bosschem, R Ducatelle, A Smet, F Haesebrouck	Belgium	<i>Helicobacter suis</i> causes changes in host factors involved in gastric acid secretion in pigs of different ages	10 + 5 min.
HP-11	<b>S Bhattacharjee</b> , E Loffredo-Verde, R Semper, R Mejias-Luque, CP da Costa*, M Gerhard*	Germany	Co-infection of <i>H. pylori</i> and <i>S. mansoni</i> : Implications on immune responses and disease progression	10 + 5 min.
HP-16	<b>F Boccellato</b> , S Wölffling, A Imai, G Sanchez, TF Meyer	Germany	A new cultivation method to study the complex interaction between epithelial and stromal cells of the human gastric mucosa	10 + 5 min.
<b>15.30 Break</b>				

<b>Friday July 1<sup>st</sup> – 16.00</b>				
<b>Cag and type IV secretion system</b>				
<b>Chair: Steffen Backert &amp; Rainer Haas</b>				
	<b>Jay Solnick</b>	USA	Why does <i>H. pylori</i> have a pathogenicity island: the bacterial perspective	25 + 5 min.
HP-08	<b>EC Skoog</b> , VA Morikis, ME Martin, GA Foster, LM Hansen, SI Simon, JV Solnick	USA	Functional plasticity in the <i>Helicobacter pylori</i> Type IV secretion system is mediated by alterations in integrin binding	10 + 5 min.
HP-12	KT Pham, F Schindele, E Weiss, R Haas, <b>W Fischer</b>	Germany	Role of non-essential genes of the <i>Helicobacter pylori</i> Cag type IV secretion system: <i>cagG</i> and <i>cagP</i> influence levels of the pilus assembly factors CagH, CagI and CagL	10 + 5 min.
HP-31	T Bönig, P Olbermann, S Bats, W Fischer, <b>C Josenhans</b>	Germany	Systematic site-directed mutagenesis of CagL, an outer protein of the <i>Helicobacter pylori</i> cag type IV secretion system	10 + 5 min.
<b>18.00 Dinner</b>				
<b>20.00 Live music and dancing, Konventum</b>				

Saturday July 2 <sup>nd</sup> – 8.30				
Carcinogenesis				
Chair: <b>Open &amp; Fatima Gärtner</b>				
	<b>Markus Gerhard</b>	Germany	<i>Helicobacter pylori</i> and gastric cancer: lessons from basic research to novel treatment options	20 + 5 min.
HP-14	P Floch, J Izotte, E Sifré, P Costet, B Rousseau, A Giese, F Mégraud, P Dubus, M Hahne, <b>P Lehours</b>	France	A new animal model of gastric lymphomagenesis? hAPRIL transgenic mice infected by <i>Helicobacter</i> species	10 + 5 min.
	<b>Mario D'Elios</b>	Italy	Mechanisms of autoimmunity and gastric MALT lymphoma: <i>Helicobacter</i> , T cells and microbiome	20 + 5 min.
HP-28	<b>JAB Strickertsson</b> , C Desler, AMD Machado, A Otto, D Becher, L Friis-Hansen, LJ Rasmussen	Denmark	Understanding how bacterial pathogens cause genome instability in human host	10 + 5 min.
HP-24	A Javaheri, T Kruse, K Moonens, I Asche, N Tegtmeyer, B Kalali, NC Bach, SA Sieber, V Königer, CR Hauck, R Haas, DH Busch, E Klaile, H Slevogt, A Schmidt, S Backert, H Remaut, BB Singer, <b>M Gerhard</b>	Germany	Engagement of CEACAM receptors by <i>Helicobacter pylori</i> modulates immune responses	10 + 5 min.
<b>10.00 Break</b>				

Saturday July 2 <sup>nd</sup> – 10.30	
Award session	
Chair: <b>Sebastian Suerbaum, Leif Andersen, Thomas Boren &amp; Freddy Haesebrouck</b>	
Awards for best presentations	
Closing remarks by Leif Andersen	
12.00 Lunch	
If you want lunch, you can order it at the reception desk, Konventum, on Friday and pay separately (not included in the registration fee)	